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Summary of Environmental Monitoring 2014

Tibbetts Road Site

Barrington, New Hampshire

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ARCADIS

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Summary of Environmental Monitoring 2014

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1. INTRODUCTION

The Tibbetts Road Site is located at 23 Tibbetts Road (formerly 216 Tibbetts Road) in Barrington, New Hampshire (Site). Barrington is located in the southeast part of New Hampshire, approximately two miles northeast of the junction of Route 4 and Hall Road. The location of the Site is identified on **Figure 1**. The area is primarily rural and utilized for single-family and seasonal residences. The Site consists of a two-acre parcel located on a topographic high (approximately 330 feet above mean sea level [amsl]) with land surface sloping to the southwest toward the Oyster Creek watershed and to the north-northeast toward Swains Lake and the Bellamy River watershed. Swains Lake, a popular recreation destination, is located approximately 1,000 feet north of the Site.

The elevation of the region generally ranges from 100 to 400 feet amsl with higher elevations located to the west-northwest of the Site and lower elevations located to the southeast. The regional topography is shown on **Figure 1**. The general Site layout, the surrounding area, and the locations of existing monitoring wells are shown on **Figure 2**.

ARCADIS U.S., Inc. (ARCADIS) conducted semi-annual groundwater monitoring events in May and November 2014 in accordance with the environmental monitoring program. These events consisted of water level gauging and groundwater sampling of monitoring wells and former extraction wells.

The primary objectives of the environmental monitoring program are to 1) monitor the extent of impacted groundwater at the Site as remedial efforts proceed and 2) obtain data to demonstrate compliance with the Interim Groundwater Cleanup Levels (ICLs) that have been established for the Site (United States Environmental Protection Agency [USEPA] 1992). This report summarizes the field and laboratory analytical data collected in 2014 (Section 2) and provides a discussion of the results (Section 3). Conceptual Site Model (CSM) changes are also included in this report as Section 4, which presents modifications to the CSM included as part of the *Summary of Environmental Monitoring 2013* report (ARCADIS, 2014).

2. GROUNDWATER MONITORING 2014

Fifty monitoring wells were sampled in May 2014 (including additional bi-level wells installed in 2013), which is consistent with the requirements of the environmental monitoring program. In addition, groundwater samples were collected from the six injection/extraction wells (EW-100, EW-101, IW-100, IW-101, IW-102, and IW-103) in May 2014 to obtain baseline data for a directed groundwater recirculation (DGR) pilot test. The DGR pilot test, which was conducted from August to December, also required the collection of additional groundwater samples from September to December 2014. Additional information on the DGR pilot test is presented in Section 4 and a more detailed summary report will be prepared in 2015.

One additional bi-level monitoring well (MW-307S) and one single-point monitoring well (MW-307D) were installed in May 2014 to target specific bedrock intervals to the north of the Site. The groundwater conditions in these wells were baselined in July 2014. A total of fifty-four wells were sampled in November 2014 as a part of the environmental monitoring program. A list of the wells selected for monitoring in 2014 (with their respective geologic units) is presented in **Table 1**.

2.1 Methodology

The following methods were used to complete the 2014 environmental monitoring activities.

2.1.1 Water-Level Measurements

Groundwater elevations were measured in monitoring, extraction and injection wells during the May and November 2014 sampling events. Depth to groundwater and groundwater elevation measurements for May and November 2014 are presented in **Table 2**. The measurements were made to the nearest hundredth of a foot using an electronic water-level indicator. All levels were recorded as depth below the top of the well casing (unless otherwise noted in the table) and converted to piezometric head in feet amsl using a surveyed well elevation. The indicator probe was cleaned with a detergent wash and distilled water rinse between wells to prevent cross-contamination.

2.1.2 Groundwater Sampling

From May 19 to 23 and November 10 to 14, 2014, ARCADIS collected groundwater samples from the wells listed in **Table 1** using the USEPA Region I Low-Stress Purge

and Sampling method (USEPA 1996). All purging and sampling was done using a Masterflex peristaltic pump, bladder pump setup, or dedicated Solinst Micro-Double Valve Pump. Field parameters were measured using a multi-sensor groundwater quality meter with a flow-through cell. Quality control samples including blind duplicates, matrix spike/matrix spike duplicates and trip blanks were obtained during each of the sampling events.

2.1.3 Laboratory Analyses

Groundwater samples were submitted to TestAmerica Laboratories of Nashville, Tennessee for analysis of volatile organic compounds (VOCs) by USEPA Method 8260B and total arsenic and manganese by USEPA Method 6010B.

Copies of the laboratory analytical reports are provided in **Appendix A**. A data validation/verification review for each laboratory analytical data package was performed by CADENA, Inc. A summary of the CADENA data reviews and quality assurance/quality control results and copies of the CADENA data reports are also presented in **Appendix A**.

2.2 Groundwater Sampling Results

The following sections provide a discussion of the 2014 groundwater monitoring data and updates to the CSM. For a broad overview of the analytical and groundwater elevation data with respect to the Site history and historical data trends, please refer to the complete CSM provided as Appendix A in the *Summary of Environmental Monitoring 2013* Report (ARCADIS, 2014).

2.2.1 Groundwater Elevation and Flow

A summary of the 2014 groundwater elevation measurements is provided as **Table 2**. In general, groundwater elevations in 2014 demonstrated similar trends to those observed in previous years. A summary of the vertical gradients measured in 2014 is provided in **Table 3**. The vertical gradient within the bedrock is consistently downward. A downward gradient in bedrock is indicative of poor vertical fracture communication, as well as characteristic of a groundwater recharge area. However, the downward potential has resulted in the distribution of constituents of concern (COCs) vertically downward in some areas of the Site.

A potentiometric surface contour map prepared from the November 2014 groundwater elevation data is presented as **Figure 3**. Monitoring wells used to create this contour map were selected based on the depth of installation and the corresponding hydrostratigraphic units. In general, only wells installed within the shallow bedrock interval (45-75 ft bgs) were used to construct the contour map. The pilot DGR system was operating at the time of the groundwater elevation survey which created a corresponding groundwater high and low, and a strong horizontal gradient across the DGR Treatment Area which was defined as the "Fracture Zone" in the 2013 CSM. Beyond the Treatment Area, groundwater in the shallow bedrock appears to flow north and south away from the Fracture Zone area.

2.2.2 Groundwater Quality

Overall, the concentrations of VOCs and metals detected in groundwater during the May and November 2014 sampling events were lower than or consistent with concentrations detected during previous sampling events. A summary of the 2014 laboratory analytical results is included as **Table 4**. Summary tables containing the historical VOC and MNA data are included as **Tables 5 and 6**, respectively. A brief discussion of the groundwater results by constituent group is presented in the following sections.

2.2.2.1 Volatile Organic Compounds

Concentration trend charts for existing overburden and bedrock wells are included as **Appendices B and C**, respectively. Trend charts were only constructed for wells that have been sampled on a semi-annual basis and have had consistent detections of VOCs over time.

<u>Overburden:</u> A total of 9 overburden wells were sampled in 2014. Of the nine wells sampled, only wells 51S and EW-10S exceeded ICLs for VOCs. Ethylbenzene, toluene, trichloroethene (TCE), and total xylenes were all detected above their respective ICLs. The impacts appear to be localized as nearby overburden monitoring well 73S did not contain VOCs above ICLs. VOC concentrations in well EW-10S varied by up to four orders-of-magnitude between the May and November 2014 groundwater sampling events. This variation has occurred in the past, and either suggests that well EW-10S is located at the edge of a variable plume, or that the plume intersected by well EW-10S is small and varies on a seasonal basis with respect to groundwater elevation.

As indicated by the trend charts included as **Appendix B**, total VOCs within overburden wells other than 51S and EW-10S have decreased over time. This decrease is likely due to a combination of source removal and groundwater remediation activities, including vapor enhanced recovery (VER), emplacement of the phytoremediation cover, and MNA. Overburden soil excavation activities completed in 2014 are also expected to expedite the reduction of VOCs in the well EW-10S area.

Bedrock: A total of 53 bedrock wells were sampled in 2014. At least one of three primary COCs (TCE, benzene, and cis-1,2-dichloroethene [cis-1,2-DCE]) were detected above ICLs in 27 of 53 wells sampled. As shown on the trend charts included as **Appendix C**, total VOCs in bedrock have generally decreased over time. The exceptions are at wells 61R, 63R, 65R, 67R, 106R, and 203R, where VOC concentrations have generally remained stable. These wells are located adjacent to and downgradient of the Fracture Zone and as the source mass is reduced, VOC concentrations are also expected to decrease with time.

The distribution of benzene, cis-1,2-DCE, and TCE is provided graphically on **Figures 4 through 12**. These iso-concentration maps were drawn considering the November 2014 groundwater sampling results, as well as the results of the October 2014 residential well sampling in the Cedar Creek development. The benzene, cis-1,2-DCE, and TCE concentrations have been separated into three different maps, based on well depth ranges (0 to 60', 60 to 165', and 165 to 300' bgs). The highest benzene concentrations were detected in the shallow bedrock within the Fracture Zone. The distribution of cis-1,2-DCE is more concentrated within the Fracture Zone and suggests on-going reductive dechlorination of CVOCs. Lastly, TCE appears to have migrated to the north and south of the Fracture Zone, following the northeast-southwest striking fractures. TCE concentrations in the Fracture Zone were likely reduced through In-Situ Chemical Oxidation (ISCO) completed in 2006.

2.2.2.2 Metals

Concentrations of arsenic and manganese were detected in both overburden and bedrock monitoring wells in 2014.

- Arsenic was detected at concentrations exceeding the ICL in 2 of the 7 overburden wells sampled in May 2014; 4 of the 9 overburden wells exceeded the ICL for arsenic in November 2014.

- Arsenic was detected at concentrations exceeding the ICL in 24 of the 50 bedrock wells sampled in May 2014; 17 of the 54 bedrock wells exceeded the ICL for arsenic in November 2014.

- Manganese was detected at concentrations exceeding the ICL in 2 of the 7 overburden wells sampled in May 2014; 6 of the 9 overburden wells exceeded the ICL for manganese in November 2014.

- Manganese was detected at concentrations exceeding the ICL in 3 of the 50 bedrock wells sampled in May 2014; 1 of the 54 bedrock wells exceeded the ICL for manganese in November 2014.

Concentrations of manganese detected above the ICL within the Fracture Zone may be an artifact of historical permanganate injections but can be naturally occurring as well. The elevated concentrations of manganese and arsenic outside of the Fracture Zone are likely due to natural conditions or may be related to the increased solubilization of naturally occurring metals created by the reducing conditions at the Site. It is expected that arsenic and manganese concentrations will decline as redox conditions become more aerobic over time. The solubilized concentrations of arsenic and manganese are not expected to migrate beyond the boundaries of reducing conditions.

2.2.2.3 Natural Attenuation Summary

A detailed analysis of the current biochemical conditions and applicability of MNA to address the remaining impacts was performed in 2007. A report summarizing the evaluation was submitted to the USEPA in December 2007. Results of the evaluation indicated that the overall size of the impacted area has decreased over time as a result of ISCO injections and MNA. Decreasing trends are being observed in monitoring wells within and outside the central portion of the remaining impacted areas, which indicates that additional contaminant reduction toward the respective ICLs is continuing.

2.2.2.4 Residential Wells

Seventeen (17) residential bedrock wells in the Cedar Creek development (formerly referred to as the “Sera Lane development”), located south of the Site were sampled in 2014. In addition to the Cedar Creek sampling, two residential bedrock wells (29R

and 26R) were sampled, one on Boyle Lane (south of the Site) and one on Acorn Point (north of the Site), respectively.

As shown in **Table 7**, VOCs were detected in residential water samples, but no VOCs were detected at levels exceeding drinking water standards from any of the homes in 2014. In 2014, groundwater samples were collected on a quarterly basis from Cedar Creek homes with in-home treatment system and on an annual basis from homes without treatment systems. The historical trend of VOC concentrations in these wells has generally been stable or on a downward trend since 2013. Historical residential well water results are provided in **Table 8,** and 2014 analytical results for Cedar Creek and the two additional residential water samples are presented in **Appendix D** and **Appendix E, respectively.**

3. 2014 GROUNDWATER MONITORING CONCLUSIONS

Based on the results of the 2014 groundwater monitoring activities, ARCADIS offers the following conclusions:

- In general, groundwater elevations measured in 2014 demonstrated similar trends to those observed in previous years. A consistent downward vertical gradient is observed at the Site, which over time has resulted in groundwater impacts moving from the overburden to bedrock, as well as from shallow bedrock to deeper bedrock in some areas of the Site.

- The DGR system was operating during the measurement of water levels which created a groundwater high and low with a strong horizontal gradient in the Fracture Zone. In general, groundwater in the shallow bedrock appears to flow radially away from a groundwater high located northeast of the property boundary, generally centered in the area of monitoring wells 204R, 202R, and 69R.

- The results of the 2014 groundwater monitoring activities indicate that only two overburden wells (51S and EW-10S) have VOCs that exceed their respective ICLs. This result, coupled with decreasing VOC trends in overburden and bedrock wells within the Fracture Zone and across the Site, suggests a limited ongoing flux between the overburden and bedrock aquifer.

- Of the 53 bedrock wells sampled in 2014, 27 had ICL exceedances for at least one VOC parameter. In general, trend charts suggest COCs at the Site are stable or decreasing in bedrock over time.

- Concentrations of arsenic and manganese were detected in both the overburden and bedrock monitoring wells in 2014. It is expected that these concentrations will decline as redox conditions become more aerobic over time.

- The concentrations of VOCs in Cedar Creek wells were all detected within drinking water standards and the VOC trend has generally been stable or declining since 2013.

4. CONCEPTUAL SITE MODEL UPDATES

Based on data collected during the 2014 environmental monitoring, investigation, and remedial activities, the following additions and/or modifications have been made to the CSM.

4.1 Well Installation

One bi-level bedrock well (MW-307S) and one single-zone bedrock well (MW-307D) were installed north of the Site to delineate VOC impacts and to serve as monitoring points for the DGR and in-situ chemical oxidation (ISCO) pilot study. During the installation, a large fracture zone was encountered at a depth between approximately 178 and 190 ft bgs. The fracture zone was highly prolific with discharge during drilling suggesting a capacity of greater than 100 gpm. The geophysical log indicates the zone consists of several near flat lying fractures with up to a six inch aperture. The presence of the fracture zone inhibited significant further advancement of the borehole due to loss of circulation during drilling. The presence of a prolific fracture at this location, coupled with the expected groundwater flow balance, suggests the majority of the available groundwater in the system funnels through this zone as it moves away from the Site.

Well MW-307S was screened from 80-90 bgs within a smaller fracture, and at 172-187 bgs within the large fracture zone. Well MW-307D was screened from 200-210 feet bgs after coring through the large fracture zone, but was the maximum depth achieved in the borehole. Lithology and well construction logs, as well as geophysical logs are provided in **Appendix F.** Groundwater samples were collected from each interval in July 2014 and November 2014. During each sampling event, TCE was detected slightly above or close to the ICL in each interval, which suggests that COCs have migrated laterally within the deeper bedrock fractures at this location.

Prior to the selection of the screened intervals for the wells, geophysical investigation activities were conducted on each of the two open boreholes to determine the location of water-bearing fracture sets. Borehole geophysical techniques included fluid temperature, resistivity, caliper, acoustic televiewer, and heat pulse flowmeter logging. Borehole geophysics logs are provided in **Appendix F.**

4.2 DGR Pilot Test

A DGR pilot test was performed from August through November 2014 using two injection well (EW-100 and EW-101) and two extraction wells (IW-103 and IW-100) within the Fracture Zone. Groundwater that was extracted was run through granular activated carbon for treatment before being re-injected.

The main objective of the DGR pilot test was to evaluate the effectiveness of DGR in flushing and recovering VOC mass from the Fracture Zone. Additional objectives of the DGR pilot test were to continue the hydraulic connectivity evaluation between injection and extraction wells and to determine the appropriate DGR cell configuration and hydraulic parameters for future remediation work. A summary report will be prepared in 2015, but highlights of the work to date are summarized below.

Groundwater extraction and injection rates were increased from approximately 1.5 gpm at the beginning of the testing to 6 gpm at the end of the testing. It was determined that the same amount of groundwater extracted from the system could also be re-injected into the system. A strong horizontal gradient was observed between extraction and injection wells. Total VOC mass removal rates increased from 0.5 grams per day (g/day) to greater than 2.0 g/day with the increase in extraction and injection rates. There was a general increase in benzene concentrations in the extraction wells over time indicating the potential desorption and/or flushing of VOC mass due to the operation of the DGR system. The monitoring wells surrounding the Fracture Zone generally exhibited stable to slightly decreasing VOC trends over time. The wells will continue to be monitored to evaluate the longer term effects from the testing. Groundwater and system analytical results collected as a part of DGR activities are summarized in **Table 4**, and laboratory reports are provided as **Appendix G.**

4.3 Swains Lake Village Water District (SLVWD) and Cedar Creek Development

Prior to approximately 1987, the bedrock aquifer was utilized as the primary drinking water source for area residences. Following the 1982 discovery of VOCs in a residential well sample located near the Site and resulting Site investigations, the Swains Lake Village Water District (SLVWD) community water system was constructed to distribute drinking water to residences in the vicinity of the Site in 1987. Homes outside of the SLVWD continue to use bedrock wells as their primary source of drinking water.

Prior to 2012, the SLVWD water system consisted of a surface water intake at Swains Lake, a water treatment system, and distribution lines to residences in the Groundwater Management Zone (GMZ). In 2012, the SLVWD installed and connected two deep bedrock municipal production wells (SWL-6alt and SWL-7) to the existing water treatment system and the extraction of water from Swains Lake as the source of potable water was discontinued. The SLVWD production well locations are shown on **Figure 13**. As per New Hampshire Department of Environmental Services (NHDES) and USEPA regulations, annual water testing was conducted by the SLVWD in 2014, and the system was determined to be in compliance with all applicable standards.

The 18-lot residential subdivision known as Cedar Creek is located to the south of the Site, and a total of 17 residences have been constructed to date and are currently occupied. The location of this development relative to the Site is shown on **Figures 4 to 12.** Private bedrock wells supply water to each of the residences in the development. A table summarizing the construction details of the Cedar Creek residential wells is included as **Table 9**. Based on the continued detection of VOCs in groundwater at the Cedar Creek subdivision, the expansion of the SLVWD was proposed in 2014 (to provide potable water to these residences) and is on schedule to be implemented in 2015.

Based on a review of the current SLVWD controls, the distribution system may require design upgrades to handle the increased capacity, including the installation of variable frequency drives (VFDs) and a larger hydro-pneumatic tank. A professional survey of the Cedar Creek subdivision (and all associated utilities) was completed in 2014, in addition to individual interior home inspections and access agreement preparation. The project planning is ongoing, and the SLVWD water line extension to Cedar Creek is anticipated to commence in 2015.

4.4 Additional Planned 2015 Site Activities

Based on the current concentration and distribution of COCs in the Fracture Zone, continuation of the pilot test for the DGR system will be evaluated, and the DGR cell may be expanded or modified to best address the Fracture Zone if it is brought back online in 2015. Groundwater recirculation with oxidant injections may be used to reduce contaminant concentrations to levels more appropriate for MNA.

REFERENCES

ARCADIS U.S., Inc. 2014. Summary of Environmental Monitoring 2013, Tibbetts Road Site, Barrington, New Hampshire.

ARCADIS U.S., Inc. 2007. Evaluation of Current Biogeochemical Conditions and Applicability of Monitored Natural Attenuation, Tibbetts Road Site, Barrington, New Hampshire.

United States Environmental Protection Agency (USEPA) Region I. 1992. Record of Decision, Tibbetts Road Superfund Site, Barrington, New Hampshire. September 29, 1992.

United States Environmental Protection Agency (USEPA) Region I. 1996. Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures. April 1996.

Table 1

Monitoring, Injection, and Extraction Wells Sampled During 2014

Tibbetts Road, Barrington, New Hampshire

Well Designation	Semiannual Sampling (Months Sampled)	DGR Sampling (Months Sampled)	Geologic Unit Screened by Well
Monitoring Wells (22)			
37D	May/November		Glacial Outwash/Lower Till
51S	May/November		Glacial Outwash
52S	November		Upper Overburden
57S	May/November		Upper Overburden
70S	November		Upper Overburden
73S	May/November		Glacial Outwash
75D	May/November		Lower Till
EW-3S	May/November		Glacial Outwash
EW-10S	May/November		Upper Till/Glacial Outwash
35R	May	September/October	Bedrock
69R	May/November	October	Bedrock
103R	May/November	October	Bedrock
106R	May/November		Bedrock
108R	May/November	October	Bedrock
169R	May/November	October	Bedrock
201R	May/November	September/October	Bedrock
202R	May/November	September/October	Bedrock
203R	May/November	September/October	Bedrock
204R	May/November	September/October	Bedrock
205R	May/November	October	Bedrock
MW-307D (200-210)	July/November		Bedrock
Injection/Extraction Wells (6)			
EW-100		May	Bedrock
EW-101		May	Bedrock
IW-100		May/August to December	Bedrock
IW-101		May	Bedrock
IW-102		May	Bedrock
IW-103		May/August to December	Bedrock
Bi-Level Monitoring Wells (18)			
61R (75-90)	May/November		Bedrock
61R (183-198)	May/November		Bedrock
63R (85-100)	May/November		Bedrock
63R (150-165)	May/November		Bedrock
65R (100-115)	May/November		Bedrock
65R (180-195)	May/November		Bedrock
67R (83-98)	May/November		Bedrock
67R (149-164)	May/November		Bedrock
MW-302 (60-70)	May/November		Bedrock
MW-302 (100-110)	May/November		Bedrock

Table 1

Monitoring, Injection, and Extraction Wells Sampled During 2014

Tibbetts Road, Barrington, New Hampshire

Well Designation	Semiannual Sampling (Months Sampled)	DGR Sampling (Months Sampled)	Geologic Unit Screened by Well
MW-303 (55-65)	May/November		Bedrock
MW-303 (115-125)	May/November		Bedrock
MW-306S (85-100)	May/November		Bedrock
MW-306S (130-140)	May/November		Bedrock
MW-306D (185-195)	May/November		Bedrock
MW-306D (280-300)	May/November		Bedrock
MW-307S (80-90)	July/November		Bedrock
MW-307S (172-187)	July/November		Bedrock
Multi-Level Monitoring Wells (15)			
MW-300 (20-30)	May/November		Bedrock
MW-300 (40-50)	May/November		Bedrock
MW-300 (80-90)	May/November		Bedrock
MW-300 (120-130)	May/November		Bedrock
MW-301 (35-45)	May/November	September/October	Bedrock
MW-301 (115-125)	May/November	October	Bedrock
MW-301 (145-155)	May/November	October	Bedrock
MW-301 (240-250)	May/November		Bedrock
MW-301 (290-300)	May/November		Bedrock
MW-305 (35-45)	May/November	October	Bedrock
MW-305 (62-72)	May/November	September/October	Bedrock
MW-305 (145-155)	May/November	September/October	Bedrock
MW-305 (233-243)	May/November		Bedrock
MW-305 (265-275)	May/November		Bedrock
MW-305 (285-300)	May/November		Bedrock

Table 2. Summary of 2014 Groundwater Elevation Measurements, Tibbetts Road Site, Barrington, NH.

Well Designation	Measuring Point Elevation (ft amsl)	Screen Top (ft bgs)	Screen Bottom (ft bgs)	Screen Length (ft)	May 16, 2014		November 7, 2014	
					Depth to Water (ft bmp)	Water-Level Elevation (ft amsl)	Depth to Water (ft bmp)	Water-Level Elevation (ft amsl)
Overburden Wells								
37D	327.66	15.5	25.5	10	6.80	320.86	12.54	315.12
51S	328.15	11	16	5	8.18	319.97	15.44	312.71
52S	328.19	6.5	11.5	5	6.61	321.58	11.80	316.39
57S	329.82	9	19	10	3.80	326.02	11.75	318.07
70S	326.4	8	13	5	3.37	323.03	10.65	315.75
73S	328.06	13.5	18.5	5	4.95	323.11	13.50	314.56
75D	326.56	21	26	5	4.50	322.06	11.00	315.56
EW-03S	326.63	9	19	10	3.73	322.90	11.00	315.63
EW-10S	328.41	7.5	17.5	10	8.31	320.10	15.34	313.07
Injection/Extraction Wells								
EW-100	319.03	31	165	134[1]	8.22	310.81	NM	NM
EW-101	321.75	35	165	130[1]	10.99	310.76	NM	NM
IW-100	323.03	41.5	165	123.5[1]	15.25	307.78	31.10	291.93
IW-101	323.49	39	165	126[1]	13.60	309.89	30.88	292.61
IW-102	323.94	39	165	126[1]	11.22	312.72	31.69	292.25
IW-103	323.88	38.5	165	126.5[1]	14.77	309.11	32.91	290.97
Bedrock Wells								
35R*	320.88	29	82	53[1]	9.31	311.57	NM	NM
61R (75-90)	325.37	75	90	15	16.83	308.54	23.25	302.12
61R (183-198)	325.28	183	198	15	36.85	288.43	36.89	288.39
63R (85-100)	323.75	85	100	15	15.10	308.65	25.98	297.77
63R (150-165)	323.73	150	165	15	16.99	306.74	26.12	297.61
65R (100-115)	327.53	100	115	15	19.76	307.77	34.45	293.08
65R (180-195)	327.56	180	195	15	21.25	306.31	36.75	290.81
67R (83-98)	329.22	83	98	15	21.16	308.06	33.73	295.49
67R (149-164)	329.33	149	164	15	21.60	307.73	32.60	296.73
69R	330.16	38	58	20	16.03	314.13	25.70	304.46
103R	326.77	44	62	18[1]	15.60	311.17	25.72	301.05
106R*	312.89	24	60	36[1]	9.81	303.08	9.20	303.69
108R	323.27	53.5	63.5	10	14.27	309.00	25.97	297.30
169R	326.17	33	60	27[1]	16.65	309.52	37.35	288.82
201R*	320.32	40	60	20	9.52	310.80	14.18	306.14
202R*	326.82	40	60	20	15.46	311.36	16.80	310.02
203R*	327.47	40	60	20	17.30	310.17	34.14	293.33
204R*	324.37	40	60	20	11.71	312.66	6.66	317.71
205R*	325.31	32	62	30	16.58	308.73	32.18	293.13
MW-300 (20-30)	310.95	20	30	10	9.22	301.73	NM	NM
MW-300 (40-50)	310.95	40	50	10	2.17	308.78	NM	NM
MW-302 (60-70)	315.87	60	70	10	11.43	304.44	16.18	299.69
MW-302 (100-110)	315.89	100	110	10	12.17	303.72	17.12	298.77
MW-303 (55-65)	311.63	55	65	10	23.10	288.53	24.34	287.29
MW-303 (115-125)	311.63	115	125	10	37.15	274.48	31.18	280.45
MW-306S (85-100)	330.05	85	100	15	22.85	307.20	36.36	293.69
MW-306S (130-140)	329.93	130	140	10	23.21	306.72	36.40	293.53
MW-306D (185-195)	329.49	185	195	10	24.39	305.10	32.10	297.39
MW-306D (280-300)	329.43	280	300	20	44.40	285.03	48.72	280.71
MW-307S (80-90)	304.17	80	90	10	NM	NM	22.95	281.22
MW-307S (172-187)	304.15	172	187	15	NM	NM	22.68	281.47
MW-307D (200-210)	306.23	200	210	10	NM	NM	25.17	281.06

Notes:
1. Elevations for each well surveyed by Bay Colony Group, Inc. (1995-2006) and Ducharme & Dillis Civil Design Group, Inc. (2012-2014)
2. NM - not measured
3. ft bmp - feet below measuring point
4. ft amsl - feet above mean sea level
5. ft bgs - feet below ground surface
6. [1] - open bedrock monitoring well (no well screen installed)
7. * - Measuring point is from top of steel casing (not PVC)

Table 3. Summary of 2014 Vertical Gradients, Tibbetts Road Site, Barrington, NH

Well Designation	Groundwater Elevation May 2014 (feet amsl)	Groundwater Elevation November 2014 (feet amsl)	Bottom of Screen (ft bgs)	Top of Screen (ft bgs)	Middle of Screen (ft bgs)	Distance Between Screens (ft)	Vertical Gradient May 2014	Vertical Gradient November 2014
Shallow vs. Intermediate Bedrock Wells								
61R (75-90)	308.54	302.12	90.0	75.0	82.5	-108.0	**-0.19**	**-0.13**
61R (183-198)	288.43	288.39	198.0	183.0	190.5			
63R (85-100)	308.65	297.77	100.0	85.0	92.5	-65.0	**-0.03**	**0.00**
63R (150-165)	306.74	297.61	165.0	150.0	157.5			
65R (100-115)	307.77	293.08	115.0	110.0	112.5	-75.0	**-0.02**	**-0.03**
65R (180-195)	306.31	290.81	195.0	180.0	187.5			
67R (83-98)	308.06	295.49	98.0	83.0	90.5	-66.0	**0.00**	**0.02**
67R (149-164)	307.73	296.73	164.0	149.0	156.5			
MW-302 (60-70)	304.44	299.69	70.0	60.0	65.0	-40.0	**-0.02**	**-0.02**
MW-302 (100-110)	303.72	298.77	110.0	100.0	105.0			
MW-303 (55-65)	288.53	287.29	65.0	55.0	60.0	-60.0	**-0.23**	**-0.11**
MW-303 (115-125)	274.48	280.45	125.0	115.0	120.0			
Intermediate vs. Deep Bedrock Wells								
MW-306S (85-100)	307.20	293.69	100.0	85.0	92.5	-42.5	**-0.01**	**0.00**
MW-306S (130-140)	306.72	293.53	140.0	130.0	135.0			
MW-306D(185-195)	305.10	297.39	195.0	185.0	190.0	-100.0	**-0.20**	**-0.17**
MW-306D (280-300)	285.03	280.71	300.0	280.0	290.0			
MW-307S (80-90)	NM	281.22	90.0	80.0	85.0	-94.5	**NM**	**0.00**
MW-307S (172-187)	NM	281.47	187.0	172.0	179.5			

Notes:
1. Negative vertical gradient values indicate downward flow potential, positive values indicate upward flow potential.
2. ft bgs - feet below ground surface
3. ft amsl - feet above mean sea level
4. NM - not measured (well not installed, or pre-installed tubing in place)

Table 4. Summary of 2014 Groundwater Analytical Results, Tibbetts Road Site, Barrington, NH

	Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
	ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Sample ID	**Sample Date**												
103R	5/19/2014	< 5.0	**17.6**	18.4	1.59	< 5.0	< 0.5	< 0.5	0.403 J	< 0.5	< 1.5	**16**	1080
103R	10/16/2014	< 5.0	**16.5**	18.3	1.17	< 5.0	< 0.5	< 0.5	0.524	< 0.5	< 1.5	--	--
103R	11/10/2014	< 5.0	**15.7**	13.5	1.24	< 5.0	< 0.5	< 0.5	0.784	< 0.5	< 1.5	**14.6**	1430
106R	5/20/2014	< 5.0	1.45	0.553	< 0.5	< 5.0	0.209 J	< 0.5	0.605	< 0.5	< 1.5	9.3 J	77.6
106R	11/11/2014	< 5.0	4.80	0.963	< 0.5	< 5.0	0.252 J	< 0.5	0.824	< 0.5	< 1.5	< 10	26.8
108R	5/20/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**27.6**	316
108R	10/16/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
108R	11/13/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**28.8**	150
169R	5/19/2014	< 5.0	**88.7**	65.6	27.4	< 5.0	< 0.5	10.8	0.505	0.251 J	19.9	**47.7**	**3910**
169R	10/15/2014	< 5.0	**39.6**	41.2	15.2	< 5.0	< 0.5	0.268 J	0.484 J	< 0.5	13.7	--	--
169R	11/10/2014	< 5.0	**20.4**	16.4	9.87	< 5.0	< 0.5	< 0.5	0.352 J	< 0.5	10.7	**53.4**	2570
201R	5/20/2014	7.64	1.61	28.2	< 0.5	< 5.0	< 0.5	< 0.5	1.19	< 0.5	< 1.5	< 10	880
201R	9/11/2014	< 5.0	4.88	33.4	0.224 J	< 5.0	< 0.5	< 0.5	0.617	< 0.5	< 1.5	--	--
201R	10/16/2014	< 5.0	4.01	29.2	< 0.5	< 5.0	< 0.5	< 0.5	0.551	< 0.5	< 1.5	--	--
201R	11/11/2014	< 5.0	2.74	24.4	< 0.5	< 5.0	< 0.5	< 0.5	0.558	< 0.5	< 1.5	< 10	680
202R	5/19/2014	6.36	< 0.5	2.57	< 0.5	< 5.0	< 0.5	< 0.5	0.366 J	< 0.5	< 1.5	**19.6**	2090
202R	9/11/2014	< 5.0	0.264 J	2.92	< 0.5	< 5.0	< 0.5	< 0.5	0.316 J	< 0.5	< 1.5	--	--
202R	10/15/2014	< 5.0	0.301 J	2.75	< 0.5	< 5.0	< 0.5	< 0.5	0.292 J	< 0.5	< 1.5	--	--
202R	11/10/2014	< 5.0	0.313 J	2.80	< 0.5	< 5.0	< 0.5	< 0.5	0.314 J	< 0.5	< 1.5	9.6 J	1980
203R	5/20/2014	6.27	**218**	**145**	21.7	< 5.0	< 0.5	0.482 J	0.379 J	0.558	16	**22.5**	**6350**
203R	9/11/2014	< 5.0	**56**	67.1	18.1	< 5.0	< 0.5	0.177 J	0.494 J	0.413 J	15.8	--	--
203R	10/15/2014	< 5.0	**129**	**99**	48.3	< 5.0	< 0.5	0.799	0.504	< 0.5	39.7	--	--
203R	11/10/2014	< 5.0	**227**	**166**	39.3	< 5.0	< 0.5	2.20	0.461 J	0.867	35.7	**40.7**	**7210**
204R	5/19/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	0.313 J	< 0.5	< 0.5	< 0.5	**10.8**	64.7
204R	9/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
204R	10/15/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	--	--
204R	11/12/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	0.209 J	< 0.5	< 0.5	< 0.5	8.4 J	111
205R	5/22/2014	126	**96.8**	44.6	20.3	166	< 0.5	< 0.5	1.77	0.211 J	15.2	**32.1**	871
405R (205R DUP)	5/22/2014	54.4	**98**	44.1	21.1	161	< 0.5	< 0.5	1.74	0.218 J	15.3	**32.2**	890
205R	10/15/2014	< 5.0	**70.1**	29.9	17.9	40.2	< 0.5	< 0.5	1.61	< 0.5	12.2	--	--
205R	11/11/2014	< 5.0	**44.8**	20.5	11.5	16.2	< 0.5	< 0.5	1.90	< 0.5	7.87	**33.9**	664
405R (205R DUP)	11/11/2014	< 5.0	**44.8**	20.5	11.2	16.0	< 0.5	< 0.5	1.98	< 0.5	7.73	**40.8**	707
35R	5/21/2014	< 5.0	**10.6**	4.72	2.44	< 5.0	0.74	< 0.5	1.32	< 0.5	0.889 J	**10.4**	1370
35R	9/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
35R	10/15/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
37D	5/19/2014	7.33	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**93.4**	**4420**
37D	11/10/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**247**	**5880**
51S	5/20/2014	38.6	0.222 J	< 0.5	351	1.75 J	< 0.5	600	< 0.5	< 0.5	1730	**258**	**10400**
51S	11/11/2014	< 5.0	0.339 J	< 0.5	**834**	1.73 J	< 0.5	1.55	0.223 J	< 0.5	3430	**210**	**8290**
52S	11/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	< 10	923
57S	5/20/2014	< 5.0	< 0.5	0.420 J	< 0.5	< 5.0	< 0.5	< 0.5	0.504	< 0.5	< 1.5	< 10	563
57S	11/12/2014	< 5.0	< 0.5	1.97	7.98	< 5.0	< 0.5	0.255 J	< 0.5	< 0.5	2.04	**63.9**	**3810**
61R (75-90)	5/19/2014	< 5.0	1.66	5.05	0.599	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**14.5**	78.3
61R (75-90)	11/11/2014	< 5.0	0.640	3.77	0.217 J	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**12.7**	< 15
61R (183-198)	5/19/2014	< 5.0	< 0.5	13.2	< 0.5	< 5.0	< 0.5	< 0.5	**24.4**	< 0.5	< 1.5	**12**	20.4
61R (183-198)	11/11/2014	< 5.0	1.60	13.4	< 0.5	< 5.0	< 0.5	< 0.5	**15.6**	< 0.5	< 1.5	**14.4**	146
63R (85-100)	5/20/2014	42.3	< 0.5	0.834	< 0.5	< 5.0	< 0.5	0.488 J	0.229 J	< 0.5	< 1.5	< 10	< 15
63R (85-100)	11/12/2014	27.5	0.225 J	1.35	< 0.5	< 5.0	< 0.5	0.85	0.521	< 0.5	< 1.5	< 10	23
63R (150-165)	5/20/2014	< 5.0	0.494 J	17.6	< 0.5	< 5.0	< 0.5	0.288 J	**14.1**	< 0.5	< 1.5	**34.5**	215
63R (150-165)	11/12/2014	< 5.0	0.740	11.4	< 0.5	< 5.0	< 0.5	< 0.5	**12.3**	< 0.5	< 1.5	**24.4**	18.7
65R (100-115)	5/20/2014	< 5.0	1.12	16.4	< 0.5	< 5.0	< 0.5	0.281 J	**10.2**	< 0.5	< 1.5	**12.7**	9.0 J
65R (100-115)	11/12/2014	< 5.0	0.631	8.83	< 0.5	< 5.0	< 0.5	0.176 J	**5.32**	< 0.5	< 1.5	**13.2**	< 15
65R (180-195)	5/20/2014	< 5.0	**25.6**	**223**	2.59	< 5.0	< 0.5	0.334 J	0.432 J	0.683	1.31 J	< 10	2760

Table 4. Summary of 2014 Groundwater Analytical Results, Tibbetts Road Site, Barrington, NH

	Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
	ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Sample ID	**Sample Date**												
75R (180-195) DUP	5/20/2014	< 5.0	**26.1**	**212**	2.52	< 5.0	< 0.5	0.329 J	0.414 J	0.688	1.29 J	< 10	2760
65R (180-195)	11/12/2014	< 5.0	**18.8**	**184**	1.56	< 5.0	< 0.5	0.192 J	2.99	0.704	0.618 J	< 10	2080
75R (180-195) DUP	11/12/2014	< 5.0	**19.4**	**191**	1.51	< 5.0	< 0.5	0.205 J	3.00	0.817	0.629 J	< 10	2020
67R (83-98)	5/19/2014	3.67 J	**5.79**	40.7	< 0.5	< 5.0	< 0.5	1.39	**72.6**	0.262 J	< 1.5	8.6 J	< 15
67R (83-98)	11/12/2014	7.92	3.38	37.8	< 0.5	< 5.0	< 0.5	0.756	**80.8**	0.271 J	< 1.5	8.1 J	< 15
67R (149-164)	5/19/2014	18.6	1.31	8.11	< 0.5	< 5.0	< 0.5	0.443 J	**11.3**	< 0.5	< 1.5	< 10	925
67R (149-164)	11/12/2014	15.3	1.45	7.54	< 0.5	< 5.0	< 0.5	0.372 J	**12.1**	< 0.5	< 1.5	< 10	627
69R	5/19/2014	3.11 J	3.10	8.10	1.68	< 5.0	< 0.5	21	0.344 J	< 0.5	1.56	**67.1**	1880
69R	10/16/2014	< 5.0	2.17	8.00	0.967	< 5.0	< 0.5	< 0.5	0.429 J	< 0.5	0.819 J		
69R	11/10/2014	< 5.0	0.449 J	1.10	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**53.6**	1660
70S	11/13/2014	< 5.0	< 0.5	0.544	0.439 J	< 5.0	0.305 J	< 0.5	0.265 J	< 0.5	1.85	< 10	**8360**
73S	5/20/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	0.210 J	< 0.5	< 1.5	< 10	65.1
73S	11/12/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	< 10	90.7
75D	5/19/2014	< 5.0	< 0.5	0.959	0.894	< 5.0	0.211 J	0.183 J	0.384 J	< 0.5	< 1.5	< 10	1280
175D (75D DUP)	5/19/2014	< 5.0	< 0.5	0.722	1.48	< 5.0	< 0.5	< 0.5	0.300 J	< 0.5	< 1.5	< 10	1030
75D	11/13/2014	< 5.0	< 0.5	1.51	0.355 J	< 5.0	0.195 J	0.251 J	0.270 J	< 0.5	< 1.5	< 10	2250
175D (75D DUP)	11/13/2014	< 5.0	< 0.5	1.41	0.269 J	< 5.0	0.194 J	< 0.5	0.315 J	< 0.5	< 1.5	< 10	2180
EW-3S	5/19/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10	69.6
EW-3S	11/10/2014	< 5.0	< 0.5	0.489 J	< 0.5	< 5.0	0.266 J	< 0.5	< 0.5	< 0.5	0.676 J	< 10	**3750**
EW-10S	5/20/2014	< 5.0	< 0.5	< 0.5	0.753	< 5.0	< 0.5	3.35	< 0.5	< 0.5	5.69	< 10	313
EW-10S	11/11/2014	< 5.0	1.17	0.242 J	**2340**	< 5.0	< 0.5	**31400 B**	**12.9**	< 0.5	**12900**	**127**	**14000**
EW-100 (31-60')	5/21/2014	< 5.0	**112**	46.3	55.3	5.46	< 0.5	1.33	1.10	< 0.5	47.7	--	**--**
EW-101 (35-60')	5/21/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	0.390 J	9.11	0.267 J	< 0.5	< 1.5	--	**--**
IW-100 (41.5-60')	5/22/2014	27.2	**474**	**198**	84	857	< 0.5	54.3	0.57	0.889	254	--	**--**
IW-100	8/11/2014	< 5.0	**17.1**	20.7	2.06	2.36 J	0.163 J	< 0.5	2.02	< 0.5	1.46 J	--	**--**
IW-100	8/13/2014	< 5.0	**16.6**	22	2.50	4.01 J	0.192 J	< 0.5	2.57	< 0.5	1.91	--	**--**
IW-100	8/15/2014	< 5.0	**21.3**	22.6	3.83	15.3	0.180 J	< 0.5	2.42	< 0.5	6.81	--	**--**
IW-100	8/21/2014	< 5.0	**18.8**	17.4	3.78	15.0	< 0.5	0.711	2.32	< 0.5	5.46	--	**--**
IW-100	8/28/2014	< 5.0	**24.8**	20.9	5.25	24.3	< 0.5	1.08	2.78	< 0.5	7.98	--	**--**
IW-100	9/5/2014	< 5.0	**18.4**	16.1	4.42	13.7	< 0.5	0.994 B	2.11	< 0.5	6.74	--	**--**
IW-100	9/11/2014	< 5.0	**15.1**	18.5	3.77	11	< 0.5	0.635	2.29	< 0.5	5.77	--	**--**
IW-100	9/25/2014	< 5.0	**11.4**	14.3	2.87	6.05	< 0.5	0.194 J	2.00	< 0.5	2.94	--	**--**
IW-100	10/9/2014	< 5.0	**9.17**	14.4	1.77	6.36	< 0.5	< 0.5	1.59	< 0.5	1.76	--	**--**
IW-100	10/15/2014	< 5.0	**37.2**	**77.8**	12.6	16.6	< 0.5	0.822	3.08	0.325 J	12.5	--	**--**
IW-100	11/12/2014	< 5.0	**16.6**	39.4	4.73	4.12 J	< 0.5	0.332	2.87	< 0.5	4.16	--	**--**
IW-100	12/3/2014	< 5.0	**20.4**	49.9	6.52	8.20	< 0.5	0.455 J	3.41	0.230 J	5.82	--	**--**
IW-101 (39-45')	5/22/2014	16.1	**17.5**	7.04	5.46	18.9	< 0.5	7.96	0.208 J	< 0.5	9.45	--	**--**
IW-102 (39-60')	5/22/2014	< 5.0	**12.4**	21.7	4.23	< 5.0	< 0.5	4.49	0.244 J	< 0.5	4.72	--	**--**
IW-103 (38.5-60')	5/22/2014	< 5.0	**47.7**	45.3	17.3	< 5.0	< 0.5	0.386 J	0.78	< 0.5	13.8	--	**--**
IW-103	8/11/2014	< 5.0	**55.2**	47.5	16.5	< 5.0	0.163 J	< 0.5	2.02	< 0.5	12.8	--	**--**
IW-103	8/13/2014	< 5.0	**33**	29.4	11.4	< 5.0	0.192 J	< 0.5	2.57	< 0.5	9.8	--	**--**
IW-103	8/15/2014	< 5.0	**35.3**	31.8	13.5	< 5.0	0.180 J	< 0.5	2.42	< 0.5	11.7	--	**--**
IW-103	8/21/2014	< 5.0	**26.7**	21.5	9.08	< 5.0	< 0.5	0.711	2.32	< 0.5	7.28	--	**--**
IW-103	8/28/2014	< 5.0	**34.6**	30.1	11.3	< 5.0	< 0.5	1.08	2.78	< 0.5	9.36	--	**--**
IW-103	9/5/2014	< 5.0	**31.8**	29.2	11.5	< 5.0	< 0.5	0.994 B	2.11	< 0.5	9.81	--	**--**
IW-103	9/11/2014	< 5.0	**24.8**	27.5	8.55	< 5.0	< 0.5	< 0.5	0.564	< 0.5	7.82	--	**--**
IW-103	9/25/2014	< 5.0	**21.1**	21.1	7.85	< 5.0	< 0.5	< 0.5	0.402 J	< 0.5	6.67	--	**--**
IW-103	10/9/2014	< 5.0	**22.7**	26.8	7.73	< 5.0	< 0.5	< 0.5	0.470 J	< 0.5	7.01	--	**--**
IW-103	10/15/2014	< 5.0	**20.3**	25.5	6.00	6.75	0.53	0.295 J	0.530	< 0.5	6.39	--	**--**
IW-103	11/12/2014	< 5.0	**11.9**	19.8	3.02	1.81 J	< 0.5	< 0.5	0.758	< 0.5	3.06	--	**--**
IW-103	12/3/2014	< 5.0	**12.7**	19.5	3.61	< 5.0	< 0.5	< 0.5	0.557	< 0.5	2.85	--	**--**
MW-300 (20-30)	5/21/2014	< 5.0	**5.44**	10.1	< 0.5	< 5.0	0.407 J	0.329 J	3.27	< 0.5	< 1.5	**28.5**	451
MW-300 (20-30)	11/13/2014	< 5.0	0.369 J	1.93	< 0.5	< 5.0	0.176 J	< 0.5	0.790	< 0.5	< 1.5	**22.4**	356
MW-300 (40-50)	5/21/2014	< 5.0	2.08	31.0	< 0.5	< 5.0	0.692	0.735	**7.76**	< 0.5	< 1.5	7.9 J	163
MW-300 (40-50)	11/13/2014	< 5.0	2.26	13.0	< 0.5	< 5.0	0.728	0.365 J	**5.12**	< 0.5	< 1.5	9.2 J	95.1

Table 4. Summary of 2014 Groundwater Analytical Results, Tibbetts Road Site, Barrington, NH

	Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
	ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Sample ID	**Sample Date**												
MW-300 (80-90)	5/21/2014	< 5.0	**27.1**	8.54	< 0.5	< 5.0	< 0.5	2.39	4.05	< 0.5	< 1.5	< 10	728
MW-300 (80-90)	11/13/2014	< 5.0	**9.06**	6.44	< 0.5	< 5.0	< 0.5	1.19	1.76	< 0.5	< 1.5	< 10	817
MW-300 (120-130)	5/21/2014	< 5.0	4.97	6.12	< 0.5	< 5.0	< 0.5	4.05	0.761	< 0.5	< 1.5	< 10	121
MW-300 (120-130)	11/13/2014	3.32 J	4.01	5.51	< 0.5	< 5.0	< 0.5	1.98	0.819	< 0.5	< 1.5	< 10	160
MW-301 (35-45)	5/22/2014	111	**30.9**	23.4	5.87	< 5.0	< 0.5	0.599	< 0.5	< 0.5	5.08	**118**	1870
MW-301 (35-45)	9/12/2014	13.7	**28.1**	12.6	12.2	< 5.0	< 0.5	0.514	< 0.5	< 0.5	10.6	**--**	--
MW-301 (35-45)	10/16/2014	< 5.0	**20.6**	9.45	12.4	< 5.0	< 0.5	0.323 J	< 0.5	< 0.5	10.8	**--**	--
MW-301 (35-45)	11/13/2014	< 5.0	**64.8**	29.5	25.2	< 5.0	< 0.5	0.853	< 0.5	< 0.5	21.9	**58.8**	1350
MW-301 (115-125)	5/22/2014	< 5.0	3.92	10.1	< 0.5	< 5.0	< 0.5	0.659	0.727	< 0.5	< 1.5	< 10	588
MW-301 (115-125)	10/16/2014	< 5.0	1.92	9.76	< 0.5	< 5.0	< 0.5	0.546	0.538	< 0.5	< 1.5	--	--
MW-301 (115-125)	11/13/2014	< 5.0	1.58	7.40	< 0.5	< 5.0	< 0.5	0.254 J	1.70	< 0.5	< 1.5	< 10	444
MW-301 (145-155)	5/22/2014	< 5.0	**12.1**	32.4	< 0.5	< 5.0	< 0.5	1.10	0.652	< 0.5	< 1.5	< 10	1530
MW-301 (145-155)	10/16/2014	12.1	**9.48**	26.1	< 0.5	< 5.0	< 0.5	1.20	0.344 J	< 0.5	< 1.5	--	--
MW-301 (145-155)	11/13/2014	< 5.0	**11.9**	33.2	< 0.5	< 5.0	< 0.5	0.952	0.737	< 0.5	< 1.5	< 10	1530
MW-301 (240-250)	5/22/2014	7.33	**14.9**	28.9	< 0.5	< 5.0	< 0.5	1.84	0.902	< 0.5	< 1.5	< 10	1170
MW-301 (240-250)	11/13/2014	15.3	**8.19**	22.2	< 0.5	< 5.0	< 0.5	1.02	0.444 J	< 0.5	< 1.5	< 10	933
MW-301 (290-300)	5/22/2014	13.5	**6.05**	41.9	< 0.5	< 5.0	< 0.5	0.664	1.19	0.188 J	< 1.5	**11.9**	1160
MW-301 (290-300)	11/13/2014	< 5.0	3.55	24.8	< 0.5	< 5.0	< 0.5	0.629	0.278 J	< 0.5	< 1.5	< 10	926
MW-302 (60-70)	5/21/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**30.6**	109
MW-302 (60-70)	11/12/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**29.4**	122
MW-302 (100-110)	5/21/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**24.3**	235
MW-302 (100-110)	11/12/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**25.7**	147
MW-303 (55-65)	5/21/2014	< 5.0	3.53	< 0.5	< 0.5	< 5.0	< 0.5	0.235 J	< 0.5	< 0.5	< 1.5	**22.1**	79.7
MW-303 (55-65)	11/11/2014	< 5.0	2.05	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**24.4**	41.3
MW-303 (115-125)	5/21/2014	< 5.0	4.53	0.432 J	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**22.1**	126
MW-303 (115-125)	11/11/2014	< 5.0	0.522	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**16.2**	63.9
MW-305 (35-45)	5/22/2014	< 5.0	2.27	4.59	< 0.5	< 5.0	< 0.5	1.82	0.208 J	< 0.5	< 1.5	**16**	3050
MW-305 (35-45)	10/16/2014	3.06 J	1.36	2.97	< 0.5	< 5.0	< 0.5	1.52	< 0.5	< 0.5	< 1.5	**--**	--
MW-305 (35-45)	11/13/2014	< 5.0	0.592	1.33	< 0.5	< 5.0	< 0.5	1.17	< 0.5	< 0.5	< 1.5	**11.1**	1100
MW-305 (62-72)	5/22/2014	< 5.0	4.01	2.81	0.298 J	< 5.0	< 0.5	0.736	0.421 J	< 0.5	< 1.5	**14.8**	1310
MW-305 (62-72)	9/12/2014	< 5.0	3.06	1.77	0.354 J	< 5.0	< 0.5	0.842	< 0.5	< 0.5	< 1.5	**--**	**--**
MW-305 (62-72)	10/16/2014	< 5.0	2.44	1.23	0.306 J	< 5.0	< 0.5	0.818	< 0.5	< 0.5	< 1.5	**--**	**--**
MW-305 (62-72)	11/13/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	9.6 J	796
MW-305 (145-155)	5/22/2014	0.390 J	0.273 J	0.890	< 0.5	< 5.0	< 0.5	1.44	< 0.5	< 0.5	< 1.5	8.9 J	897
MW-305 (145-155)	9/12/2014	9.21	0.260 J	0.763	< 0.5	< 5.0	< 0.5	0.886	< 0.5	< 0.5	< 1.5	--	--
MW-305 (145-155)	10/16/2014	6.20	0.200 J	0.691	< 0.5	< 5.0	< 0.5	1.04	< 0.5	< 0.5	< 1.5	--	--
MW-305 (145-155)	11/13/2014	< 5.0	0.297 J	0.694	< 0.5	< 5.0	< 0.5	1.42	< 0.5	< 0.5	< 1.5	7.6 J	711
MW-305 (233-243)	5/22/2014	11.7	0.989	4.70	< 0.5	< 5.0	< 0.5	3.44	0.255 J	< 0.5	< 1.5	**13**	1060
MW-305 (233-243)	11/13/2014	< 5.0	0.789	6.41	< 0.5	< 5.0	< 0.5	1.64	0.338 J	< 0.5	< 1.5	< 10	998
MW-305 (265-275)	5/22/2014	10.8	1.10	9.39	< 0.5	< 5.0	< 0.5	1.66	0.408 J	< 0.5	< 1.5	< 10	628
MW-305 (265-275)	11/13/2014	< 5.0	0.962	11.8	< 0.5	< 5.0	< 0.5	0.589	0.869	< 0.5	< 1.5	< 10	482
MW-305 (285-300)	5/22/2014	15.8	0.809	4.63	< 0.5	< 5.0	< 0.5	1.97	< 0.5	< 0.5	< 1.5	9.0 J	**3880**
MW-305 (285-300)	11/13/2014	7.71	0.402 J	2.62	< 0.5	< 5.0	< 0.5	1.27	< 0.5	< 0.5	< 1.5	8.1 J	2420
MW-306S (130-140)	5/22/2014	< 5.0	< 0.5	5.30	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**12.2**	20.4
MW-306S (130-140)	11/10/2014	< 5.0	< 0.5	0.451 J	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	< 10	19.4
MW-306S (85-100)	5/22/2014	< 5.0	0.737	23.9	< 0.5	< 5.0	< 0.5	< 0.5	0.391 J	< 0.5	< 1.5	< 10	16.6
MW-306S (85-100)	11/10/2014	< 5.0	1.02	30.8	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	< 10	170
MW-306D (185-195)	5/22/2014	< 5.0	**41.2**	**242**	1.62	< 5.0	< 0.5	0.358 J	**5.66**	0.879	< 1.5	9.6 J	26.2
MW-306D (185-195)	11/10/2014	< 5.0	4.37	47.4	0.944	< 5.0	< 0.5	0.223 J	1.24	< 0.5	< 1.5	9.7 J	35
MW-306D (280-300)	5/22/2014	< 5.0	1.89	19.6	< 0.5	< 5.0	< 0.5	< 0.5	1.03	< 0.5	< 1.5	< 10	51.6
MW-306D (280-300)	11/10/2014	< 5.0	2.00	19.1	0.201 J	< 5.0	< 0.5	< 0.5	0.842	< 0.5	< 1.5	< 10	29.4
MW-406D	11/10/2014	< 5.0	2.05	19.0	0.203 J	< 5.0	< 0.5	< 0.5	0.888	< 0.5	< 1.5	< 10	29.1

Table 4. Summary of 2014 Groundwater Analytical Results, Tibbetts Road Site, Barrington, NH

	Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
	ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Sample ID	**Sample Date**												
MW-307S (80-90)	7/8/2014	< 5.0	< 0.5	23.6	< 0.5	< 5.0	< 0.5	< 0.5	**7.83**	< 0.5	< 1.5	--	--
BD-0708014	7/8/2014	< 5.0	< 0.5	24.3	< 0.5	< 5.0	< 0.5	0.376 J	**7.87**	< 0.5	0.620 J	--	--
MW-307S (80-90)	11/11/2014	< 5.0	1.51	9.69	< 0.5	< 5.0	0.222 J	0.197 JB	**7.47**	< 0.5	< 1.5	8.0 J	1300
MW-307S (172-187)	7/8/2014	< 5.0	0.226 J	17.4	< 0.5	< 5.0	< 0.5	< 0.5	**6.87**	< 0.5	< 1.5	--	--
MW-307S (172-187)	11/11/2014	< 5.0	< 0.5	4.52	< 0.5	< 5.0	< 0.5	< 0.5	1.28	< 0.5	< 1.5	7.9 J	227
MW-307D (200-210)	7/8/2014	< 5.0	1.37	38.4	< 0.5	< 5.0	< 0.5	9.48	4.95	0.218 J	< 1.5	--	--
MW-307D (200-210)	11/11/2014	< 5.0	0.400 J	25.9	< 0.5	< 5.0	< 0.5	0.981	**5.41**	< 0.5	< 1.5	< 10	47.3
GAC Outlet 1-2	12/3/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
GAC Outlet 2-3	8/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
GAC Outlet 2-3	8/13/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
GAC Outlet 2-3	8/15/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
GAC Outlet 2-3	8/21/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
GAC Outlet 2-3	8/28/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
GAC Outlet 2-3	9/5/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
GAC Outlet 2-3	12/3/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Effluent	8/11/2014	8.89	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Effluent	8/13/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Effluent	8/15/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Effluent	8/21/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Effluent	8/28/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	0.206 J	< 0.5	< 1.5	--	--
Effluent	9/5/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Effluent	9/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Effluent	9/25/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Effluent	10/9/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Effluent	11/12/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Effluent	12/3/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	5/19/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	5/20/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	5/21/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	5/22/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	7/8/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	8/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	8/13/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	8/15/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	8/21/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	8/28/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	9/5/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	0.373 JB	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	9/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	9/25/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	10/9/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	10/15/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	0.213 J	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	11/10/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	11/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	11/12/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	11/13/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--
Trip Blank	12/3/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	--	--

Notes:
ICL - interim groundwater cleanup level
ug/L - micrograms per liter
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 detected in the blank and sample
< - result less than indicated reporting limit (shown in parentheses)
Bold values indicate ICL exceedances
NA - ICL not established for this parameter
-- - not analyzed

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
035R	35R	1/1/1985	ND	**12**	ND		ND	ND	ND	**110**		4.0 J		
035R	35R	6/6/1990	< 10	**19**	< 5.0	< 5.0	140	< 5.0	< 5.0	4.0 J	< 10	< 5.0		
035R	35R	6/1/1991	ND	**52**	ND		320 B	ND	ND	**12 J**		ND		
035R	35R	5/24/1994	ND	**290**	26	ND	790	< 10	ND	**25**		ND		
035R	35R	1/8/1997	< 10	**17**	4.0 J	< 5.0	120	< 5.0	< 5.0	1.0 J	< 5.0	< 5.0		
035R	35R	3/21/1997	ND	< 5.0	3.0 J	5.0	23	< 5.0	3.0 J	5.0		6.0		
035R	35R	4/21/1998	< 50	**130**	< 25	< 25	1000	< 25	< 25	< 25	< 25	< 25	**30**	870
035R	35R	5/6/1999	< 10	**120**	9.6	1.6 J	180	1.2 J	< 5.0	**12**	< 10	< 15		
035R	35R	12/21/1999	< 10	**92**	10	1.8 J	< 10	1.8 J	< 5.0	**18**	< 5.0	< 15		
035R	35R	2/16/2000	< 10	**53**	8.7	< 5.0	< 10	2.1 J	< 5.0	**19**	< 5.0	< 15		
035R	35R	7/13/2000	< 10	**75**	8.2	< 5.0	24	1.7 J	< 5.0	**13**	< 5.0	< 15		
035R	35R	12/6/2000	< 25	**78**	8.3	< 5.0	< 10	2.3 J	< 5.0	**19**	< 5.0	< 15		
035R	35R	7/26/2001	< 50	**60**	12	< 5.0	< 25	< 5.0	< 5.0	**22**	< 10	< 10		
035R	35R	12/19/2001	< 10	**140**	28	5.4	33	< 5.0	58	**20**	< 5.0	13		
035R	35R	7/10/2002	< 10	**30**	8.2	< 5.0	< 10	< 5.0	< 5.0	**12**	< 5.0	< 10		
035R	35R	1/16/2003	< 10	**40**	11	< 5.0	< 10	< 5.0	< 5.0	**20**	< 5.0	< 10	**23**	960
035R	35R	3/12/2003	< 10	**31**	12	< 5.0	< 10	< 5.0	< 5.0	**20**	< 5.0	< 10	**22**	960
035R	35R	6/4/2003	< 10	**44**	10	< 5.0	< 10	< 5.0	< 5.0	**20**	< 5.0	< 10	**21**	950
035R	35R	10/27/2003	< 10	**56**	20	< 5.0	< 10	< 5.0	< 5.0	**27**	< 5.0	< 5.0	**21.6**	1170
035R	35R	12/17/2003	< 100	**56**	19	< 5.0	< 10	< 5.0	< 5.0	**22**	< 5.0	< 5.0	**25.2**	1110
035R	35R	2/10/2004	< 10	**41**	13	< 5.0	< 10	< 5.0	< 5.0	**20**	< 5.0	< 5.0	**21.2**	1100
035R	35R	3/23/2004	< 10	**50**	12	< 5.0	< 10	< 5.0	< 5.0	**23**	< 5.0	< 5.0	**18.6**	1200
035R	35R	5/25/2004	< 10	**56**	16	< 5.0	< 10	5.0	< 5.0	**18**	< 5.0	< 5.0	**19.7**	1100
035R	35R	11/8/2004	< 10	**76**	24	5.0	< 10	4.0 J	1.0 J	**29**	< 5.0	1.0 J	**19.6**	1380
035R	35R	5/26/2005	< 100	**35**	12	< 5.0	< 10	**6.0**	< 5.0	**20**	< 10	< 1.0	**20.3**	1160
035R	35R	11/11/2005	< 100	**53**	22	3.0 J	< 10	3.0 J	< 5.0	**19**	< 5.0	< 1.0	**19.8**	1260
035R	35R	7/5/2006	< 100	**18**	5.0 J	< 5.0	< 10	< 5.0	< 5.0	3.0 J	< 5.0	< 1.0	**27**	925
035R	35R	8/31/2006	< 100	**19**	7.0	< 5.0	< 10	1.0 J	< 5.0	**6.0**	< 5.0	< 1.0	**23.8**	1060
035R	35R	11/21/2006	< 100	5	2.0 J	< 5.0	< 10	0.9 J	< 5.0	2.0 J	< 5.0	< 1.0	< 100	993
035R	35R	2/27/2007	< 100	5	5.0 J	< 5.0	< 10	2.0 J	< 5.0	4.0 J	< 5.0	< 1.0	< 100	834
035R	35R	5/30/2007	< 100	**18**	5.0 J	< 5.0	< 10	< 5.0	< 5.0	2.0 J	< 5.0	< 1.0	< 100	823
035R	35R	11/27/2007	< 100	**14**	10	< 5.0	< 10	3.0 J	< 5.0	**11**	< 5.0	< 1.0	**44 J**	1120
035R	35R	5/22/2008	< 100	**6.0**	11	< 5.0	< 10	1.0 J	< 5.0	4.0 J	< 2.0	< 1.0	< 100	926
035R	35R	11/21/2008	< 100	4.0 J	7.0	< 5.0	< 10	2.0 J	< 5.0	5.0	< 2.0	< 1.0	< 100	1170
035R	35R	6/25/2009	< 50	**27.3**	14	2.68	< 10	1.77	0.87	**9.02**	< 0.5	0.79	**14.2**	1250
035R	35R	11/24/2009	< 50	**37.2**	22	3.01	< 10	2.85	< 0.5	**12.8**	< 0.5	< 0.5	**15.7**	1450
035R	35R	11/30/2010	< 50	**13.7**	22.7	1.24	< 10	2.44	0.340 J	**9.59**	< 0.5	1.25	**13.8**	1820
035R	35R	5/10/2011	< 50	**12**	13.8	0.93	< 10	2.45	< 0.5	**8.48**	< 0.5	0.410 J	**16.3**	1430
035R	35R	11/14/2011	< 50	3.63	18.1	< 0.5	< 10	2.36	< 0.5	**7.54**	< 0.5	< 0.5	**12.9**	1700
035R	35R	5/16/2012	< 50	1.07	5.16	< 0.5	< 10	1.47	< 0.5	4.79	< 0.5	< 0.5	**14.5**	1310
035R	35R	11/12/2012	< 50	0.277 J	1.94	< 0.5	< 10	1.1	< 0.5	1.84	< 0.5	< 0.5	< 10	304
035R	35R	5/23/2013	< 50	0.794	5.0	< 0.5	< 10	1.23	< 0.5	3.56	< 0.5	< 0.5	< 10	1390
035R	35R	11/12/2013	< 5.0	0.287	1.54	< 0.5	< 5.0	0.62	< 0.5	1.7	< 0.5	< 1.5	6.8 J	1840
035R	35R	5/21/2014	< 5.0	**10.6**	4.72	2.44	< 5.0	0.74	< 0.5	1.32	< 0.5	0.889 J	**10.4**	1370
035R	35R	9/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5		
035R	35R	10/15/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5		
037D	37D	1/1/1985	16000	**620**		58	**87000**	**6.0 J**	430	**200**		270		
037D	37D	6/19/1990	< 660	**1000 J**	**140**	< 250	**2300**	< 250	< 390	**150 J**	< 500	< 1000		
037D	37D	10/10/1990	< 200	**3100 J**	**270**	**1500**	**3800**	**210**	**2600**	**630**	< 200	3100		
037D	37D	5/31/1991	ND	**2300**	**950**	**1100**	750	**38 J**	840	**160**		2200		
037D	37D	5/24/1994	ND	**290**	26	ND	790	< 10	ND	**25**		ND		
037D	37D	5/27/1995	13 JB	**98**	< 20	190	28	**130**	41	**330**	< 20	6.0 J		
037D	37D	8/23/1995	< 40	**28**	**100**	68	< 40	**91**	< 20	**320**	< 20	< 20		
037D	37D	4/3/1996	< 20	< 10	**89**	33	< 20	**47**	< 10	< 10	< 10	< 10		
037D	37D	8/12/1996	< 40	< 20	52	< 20	< 40	**35**	< 20	**120**	< 20	< 20		
037D	37D	1/8/1997	< 10	2.0 J	39	10	7.0 J	**38**	< 5.0	**87**	< 5.0	< 5.0		
037D	37D	3/21/1997	ND	< 25	43	14 J	< 50	**36**	< 25	**97**		< 25		
037D	37D	4/20/1998	< 10	< 5.0	7.8	< 5.0	< 10	**7.6**	< 5.0	**14**	< 5.0	< 5.0	**360**	3100
037D	37D	5/6/1999	< 10	1.6 J	3.4 J	< 5.0	< 10	2.2 J	< 5.0	**5.4**	< 10	< 15		
037D	37D	12/21/1999	< 10	< 5.0	1.0 J	< 5.0	< 10	1.5 J	< 5.0	2.3 J	< 5.0	< 15		
037D	37D	7/13/2000	< 10	< 5.0	< 5.0	< 5.0	< 10	2.2 J	< 5.0	2.2 J	< 5.0	< 15		
037D	37D	12/6/2000	< 25	< 5.0	1.9 J	< 5.0	< 10	1.9 J	< 5.0	2.0 J	< 5.0	< 15		
037D	37D	7/26/2001	< 10	< 5.0	< 5.0	< 5.0	< 10	**7.0**	< 5.0	< 5.0	< 5.0	< 10		
037D	37D	12/19/2001	< 10	**35**	10	< 5.0	220	< 5.0	150	< 5.0	< 5.0	< 10		
037D	37D	7/10/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
037D	37D	12/19/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
037D	37D	6/5/2003	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10	**44**	2800
037D	37D	12/19/2003	< 100	< 5.0	17	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**55.1**	3410
037D	37D	5/26/2004	< 10	< 5.0	16	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**52.3**	**3920**
037D	37D	11/5/2004	< 10	< 5.0	48	< 5.0	< 10	2.0 J	< 5.0	2.0 J	< 5.0	< 5.0	**53.6**	**3870**
037D	37D	5/20/2005	< 100	< 5.0	39	< 5.0	< 10	4.0 J	< 5.0	< 5.0	< 10	< 1.0	**51.1**	**4530**
037D	37D	11/14/2005	< 100	< 5.0	**170**	< 5.0	< 10	5.0	< 5.0	2.0 J	< 5.0	< 1.0	**52**	**4850**
037D	37D	6/29/2006	< 100	< 5.0	**220**	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 5.0	< 1.0	**71.5**	**6640**
037D	37D	8/30/2006	< 100	< 5.0	**260**	< 5.0	< 10	3.0 J	< 5.0	1.0 J	< 5.0	< 1.0	**57.4**	**5300**
037D	37D	11/20/2006	< 100	< 5.0	**120**	< 5.0	< 10	3.0 J	< 5.0	< 5.0	< 5.0	< 1.0	**67.7 J**	**5760**
037D	37D	2/26/2007	< 100	< 5.0	63	< 5.0	< 10	2.0 J	< 5.0	< 5.0	< 5.0	< 1.0	**63 J**	**5770**
037D	37D	5/31/2007	< 100	< 5.0	33	< 5.0	< 10	1.0 J	< 5.0	< 5.0	< 5.0	< 1.0	**51.6 J**	**6610**
037D	37D	11/26/2007	< 100	< 5.0	16	< 5.0	< 10	1.0 J	< 5.0	< 5.0	< 5.0	< 1.0	**50.4 J**	**5470**
037D	37D	5/20/2008	< 100	< 5.0	8.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	**61.4 J**	**6240**
037D	37D	11/20/2008	< 100	< 5.0	4.0 J	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	**80.6 J**	**6140**

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
037D	37D	6/24/2009	< 50	< 0.5	1.67	< 0.5	< 10	< 0.5	0.35 J	< 0.5	< 0.5	< 0.5	**58.7**	**6240**
037D	37D	11/20/2009	< 50	< 0.5	0.95	< 0.5	< 10	0.290 J	< 0.5	< 0.5	< 0.5	< 0.5	**67**	**7370**
037D	37D	12/2/2010	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**78.9**	**5390**
037D	37D	5/10/2011	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**50.1**	**4920**
037D	37D	11/16/2011	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**70.5**	**5030**
037D	37D	5/16/2012	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**60.5**	**5560**
037D	37D	11/12/2012	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**78.2**	**5370**
037D	37D	5/21/2013	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**59.4**	**5260**
037D	37D	11/11/2013	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**80.4**	**5720**
037D	37D	5/19/2014	7.33	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**93.4**	**4420**
037D	37D	11/10/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**247**	**5880**
051S	51S	1/1/1985	3500	**120**		ND	210	ND	1000	ND		4800		
051S	51S	6/19/1990	< 10000	< 5000	< 5000	< 5000	**10000**	< 5000 J	< 24000	< 5000	< 10000	< 21000		
051S	51S	10/9/1990	< 200	**28 J**	< 100	450	< 200	< 100	**2500**	< 100	< 200	2200		
051S	51S	6/2/1995	600 J	< 1000	< 1000	**3400**	850 J	< 1000	**18000**	< 1000	< 1000	**12000**		
051S	51S	11/28/1995	< 50	< 25	< 25	270	< 50	< 25	580	< 25	< 25	2000		
051S	51S	4/10/1996	< 500	< 250	< 250	**4000**	< 500	< 250	**7800**	< 250	< 250	**23000**		
051S	51S	8/14/1996	< 1000	< 500	< 500	**2300**	< 1000	< 500	**17000**	< 500	< 500	**11000**		
051S	51S	1/8/1997	< 1000	< 500	< 500	**1300**	< 1000	< 500	**15000**	< 500	< 500	**11000**		
051S	51S	3/20/1997	ND	< 2500	< 2500	**1600 J**	< 5000	< 2500	**12000**	< 2500		10000		
051S	51S	4/17/1998	< 200	< 100	< 100	370	< 200	< 100	440	< 100	< 100	2100		
051S	51S	10/26/1998	< 200	< 100	< 100	**1000**	< 200	< 100	690	< 100	< 100	4400		
051S	51S	5/4/1999	< 10	1.5 J	< 5.0	73	< 10	< 5.0	130	< 5.0	< 5.0	400		
051S	51S	12/20/1999	< 100	< 5.0	< 5.0	**870**	< 10	< 5.0	140 B	< 5.0	< 16	4300		
051S	51S	7/12/2000	< 10	**7.6**	< 5.0	620 E	< 10	< 5.0	**1200 E**	< 5.0	< 5.0	5500 E		
051S	51S	12/4/2000	< 25	**14**	< 6.4	**830**	< 16	< 6.4	190	< 5.0	< 6.4	3300		
051S	51S	7/24/2001	< 100	< 50	< 50	**840**	< 100	< 50	670	< 50	< 50	5900		
051S	51S	12/17/2001	< 10	< 5.0	< 5.0	230 E	< 10	< 5.0	7.7	< 5.0	< 5.0	58		
051S	51S	7/8/2002	< 10	< 5.0	< 5.0	5.7	< 10	< 5.0	< 5.0	< 5.0	< 5.0	100		
051S	51S	12/18/2002	< 10	< 5.0	< 5.0	33	< 10	< 5.0	< 5.0	< 5.0	< 5.0	70		
051S	51S	6/2/2003	< 20	< 5.0	< 5.0	36 D	< 20	< 5.0	< 5.0	< 5.0	< 5.0	500 E	**54**	**5600**
051S	51S	12/19/2003	< 100	< 5.0	< 5.0	34	< 10	< 5.0	< 5.0	< 5.0	< 10	340	**50.4**	**4600**
051S	51S	5/28/2004	< 10	< 5.0	< 5.0	31	< 10	< 5.0	< 5.0	< 5.0	< 5.0	278	**75**	**5370**
051S	51S	11/2/2004	< 10	1.0 J	< 5.0	7.0	< 10	< 5.0	1.0 J	< 5.0	< 5.0	53	**136**	**6400**
051S	51S	5/17/2005	< 100	< 5.0	< 5.0	21	< 10	< 5.0	1.0 J	< 5.0	< 10	114	**125**	**4510**
051S	51S	11/10/2005	< 100	3.0 J	< 5.0	39	< 10	< 5.0	< 5.0	< 5.0	< 5.0	68	**139**	**5440**
051S	51S	6/26/2006	< 100	< 5.0	< 5.0	39	< 10	< 5.0	2.0 J	< 5.0	< 5.0	51	**188**	
051S	51S	11/29/2006	< 100	2.0 J	< 5.0	93	< 10	< 5.0	4.0 J	< 5.0	< 5.0	133	**150**	**5690**
051S	51S	5/19/2008	< 100	< 5.0	< 5.0	30	< 10	< 5.0	< 5.0	< 5.0	< 2.0	57	**133**	**4250**
051S	51S	11/17/2008	< 100	< 5.0	< 5.0	28	< 10	< 5.0	< 5.0	< 5.0	< 2.0	31	**208**	**4420**
051S	51S	6/22/2009	< 50	< 0.5	< 0.5	60.5	< 10	< 0.5	0.530 B	< 0.5	< 0.5	126	**134**	3430
051S	51S	11/18/2009	< 50	1.2	< 0.5	176	< 10	< 0.5	0.77	0.390 J	< 0.5	128	**172**	2860
051S	51S	11/30/2010	< 50	< 0.5	< 0.5 U	7.96	< 10	< 0.5	< 0.5	0.370 J	< 0.5	0.55	**21.9**	1810
051S	51S	5/9/2011	< 50	0.670 J	< 0.5	80.9	< 10	< 0.5	< 0.5	0.320 J	< 0.5	79.1	**105**	2830 B
051S	51S	11/14/2011	< 50	3.56	< 0.5	181 J	< 10	< 0.5	58.2	0.470 J	< 0.5	273 J	**165**	2800 MHA
051S	51S	5/15/2012	< 50	0.330 J	< 0.5	48	< 10	< 0.5	0.430 J	< 0.5	< 0.5	47.6	**177**	2560 MHA
051S	51S	11/13/2012	< 50	2.75	< 0.5	289	< 10	< 0.5	6.82	< 0.5	< 0.5	441	**100**	2240
051S	51S	5/23/2013	< 50	0.308 J	< 0.5	36.3	< 10	< 0.5	< 0.5	< 0.5	< 0.5	43.9	**142**	1650
051S	51S	11/12/2013	993	< 2.5	< 2.5	518	< 25	< 2.5	934	< 2.5	< 2.5	2320	**305**	**12500**
051S	51S	5/20/2014	38.6	0.222 J	< 0.5	351	1.75 J	< 0.5	600	< 0.5	< 0.5	1730	**258**	**10400**
051S	51S	11/11/2014	< 5.0	0.339 J	< 0.5	**834**	1.73 J	< 0.5	1.55	0.223 J	< 0.5	3430	**210**	**8290**
052S	52S	1/1/1985	5400	**1700**		ND	**47000**	**18 J**	**5200**	**84 J**		750		
052S	52S	6/15/1990	ND	**960 J**		ND	ND	ND	**12000 J**	**310 J**		ND		
052S	52S	10/10/1990	< 500	**1100**	**200 J**	**880**	< 500	**130 J**	**4600**	**300**	< 500	2000		
052S	52S	5/31/1991	ND	**200**	**180**	110	ND	ND	880	**29 J**		290		
052S	52S	5/24/1994	ND	3.8	1.6	4.3	ND	3.2	ND	4.2		3.9		
052S	52S	6/2/1995	< 10	2.0 J	8.0 J	2.0 J	< 10	**10**	< 10	**20**	< 10	< 10		
052S	52S	11/28/1995	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
052S	52S	4/3/1996	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
052S	52S	8/13/1996	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
052S	52S	1/8/1997	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
052S	52S	3/21/1997	ND	< 5.0	< 5.0	< 5.0	< 10	< 5.0	2.0 J	< 5.0		< 5.0		
052S	52S	4/21/1998	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	2.7	97
052S	52S	5/6/1999	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	2.6 BJ	< 5.0	< 10	< 15		
052S	52S	12/21/1999	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 15		
052S	52S	7/13/2000	< 10	< 5.0	2.7 J	< 5.0	< 10	1.8 J	< 5.0	< 5.0	< 5.0	< 15		
052S	52S	12/6/2000	< 25	< 5.0	< 5.0	< 5.0	6.1 J	< 5.0	< 5.0	< 5.0	< 5.0	< 15		
052S	52S	7/26/2001	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
052S	52S	12/19/2001	16	**110**	22	9.0	610 E	< 5.0	430 E	< 5.0	< 5.0	37		
052S	52S	6/13/2002	ND	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0		< 10		
052S	52S	7/10/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
052S	52S	12/18/2002	< 10	< 5.0	5.1	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
052S	52S	6/4/2003	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	50
052S	52S	12/16/2003	< 100	< 5.0	1.0 J	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	807
052S	52S	2/9/2004	< 10	< 5.0	2.0 J	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	1960
052S	52S	3/22/2004	< 10	< 5.0	1.0 J	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	1270
052S	52S	5/20/2005	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 10	< 1.0	< 5.0	650
052S	52S	11/27/2006	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	1000
052S	52S	11/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	< 10	923

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
057S	57S	7/11/1984	1811	**244**		**1319**	250	ND	**18655**	**10361**		**10790**		
057S	57S	11/26/1984	ND	ND		**1989**		ND	**37322**	**13091**		**11287**		
057S	57S	1/1/1985	18000	**1900**		**4700**	**21000**	**110 J**	**140000**	**27000**		**28000**		
057S	57S	6/19/1990	< 1000	**170 J**	< 500	< 500	< 1100	< 500 J	**3900 J**	< 1700	< 1000	< 1300		
057S	57S	10/11/1990	< 1000	**160**	**4000**	**1700**	< 1000	< 500	**7700**	**7800**	< 1000	5400		
057S	57S	2/14/1992	ND											
057S	57S	2/8/1994	ND	< 500	**18000**	**1800**	ND	< 500	**28000**	**3200**		8400		
057S	57S	5/31/1995	160 J	**100 J**	**15000**	**760**	< 500	< 500	250 J	**7200**	< 500	220 J		
057S	57S	11/29/1995	< 1000	< 500	**9400**	< 500	< 1000	< 500	< 500	**3800**	< 500	< 500		
057S	57S	4/8/1996	< 500	< 250	**6600**	400	< 500	< 250	**1100**	**2600**	< 250	400		
057S	57S	8/7/1996	< 1000	< 500	**1900**	< 500	< 1000	< 500	< 500	< 500	< 500	< 500		
057S	57S	1/8/1997	< 100	**21 J**	**1300**	200	< 100	< 50	77	**2000**	< 50	770		
057S	57S	3/20/1997	ND	< 2500	< 2500	**2200 J**	< 5000	< 2500	**37000**	**8700**		**12000**		
057S	57S	4/20/1998	< 2000	< 1000	**1400**	**2400**	< 2000	< 1000	**28000**	**6500**	< 1000	6300	**170**	**19000**
057S	57S	5/4/1999	< 10	**200**	**1500 E**	**1300 E**	< 10	**160**	**7000 E**	**3700 E**	< 10	7300 E		
057S	57S	12/20/1999	< 10	1.5 J	**380 E**	260 E	< 10	1.5 J	82 B	**22**	< 5.0	240		
057S	57S	7/13/2000	< 10	< 12	**670**	**1700**	< 40	< 16	**2200**	**85**	< 16	3800		
057S	57S	12/5/2000	< 25	< 12	**450**	340	< 40	< 16	980	< 10	< 16	1000		
057S	57S	7/25/2001	< 50	< 25	**440**	**760**	< 50	< 25	58	< 25	< 25	1300		
057S	57S	12/17/2001	52	< 25	**6100 E**	**3800 E**	< 50	< 25	**13000 E**	< 25	< 25	**14000 E**		
057S	57S	6/13/2002	ND	< 25	**1000 E**	**810**	< 10	< 25	**2800 E**	< 25		2900		
057S	57S	7/8/2002	< 40	< 20	**230**	84	< 40	< 20	510	< 20	< 20	380		
057S	57S	12/17/2002	< 40	< 20	**570**	620	< 40	< 20	97	< 20	< 20	1500		
057S	57S	6/6/2003	< 20	< 10	**140**	180	< 20	< 10	22	< 10	< 10	340	**33**	**6900**
057S	57S	12/19/2003	< 100	< 5.0	**180**	210	< 10	< 5.0	27	< 5.0	< 5.0	273	**57.5**	**8850**
057S	57S	5/27/2004	< 10	< 5.0	11	13	< 10	< 5.0	< 5.0	< 5.0	< 5.0	16	**13.5**	**5430**
057S	57S	11/4/2004	< 10	< 5.0	**450**	590	< 10	< 5.0	1000	2.0 J	< 5.0	1180	**104**	**10700**
057S	57S	5/24/2005	< 100	< 5.0	**110**	200	< 10	< 5.0	160	< 5.0	< 10	348	**36**	**5440**
057S	57S	11/8/2005	< 100	< 5.0	**100**	230	< 10	< 5.0	120	< 5.0	< 5.0	460	**51.6**	**6050**
057S	57S	6/27/2006	< 100	< 5.0	**84**	190	< 10	< 5.0	16	< 5.0	< 5.0	227	**53.8**	**4550**
057S	57S	11/27/2006	< 100	< 5.0	16	64	< 10	< 5.0	4.0 J	< 5.0	< 5.0	62	**53.6 J**	**4800**
057S	57S	6/1/2007	< 100	< 5.0	17	110	< 10	< 5.0	8.0	< 5.0	< 5.0	116	**33 J**	**5390**
057S	57S	11/30/2007	< 100	< 5.0	44	330	< 10	< 5.0	100	2.0 J	< 5.0	438		
057S	57S	5/23/2008	< 100	< 5.0	3.0 J	52	< 10	< 5.0	2.0 J	< 5.0	< 2.0	45	< 100	2250
057S	57S	11/19/2008	< 100	< 5.0	7.0	250	< 10	< 5.0	20	< 5.0	< 2.0	250	**78.6 J**	**6380**
057S	57S	6/23/2009	< 50	< 0.5	4.48	196	< 10	0.4 J	18.9	1.17	< 0.5	214	**45.5**	**5950**
057S	57S	11/19/2009	< 50	< 0.5	9.03	188	< 10	0.380 J	20.4	2.08	< 0.5	210	**55**	**6430**
057S	57S	12/2/2010	< 50	< 0.5	7.33	354	< 10	< 0.5	53.3	0.97	< 0.5	571	**52.4**	2640
057S	57S	5/11/2011	< 50	< 0.5	0.51	7.17	< 10	< 0.5	0.370 J	0.410 J	< 0.5	4.95	5.8 J	196
057S	57S	11/16/2011	< 50	< 0.5	2.08	47.2	< 10	< 0.5	4.66	1.54	< 0.5	53.4	**19.7**	1510
057S	57S	5/17/2012	< 50	< 0.5	1.28	12.3	< 10	< 0.5	1.0	1.04	< 0.5	13.9	< 10	1470
057S	57S	11/14/2012	< 50	< 0.5	3.33	255	< 10	0.601	95.6	1.41	< 0.5	521	**44.4**	**3770**
057S	57S	5/24/2013	< 50	< 0.5	0.662	8.92	< 10	0.512	0.722	0.903	< 0.5	10.7	< 10	1720
057S	57S	11/15/2013	< 5.0	< 0.5	1.27	6.15	< 5.0	0.217 J	< 0.5	1.46	< 0.5	2.83	9.2 J	1980 B
057S	57S	5/20/2014	< 5.0	< 0.5	0.420 J	< 0.5	< 5.0	< 0.5	< 0.5	0.504	< 0.5	< 1.5	< 10	563
057S	57S	11/12/2014	< 5.0	< 0.5	1.97	7.98	< 5.0	< 0.5	0.255 J	< 0.5	< 0.5	2.04	**63.9**	**3810**
061R	61R	9/18/1984	60	< 5.0			20.5	ND	5.3	< 5.0		ND		
061R	61R	11/26/1984	ND	< 5.0		< 5.0	ND	ND	29.1	< 5.0		ND		
061R	61R	1/1/1985	54	ND			ND	ND	ND	**16**		ND		
061R	61R	6/1/1990	< 10	2.0 J	< 5.0	< 5.0	< 10	< 5.0	< 5.0	5.0	< 10	< 5.0		
061R	61R	6/2/1995	< 10	2.0 J	2.0 J	< 10	< 10	< 10	< 10	**28**	< 10	2.0 J		
061R	61R	4/1/1996	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**17**	< 5.0	< 5.0		
061R	61R	10/26/1998	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**10**	< 5.0	< 5.0		
061R	61R	7/24/2001	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**13**	< 5.0	< 10		
061R	61R	7/9/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
061R	61R	11/5/2004	< 10	4.0 J	6.0	< 5.0	< 10	< 5.0	< 5.0	**14**	< 5.0	< 5.0	**35.6**	260
061R	61R	5/31/2005	< 100	2.0 J	6.0	< 5.0	< 10	< 5.0	< 5.0	**12**	< 10	1.0 J	**51.7**	311
061R	61R	5/22/2008	< 100	2.0 J	7.0	< 5.0	< 10	< 5.0	2.0 J	**9.0**	< 2.0	< 1.0	**45.8 J**	245
061R	61R	6/26/2009	< 50	2.9	10	0.91	< 10	< 0.5	1.33	**12.8**	< 0.5	< 0.5	**28.6**	217
061R	61R	12/2/2010	< 50	3.11	9.33	0.56	< 10	< 0.5	< 0.5	**7.77**	< 0.5	< 0.5	**31**	225
061R	61R	5/9/2011	< 50	3.18	12.9	0.66	< 10	< 0.5	< 0.5	**8.55**	< 0.5	< 0.5	**27.5**	258
061R	61R	11/14/2011	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	0.390 J	< 0.5	< 0.5	< 0.5	< 10	61.8
061R	61R	5/15/2012	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10	209
061R	61R (75-90)	11/13/2012	11.7 J	0.385 J	< 0.5	0.384 J	< 10	< 0.5	< 0.5	< 0.5	< 0.5	0.273 J	< 10	10.4 J
061R	61R (75-90)	5/24/2013	2.67 J	1.36	3.1	< 0.5	< 10	< 0.5	< 0.5	0.237 J	< 0.5	< 0.5	**10.2**	14.7 JB
061R	61R (75-90)	11/12/2013	< 5.0	< 0.5	1.85	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**13**	28.1
061R	61R (75-90)	5/19/2014	< 5.0	1.66	5.05	0.599	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**14.5**	78.3
061R	61R (75-90)	11/11/2014	< 5.0	0.640	3.77	0.217 J	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**12.7**	< 15
061R	61R (183-198)	11/13/2012	< 50	1.19	17.7	< 0.5	< 10	< 0.5	< 0.5	**38.7**	< 0.5	< 0.5	< 10	82.2
061R	61R (183-198)	5/21/2013	< 50	1.81	15.6	< 0.5	< 10	< 0.5	< 0.5	**25.7**	0.183 J	< 0.5	7.9 J	129 B
061R	61R (183-198)	11/12/2013	< 5.0	0.233 J	14.2	< 0.5	< 5.0	< 0.5	< 0.5	**20.6**	< 0.5	< 1.5	**12.5**	115
061R	61R (183-198)	5/19/2014	< 5.0	< 0.5	13.2	< 0.5	< 5.0	< 0.5	< 0.5	**24.4**	< 0.5	< 1.5	**12**	20.4
061R	61R (183-198)	11/11/2014	< 5.0	1.60	13.4	< 0.5	< 5.0	< 0.5	< 0.5	**15.6**	< 0.5	< 1.5	**14.4**	146
063R	63R	9/18/1984	6.00	**11.8**	ND		ND	ND	< 5.0	**23.1**		ND		
063R	63R	11/26/1984	ND	**33.5**	ND		ND	ND	ND	**77.5**		ND		
063R	63R	1/1/1985	ND	**14**	ND		2.0 J	ND	2.0 J	**310**		ND		
063R	63R	6/1/1990	< 10	**14**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**45**	< 10	< 5.0		
063R	63R	7/24/2001	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**24**	< 5.0	< 10		

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
063R	63R	7/9/2002	< 10	**5.5**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**33**	< 5.0	< 10		
063R	63R	12/20/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**25**	< 5.0	< 10		
063R	63R	6/6/2003	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**30**	< 5.0	< 10	**25**	350
063R	63R	12/22/2003	< 100	< 5.0	2.0 J	< 5.0	< 10	< 5.0	< 5.0	**22**	< 5.0	< 5.0	**29.1**	336
063R	63R	6/2/2004	< 10	5	2.0 J	< 5.0	< 10	< 5.0	< 5.0	**31**	< 5.0	< 5.0	**25.9**	297
063R	63R	11/9/2004	< 10	3.0 J	2.0 J	< 5.0	< 10	< 5.0	< 5.0	**18**	< 5.0	< 5.0	**25.2**	324
063R	63R	6/3/2005	< 100	**6.0**	4.0 J	< 5.0	< 10	< 5.0	< 5.0	**35**	< 10	< 1.0	**26**	328
063R	63R	11/7/2005	< 100	4.0 J	6.0	< 5.0	< 10	< 5.0	< 5.0	**25**	< 5.0	< 1.0	**15.8**	204
063R	63R	6/30/2006	< 100	5	15	< 5.0	< 10	< 5.0	< 5.0	**28**	< 5.0	< 1.0	**19.4**	
063R	63R	11/28/2006	< 100	1.0 J	7.0	< 5.0	< 10	< 5.0	< 5.0	**17**	< 5.0	< 1.0	< 100	117
063R	63R	6/1/2007	< 100	4.0 J	8.0	< 5.0	< 10	< 5.0	< 5.0	**18**	< 5.0	< 1.0	< 100	324
063R	63R	5/23/2008	17 J	3.0 J	9.0	< 5.0	< 10	< 5.0	< 5.0	**14**	< 2.0	< 1.0	**39 J**	329
063R	63R	6/29/2009	< 50	1.14	3.7	< 0.5	< 10	< 0.5	< 0.5	**11.6**	< 0.5	< 0.5	**12.2**	139 B1
063R	63R	12/3/2010	< 50	2.17	7.57	< 0.5	< 10	< 0.5	< 0.5	**10.7**	< 0.5	< 0.5	**21.8**	314
063R	63R	5/12/2011	< 50	2.44	9.68	< 0.5	< 10	< 0.5	< 0.5	**13.2**	< 0.5	< 0.5	**26.6**	343
063R	63R	11/18/2011	< 50	3.93	17	< 0.5	< 10	< 0.5	< 0.5	**12.5**	< 0.5	< 0.5	**23**	326
063R	63R	5/18/2012	< 50	**5.77**	28.5	< 0.5	< 10	< 0.5	0.270 J	**12.8**	< 0.5	< 0.5	**30.1**	329
063R	63R (85-100)	11/15/2012	30.1 J	1.38	7.93	0.411 J	< 10	< 0.5	2.4	3.23	< 0.5	1.57	< 10	< 15
063R	63R (85-100)	5/24/2013	39.1 J	0.642	3.56	< 0.5	< 10	< 0.5	1.74	1.06	< 0.5	0.498 J	< 10	8.5 JB
063R	63R (85-100)	11/14/2013	37	0.87	4.66	0.282 J	< 5.0	0.252 J	2.92	2.23	< 0.5	1.49 J	< 50	< 75
063R	63R (85-100)	5/20/2014	42.3	< 0.5	0.834	< 0.5	< 5.0	< 0.5	0.488 J	0.229 J	< 0.5	< 1.5	< 10	< 15
063R	63R (85-100)	11/12/2014	27.5	0.225 J	1.35	< 0.5	< 5.0	< 0.5	0.85	0.521	< 0.5	< 1.5	< 10	23
063R	63R (150-165)	11/15/2012	< 50	0.978	24.9	< 0.5	< 10	< 0.5	0.344 J	**18.8**	< 0.5	< 0.5	**10.8**	58.8
063R	63R (150-165)	5/21/2013	< 50	0.471 J	8.74	< 0.5	< 10	< 0.5	< 0.5	**9.12**	< 0.5	< 0.5	**28.8**	10.7 JB
063R	63R (150-165)	11/14/2013	< 5.0	0.499 J	10.2	< 0.5	4.57 J	< 0.5	< 0.5	**11.5**	< 0.5	0.791 J	**25.8**	25.4
063R	63R (150-165)	5/20/2014	< 5.0	0.494 J	17.6	< 0.5	< 5.0	< 0.5	0.288 J	**14.1**	< 0.5	< 1.5	**34.5**	215
063R	63R (150-165)	11/12/2014	< 5.0	0.740	11.4	< 0.5	< 5.0	< 0.5	< 0.5	**12.3**	< 0.5	< 1.5	**24.4**	18.7
065R	65R	9/18/1984	43	**122.6**	7.2		130	ND	24.8	**327.2**		ND		
065R	65R	11/26/1984	ND	**226**	ND			ND	ND	**629**		ND		
065R	65R	1/1/1985	290	**200**	ND		210	2.0 J	2.0 J	**650**		ND		
065R	65R	6/6/1990	< 26	**39**	18	< 5.0	43	< 5.0	4.0 J	**110**	< 10	< 5.0		
065R	65R	8/13/1996	< 10	**140**	**95**	< 5.0	130	< 5.0	< 5.0	**72**	< 5.0	6.0		
065R	65R	7/26/2001	< 10	**6.1**	5.8	< 5.0	< 10	< 5.0	< 5.0	**9.4**	< 5.0	< 10		
065R	65R	7/10/2002	< 10	< 5.0	7.2	< 5.0	< 10	< 5.0	< 5.0	**9.4**	< 5.0	< 5.0		
065R	65R	12/20/2002	16	**64**	30	< 5.0	< 10	< 5.0	< 5.0	**12**	< 5.0	< 10		
065R	65R	6/5/2003	< 10	**22**	24	< 5.0	< 10	< 5.0	< 5.0	**13**	< 5.0	< 10	**13**	770
065R	65R	12/22/2003	< 100	**12**	24	< 5.0	< 10	< 5.0	< 5.0	**13**	< 5.0	< 5.0	**15.5**	737
065R	65R	6/2/2004	< 10	**8.0**	17	< 5.0	< 10	< 5.0	< 5.0	**17**	< 5.0	< 5.0	**13.4**	605
065R	65R	11/9/2004	< 10	4.0 J	18	< 5.0	< 10	< 5.0	< 5.0	**12**	1.0 J	< 5.0	**13.2**	720
065R	65R	6/3/2005	< 100	< 5.0	20	< 5.0	< 10	< 5.0	< 5.0	**12**	< 10	< 1.0	**34.6**	1410
065R	65R	11/7/2005	< 100	**78**	**200**	4.0 J	< 10	< 5.0	1.0 J	**29**	1.0 J	2.0	**17.1**	751
065R	65R	7/5/2006	< 100	**110**	**300**	10	2.0 J	< 5.0	10	**46**	2.0 J	25	**12.8**	827
065R	65R	11/28/2006	< 100	**17**	**100**	2.0 J	< 10	< 5.0	2.0 J	**14**	< 5.0	1.0 J	< 100	722
065R	65R	6/1/2007	< 100	**48**	**150**	10	6.0 J	< 5.0	10	**14**	3.0 J	14	< 100	850
065R	65R	5/23/2008	< 100	**24**	**120**	6.0	< 10	< 5.0	2.0 J	**11**	< 2.0	5.0	< 100	763
065R	65R	11/19/2008	< 100	**8.0**	**75**	2.0 J	< 10	< 5.0	< 5.0	**7.0**	< 2.0	1.0 J	< 100	802
065R	65R	6/24/2009	< 50	2.43	51.4	< 0.5	< 10	< 0.5	< 0.5	**7.11**	0.46 J	< 0.5	9.0 J	632
065R	65R	11/19/2009	< 50	1.23	49	< 0.5	< 10	< 0.5	< 0.5	**5.58**	0.360 J	< 0.5	**11.1**	601
065R	65R	12/3/2010	< 50	0.82	37.8	< 0.5	< 10	< 0.5	< 0.5	**6.95**	< 0.5	< 0.5	**10.6**	449
065R	65R	5/11/2011	< 50	0.72	28.9	< 0.5	< 10	< 0.5	< 0.5	**6.05**	< 0.5	< 0.5	**12.4**	477
065R	65R	11/18/2011	< 50	2.57	34.3	0.57	< 10	< 0.5	< 0.5	4.61	< 0.5	0.440 J	**10.3**	383
065R	65R	5/17/2012	< 50	3.12	37.3	0.490 J	< 10	< 0.5	0.7	**5.23**	0.290 J	< 0.5	**18.2**	431
065R	65R (100-115)	11/12/2012	7.63 J	1.24	15.6	< 0.5	< 10	< 0.5	< 0.5	**7.18**	< 0.5	< 0.5	6.4	10.1 JB
065R	65R (100-115)	5/21/2013	7.83 J	1.4	8.89	< 0.5	< 10	< 0.5	0.56	**7.29**	< 0.5	0.637	9.3 J	3.2 JB
065R	65R (100-115)	11/13/2013	< 5.0	1.26	12.5	< 0.5	< 5.0	< 0.5	0.290 J	**7.86 B**	< 0.5	< 1.5	**12.7**	< 15
065R	65R (100-115)	5/20/2014	< 5.0	1.12	16.4	< 0.5	< 5.0	< 0.5	0.281 J	**10.2**	< 0.5	< 1.5	**12.7**	9.0 J
065R	65R (100-115)	11/12/2014	< 5.0	0.631	8.83	< 0.5	< 5.0	< 0.5	0.176 J	**5.32**	< 0.5	< 1.5	**13.2**	< 15
065R	65R (180-195)	11/12/2012	< 50	**39.8**	**432**	5.24	< 10	< 0.5	0.787	**24.2**	2.18	3.06	9.0	667 B
065R	65R (180-195)	5/21/2013	< 50	**7.27**	**83.2**	0.976	< 10	< 0.5	0.357 J	**8.11**	0.391 J	0.767	8.7 J	71.4 B
065R	65R (180-195)	11/13/2013	< 5.0	3.15	33.6	< 0.5	< 5.0	< 0.5	0.287 J	2.22	< 0.5	< 1.5	**10.9**	629
065R	65R (180-195)	5/20/2014	< 5.0	**25.6**	**223**	2.59	< 5.0	< 0.5	0.334 J	0.432 J	0.683	1.31 J	< 10	2760
065R	65R (180-195)	11/12/2014	< 5.0	**18.8**	**184**	1.56	< 5.0	< 0.5	0.192 J	2.99	0.704	0.618 J	< 10	2080
065R	75R (180-195) DUP	11/12/2014	< 5.0	**19.4**	**191**	1.51	< 5.0	< 0.5	0.205 J	3.00	0.817	0.629 J	< 10	2020
067R	67R	9/18/1984	< 5.0	< 5.0	ND		ND	< 5.0	ND	**6.4**		ND		
067R	67R	11/26/1984	ND	**6.0**	ND		ND	ND	ND	< 5.0		ND		
067R	67R	1/1/1985	6.0 J	2.0 J	ND		3.0 J	ND	ND	**26**		ND		
067R	67R	5/31/1990	< 10	3.0 J	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**9.0**	< 10	< 5.0		
067R	67R	2/14/1992	ND											
067R	67R	5/31/1995	18	3.0 J	< 10	< 10	14	< 10	6.0 J	5.0 J	< 10	2.0 J		
067R	67R	4/5/1996	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
067R	67R	7/24/2001	< 10	< 5.0	5.3	< 5.0	< 10	< 5.0	< 5.0	**15**	< 5.0	< 10		
067R	67R	7/9/2002	< 10	< 5.0	6.0	< 5.0	< 10	< 5.0	< 5.0	**19**	< 5.0	< 10		
067R	67R	12/17/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**12**	< 5.0	< 10		
067R	67R	6/9/2003	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**15**	< 5.0	< 10	< 10	300
067R	67R	12/26/2003	< 10	< 5.0	3.0 J	< 5.0	< 10	< 5.0	< 5.0	**17**	< 5.0	< 5.0	6.94	182
067R	67R	5/27/2004	< 10	< 5.0	3.0 J	< 5.0	< 10	< 5.0	< 5.0	**14**	< 5.0	< 5.0	< 5.0	153

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
067R	67R	11/5/2004	< 10	1.0 J	2.0 J	< 5.0	< 10	< 5.0	< 5.0	**12**	< 5.0	< 5.0	< 5.0	165
067R	67R	6/2/2005	< 100	**6.0**	31	< 5.0	2.0 J	< 5.0	1.0 J	**29**	< 10	< 1.0	**14.3**	43.7
067R	67R	11/9/2005	< 100	5	9.0	< 5.0	< 10	< 5.0	< 5.0	**16**	< 5.0	< 1.0	**10.5**	95
067R	67R	6/28/2006	< 100	1.0 J	10	< 5.0	< 10	< 5.0	< 5.0	**14**	< 5.0	< 1.0	6.28	
067R	67R	11/27/2006	< 100	< 5.0	12	< 5.0	< 10	< 5.0	< 5.0	**14**	< 5.0	< 1.0	< 100	76.6
067R	67R	5/31/2007	< 100	< 5.0	5.0 J	< 5.0	< 10	< 5.0	< 5.0	**10**	< 5.0	< 1.0	< 100	119
067R	67R	5/23/2008	< 100	< 5.0	3.0 J	< 5.0	< 10	< 5.0	< 5.0	**8.0**	< 2.0	< 1.0	< 100	115
067R	67R	6/29/2009	< 50	0.61	2.18	< 0.5	< 10	< 0.5	< 0.5	**9.2**	< 0.5	< 0.5	< 10	92.5 B1
067R	67R	12/2/2010	< 50	0.440 J	2.67	< 0.5	< 10	< 0.5	< 0.5	**9.39**	< 0.5	< 0.5	< 10	70.6
067R	67R	5/11/2011	< 50	0.410 J	3.53	< 0.5	< 10	< 0.5	< 0.5	**14**	< 0.5	< 0.5	4.0 J	89
067R	67R	11/15/2011	< 50	2.28	6.45	< 0.5	< 10	< 0.5	2.8	**19.3**	< 0.5	< 0.5	< 10	93.2
067R	67R	5/18/2012	< 50	0.63	7.88	< 0.5	< 10	< 0.5	0.330 J	< 0.5	< 0.5	< 0.5	< 10	84.6
067R	67R (83-98)	11/12/2012	25.6 J	3.87	16.9	0.437 J	< 10	< 0.5	2.94	**38.7**	< 0.5	1.77	< 10	5.2 JB
067R	67R (83-98)	5/21/2013	17.5 J	3.38	37.4	0.430 J	< 10	< 0.5	3.55	**79.5**	0.194 J	1.77	5.5 J	3.0 JB
067R	67R (83-98)	11/11/2013	< 5.0	4.56	23.5	< 0.5	< 5.0	< 0.5	1.14	**43.1**	< 0.5	0.923 J	< 10	< 15
067R	67R (83-98)	5/19/2014	3.67 J	**5.79**	40.7	< 0.5	< 5.0	< 0.5	1.39	**72.6**	0.262 J	< 1.5	8.6 J	< 15
067R	67R (83-98)	11/12/2014	7.92	3.38	37.8	< 0.5	< 5.0	< 0.5	0.756	**80.8**	0.271 J	< 1.5	8.1 J	< 15
067R	67R (149-164)	11/12/2012	4.2 J	0.842	7.6	< 0.5	< 10	< 0.5	< 0.5	**14.1**	< 0.5	< 0.5	< 10	3260 B
067R	67R (149-164)	5/21/2013	11.2 J	0.376 J	5.04	< 0.5	< 10	< 0.5	< 0.5	**11**	< 0.5	< 0.5	5.4 J	2040 B
067R	67R (149-164)	11/11/2013	< 5.0	1.1	8.06	< 0.5	< 5.0	< 0.5	0.371 J	**12.4 B**	< 0.5	0.622 J	**11.2**	**4320**
067R	67R (149-164)	5/19/2014	18.6	1.31	8.11	< 0.5	< 5.0	< 0.5	0.443 J	**11.3**	< 0.5	< 1.5	< 10	925
067R	67R (149-164)	11/12/2014	15.3	1.45	7.54	< 0.5	< 5.0	< 0.5	0.372 J	**12.1**	< 0.5	< 1.5	< 10	627
069R	69R	9/18/1984	10000	**500**			**10000**	**10.6**	**3300**	**3000**		500		
069R	69R	11/26/1984		**473**				ND	893	**1415**		ND		
069R	69R	6/19/1990	< 1000	**490 J**	< 500	< 500	**5500**	< 500 J	< 1400	< 500	< 1000	< 500		
069R	69R	10/10/1990	5000	**2800**	**1100 J**	**1100 J**	**41000 J**	< 1250	**5400**	**650 J**	< 2500	< 2700		
069R	69R	6/1/1991	7800	**4000**	**1700 J**		**53000 B**	ND	**9000**	ND		2900		
069R	69R	5/24/1994	ND	**3500**	**1100**	310	**10000**	< 100	**4600**	< 100		1300		
069R	69R	6/2/1995	15000	**2700 J**	< 4000	< 4000	**51000**	< 4000	**7300**	< 4000	< 4000	< 4000		
069R	69R	4/5/1996	< 200	**2100**	**1100**	< 100	< 200	< 100	**1900**	< 100	< 100	230		
069R	69R	8/14/1996	< 250	**4100**	**1300**	360	< 250	< 120	690	< 120	< 120	1800		
069R	69R	1/8/1997	< 250	**5200**	**1200**	290	< 250	< 120	400	< 120	< 120	1400		
069R	69R	3/21/1997	ND	**6300**	**1800**	**790**	< 500	< 250	740	**170 J**		3500		
069R	69R	6/9/1997	15000	**4700**	**1400**	410 J	**76000**	< 1200	**16000**	< 1200	< 1200	1600	**22**	**4900**
069R	69R	6/27/1997	21000	**5100**	**1200**	580 J	**70000**	< 1200	**19000**	< 1200	< 1200	2800		
069R	69R	7/10/1997	17000	**5300**	**1100 J**	660 J	**54000**	< 1200	**20000**	< 1200	< 1200	2900	**110**	**4600**
069R	69R	7/24/1997	21000	**4100**	**920 J**	660 J	**61000**	< 1200	**17000**	< 1200	< 1200	2800		
069R	69R	8/25/1997	11000	**3800**	**880 J**	**1200**	**44000**	< 1200	**12000**	< 1200	< 1200	5300	**160**	**5000**
069R	69R	4/21/1998	< 1000	**3600**	**720**	< 500	**26000**	< 500	**12000**	< 500	< 500	1700	**120**	**4600**
069R	69R	7/1/1999	< 40	**3500**	**960**	260	< 400	< 160	**19000**	< 100	< 160	1300		
069R	69R	2/16/2000	< 16	**3300**	**990**	390	< 160	< 64	**7500**	< 40	< 64	1800		
069R	69R	7/13/2000	< 10	**4000**	**720**	580	**32000**	< 40	**14000 R**	< 25	< 40	2200		
069R	69R	12/6/2000	< 25	**4800**	**1200**	640	**9700**	< 80	**13000**	< 50	< 80	2900		
069R	69R	7/26/2001	< 1.0	**2200**	**780**	180	**2700**	< 100	430	< 100	< 200	600		
069R	69R	12/19/2001	< 200	**2900**	**730**	190	610	< 100	290	< 100	< 100	420		
069R	69R	7/10/2002	< 200	**4400 E**	**1600**	540	280	< 100	120	< 100	< 100	2200		
069R	69R	12/18/2002	< 400	**4000**	**1100**	**740**	< 400	< 200	< 200	< 200	< 200	2600		
069R	69R	1/16/2003	< 400	**4000**	**1000**	500	730	< 200	**2200**	< 200	< 200	1600	**140**	**4800**
069R	69R	2/17/2003	< 200	**3200**	**880**	550	< 200	< 100	500	< 100	< 100	2000	**140**	**5800**
069R	69R	3/12/2003	< 200	**3000**	**860**	420	< 200	< 100	340	< 100	< 100	1600	**150**	**4900**
069R	69R	6/4/2003	< 200	**3700**	**870**	**750**	< 200	< 100	200	< 100	< 100	2200	**130**	**4900**
069R	69R	10/27/2003	< 10	**2200**	**770**	< 500	< 1000	< 5.0	**2100**	< 5.0	< 5.0	1100	**65.8**	1690
069R	69R	12/18/2003	< 100	**3400**	**1000**	**870**	10	< 5.0	**1300**	< 5.0	< 5.0	3030	**98.4**	2290
069R	69R	2/10/2004	< 10	**2500**	**480**	680	46	< 5.0	640	< 5.0	< 5.0	2370	**101**	2470
069R	69R	3/23/2004	< 10	**2800**	**730**	**820**	18	< 5.0	360	< 5.0	< 5.0	2550	**109**	2920
069R	69R	5/26/2004	< 10	**1700**	**550**	580	< 10	< 5.0	500	< 5.0	< 5.0	1930	**48.8**	1370
069R	69R	11/3/2004	< 10	**1400**	**460**	410	< 10	< 5.0	17	< 5.0	2.0 J	1250	**84.1**	1640
069R	69R	5/20/2005	< 100	**1100**	**410 J**	270 J	< 10	< 5.0	6.0	< 5.0	1.0 J	890	**89**	1660
069R	69R	11/9/2005	< 100	**1700**	**490**	530	< 10	< 5.0	29	< 5.0	4.0 J	1570	**95.7**	2340
069R	69R	6/29/2006	< 100	**1200**	**360**	320	15	< 5.0	110	< 5.0	1.0 J	950	**137**	3420
069R	69R	8/30/2006	< 100	**1200**	**370**	330	< 10	< 5.0	9.0	< 5.0	2.0 J	860	**117**	3170
069R	69R	11/20/2006	< 100	**810**	**340**	260	2.0 J	< 5.0	10	< 5.0	2.0 J	650	**129**	**3760**
069R	69R	2/26/2007	< 100	**880**	**320**	240	5.0 J	< 5.0	5.0	< 5.0	1.0 J	600	**107**	**3760**
069R	69R	5/31/2007	< 100	**650**	**260**	170	< 10	< 5.0	3.0 J	< 5.0	3.0 J	400	**91.6 J**	**4050**
069R	69R	11/28/2007	< 100	**530**	**300**	170	< 10	< 5.0	3.0 J	< 5.0	3.0 J	355	**75.6 J**	**3750**
069R	69R	5/20/2008	< 100	**460**	**210**	140	< 10	< 5.0	2.0 J	< 5.0	< 2.0	244	**92.8 J**	**5120**
069R	69R	11/20/2008	< 100	**610**	**200**	140	< 10	< 5.0	< 5.0	< 5.0	< 2.0	144	**93.9 J**	**4190**
069R	69R	6/23/2009	< 50	**410**	**206**	139	< 10	< 0.5	5.18	0.42 J	0.68	188	**102**	**4460**
069R	69R	11/20/2009	< 50	**301**	**200**	104	< 10	< 0.5	1.72	< 0.5	< 0.5	96.6	**98.3**	**3950**
069R	69R	12/2/2010	< 50	**115**	**112**	70.1	< 10	< 0.5	0.99	< 0.5	0.340 J	74.8	**108**	3410
069R	69R	5/10/2011	< 50	**56.9**	**89**	35.3	< 10	< 0.5	0.62	0.380 J	< 0.5	23.4	**83.5**	3320
069R	69R	11/16/2011	< 50	**27.4**	**72.3**	24.1	< 10	< 0.5	0.460 J	0.450 J	0.270 J	16.5	**89.6**	2770
069R	69R	5/16/2012	< 50	**6.67**	20.5	8.0	< 10	< 0.5	0.330 J	0.52	< 0.5	6.72	**47.2**	1570
069R	69R	11/13/2012	< 50	**10.6**	31.3	9.9	< 10	< 0.5	0.346 J	< 0.5	< 0.5	7.09	**68.3**	1990
069R	69R	5/21/2013	< 50	4.86	22.5	4.09	< 10	< 0.5	0.190 J	0.641	< 0.5	2.83	**70.1**	2080
069R	69R	11/11/2013	< 5.0	**5.19**	13.9	2.75	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	1.99	**73.6**	3060
069R	69R	5/19/2014	3.11 J	3.10	8.10	1.68	< 5.0	< 0.5	21	0.344 J	< 0.5	1.56	**67.1**	1880
069R	69R	10/16/2014	< 5.0	2.17	8.00	0.967	< 5.0	< 0.5	< 0.5	0.429 J	< 0.5	0.819 J		
069R	69R	11/10/2014	< 5.0	0.449 J	1.10	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**53.6**	1660

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
070S	70S	5/31/1991	ND			7.0		1.0 J	87	4.0 J		23		
070S	70S	2/8/1994	ND	**630**	**420**	660	ND	**180**	**3700**	**430**		1300		
070S	70S	5/31/1995	< 50	**260**	**460**	700	< 50	**310**	320	**500**	< 50	900		
070S	70S	8/23/1995	< 10	< 5.0	7.0	1.0 J	< 10	**10**	< 5.0	**15**	< 5.0	2.0 J		
070S	70S	11/29/1995	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
070S	70S	4/4/1996	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
070S	70S	8/7/1996	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
070S	70S	1/8/1997	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
070S	70S	3/21/1997	ND	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0		< 5.0		
070S	70SL	4/15/1998	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 2.0	220
070S	70S (L)	10/27/1998	< 10	< 5.0	< 5.0	9.8	< 10	< 5.0	< 5.0	< 5.0	< 5.0	15		
070S	70S	5/4/1999	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 10	< 15		
070S	70S	12/21/1999	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	1.6 BJ	< 5.0	< 5.0	1.3 J		
070S	70S	7/13/2000	< 10	2.3 J	< 5.0	< 5.0	16	< 5.0	4.0 J	< 5.0	< 5.0	< 15		
070S	70S	12/5/2000	< 25	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 15		
070S	70S	7/26/2001	< 50	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 10	< 10		
070S	70S	12/18/2001	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	6.3	< 5.0	< 5.0	< 10		
070S	70S	7/8/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
070S	70S	5/19/2005	< 100	< 5.0	13	< 5.0	< 10	**6.0**	< 5.0	< 5.0	< 10	< 1.0	5.24	1820
070S	70S	11/9/2005	< 100	< 5.0	34	10	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 5.0	1850
070S	70S	6/27/2006	< 100	< 5.0	**120**	100	< 10	1.0 J	1.0 J	< 5.0	< 5.0	4.0	**20.5**	**5800**
070S	70S	5/29/2007	< 100	< 5.0	20	2.0 J	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	1950
070S	70S	11/30/2007	< 100	< 5.0	17	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	2690
070S	70S	5/19/2008	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	< 100	343
070S	70S	11/13/2014	< 5.0	< 0.5	0.544	0.439 J	< 5.0	0.305 J	< 0.5	0.265 J	< 0.5	1.85	< 10	**8360**
073S	73S	5/30/1991	ND	ND		1.0 J	ND	ND	7.0	**14**		7.0		
073S	73S	2/14/1992	ND											
073S	73S	2/8/1994	ND	ND	10	ND	ND	ND	ND	**90**		ND		
073S	73S	1/8/1997	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
073S	73S	4/20/1998	< 10	< 5.0	57	< 5.0	< 10	< 5.0	< 5.0	**170**	< 5.0	< 5.0	< 2.0	81
073S	73S	5/4/1999	< 10	< 5.0	**140**	< 5.0	< 10	< 5.0	< 5.0	**210 E**	< 10	< 15		
073S	73S	12/20/1999	< 10	< 5.0	**94**	< 5.0	< 10	< 5.0	< 5.0	**100**	< 5.0	< 15		
073S	73S	7/13/2000	< 10	< 5.0	**110**	< 5.0	< 10	< 5.0	< 5.0	**100**	< 5.0	< 15		
073S	73S	12/5/2000	< 25	< 5.0	**110**	< 5.0	< 10	< 5.0	< 5.0	**110**	< 5.0	< 15		
073S	73S	7/24/2001	< 10	< 5.0	63	< 5.0	< 10	< 5.0	< 5.0	**64**	< 5.0	< 10		
073S	73S	12/17/2001	12	< 5.0	16	< 5.0	< 10	< 5.0	< 5.0	**26**	< 5.0	< 10		
073S	73S	7/8/2002	< 10	< 5.0	20	< 5.0	< 10	< 5.0	< 5.0	**21**	< 5.0	< 10		
073S	73S	12/17/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**5.1**	< 5.0	< 10		
073S	73S	6/9/2003	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	**5.9**	< 5.0	< 10	< 10	20
073S	73S	12/22/2003	< 100	< 5.0	6.0	< 5.0	< 10	< 5.0	< 5.0	**8.0**	< 5.0	< 5.0	< 5.0	25.4
073S	73S	6/1/2004	< 10	< 5.0	4.0 J	< 5.0	< 10	< 5.0	< 5.0	**7.0**	< 5.0	< 5.0	< 5.0	13.5
073S	73S	11/3/2004	< 10	< 5.0	6.0	< 5.0	< 10	< 5.0	< 5.0	**8.0**	< 5.0	< 5.0	< 5.0	13.4
073S	73S	5/26/2005	< 100	< 5.0	4.0 J	< 5.0	< 10	< 5.0	< 5.0	**7.0**	< 10	< 1.0	< 5.0	19.8
073S	73S	11/8/2005	< 100	< 5.0	3.0 J	< 5.0	< 10	< 5.0	< 5.0	5.0	< 5.0	< 1.0	< 5.0	86.8
073S	73S	6/26/2006	< 100	< 5.0	1.0 J	< 5.0	< 10	< 5.0	< 5.0	2.0 J	< 5.0	< 1.0	2.87 J	
073S	73S	11/28/2006	< 100	< 5.0	2.0 J	< 5.0	< 10	< 5.0	< 5.0	2.0 J	< 5.0	< 1.0	< 100	12.4
073S	73S	6/1/2007	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	54.6
073S	73S	5/22/2008	17 J	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 2.0	< 1.0	< 100	18.2
073S	73S	6/23/2009	< 50	< 0.5	0.79	< 0.5	< 10	< 0.5	< 0.5	1.61	< 0.5	< 0.5	< 10	59.1
073S	73S	11/19/2009	< 50	< 0.5	1.01	0.290 J	< 10	< 0.5	< 0.5	1.96	< 0.5	< 0.5	< 10	16.5
073S	73S	11/30/2010	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	0.330 J	< 0.5	< 0.5	< 10	100
073S	73S	5/9/2011	< 50	< 0.5	0.310 J	< 0.5	< 10	< 0.5	< 0.5	0.57	< 0.5	< 0.5	< 10	33.8
073S	73S	11/15/2011	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	0.53	< 0.5	< 0.5	< 10	37.5
073S	73S	5/17/2012	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	0.350 J	< 0.5	< 0.5	< 10	7.7 J
073S	73S	11/13/2012	< 50	< 0.5	< 0.5	0.841	< 10	< 0.5	4.22	0.577	< 0.5	6.02	6.6 J	484
073S	73S	5/24/2013	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	0.212 J	< 0.5	< 0.5	< 10	55.2 B
073S	73S	11/12/2013	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	0.255 J	< 0.5	< 1.5	< 10	130
073S	73S	5/20/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	0.210 J	< 0.5	< 1.5	< 10	65.1
073S	73S	11/12/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	< 10	90.7
075D	75D	5/1/1991	ND											
075D	75D	6/1/1991	ND	**2900**			**74000 B**	ND	**3300**	ND		2100 J		
075D	75D	5/27/1995	4.0 JB	5.0 J	< 10	3.0 J	< 10	**89**	4.0 J	**69**	< 10	< 10		
075D	75D	8/23/1995	< 10	4.0 J	61	3.0 J	< 10	**79**	2.0 J	**62**	< 5.0	2.0 J		
075D	75D	11/29/1995	< 10	**45**	**150**	< 5.0	< 10	**120**	< 5.0	**100**	< 5.0	7.0		
075D	75D	4/9/1996	< 10	< 5.0	34	< 5.0	< 10	**110**	< 5.0	**110**	< 5.0	< 5.0		
075D	75D	7/26/2001	< 50	< 5.0	32	< 5.0	< 25	**41**	< 5.0	< 5.0	< 10	< 10		
075D	75D	7/8/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	**13**	< 5.0	< 5.0	< 5.0	< 10		
075D	75D	12/17/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	**12**	< 5.0	< 5.0	< 5.0	< 10		
075D	75D	6/3/2003	< 10	< 5.0	5.9	< 5.0	< 10	**19**	< 5.0	< 5.0	< 5.0	< 10	**12**	1600
075D	75D	12/18/2003	< 100	< 5.0	15	< 5.0	< 10	**14**	< 5.0	< 5.0	< 5.0	< 5.0	7.46	1330
075D	75D	5/25/2004	< 10	< 5.0	30	< 5.0	< 10	**14**	< 5.0	< 5.0	< 5.0	< 5.0	**20.9**	1380
075D	75D	11/4/2004	< 10	< 5.0	67	< 5.0	< 10	**23**	< 5.0	3.0 J	< 5.0	< 5.0	**15.2**	1420
075D	75D	5/26/2005	< 100	< 5.0	**160**	< 5.0	< 10	**30**	< 5.0	**6.0**	< 10	< 1.0	**10.5**	1610
075D	75D	11/9/2005	< 100	< 5.0	**240**	< 5.0	< 10	**30**	< 5.0	**13**	< 5.0	< 1.0	**15.1**	1420
075D	75D	6/27/2006	< 100	< 5.0	**330**	< 5.0	< 10	**27**	< 5.0	**8.0**	< 5.0	< 1.0	**12.7**	2130
075D	75D	11/21/2006	< 100	< 5.0	**360**	< 5.0	< 10	**22**	< 5.0	**6.0**	< 5.0	< 1.0	< 100	1940
075D	75D	5/30/2007	< 100	< 5.0	**160**	< 5.0	< 10	**12**	< 5.0	2.0 J	< 5.0	< 1.0	< 100	1790
075D	75D	11/29/2007	< 100	< 5.0	**120**	< 5.0	< 10	**8.0**	< 5.0	2.0 J	< 5.0	1.0 J	< 100	1830
075D	75D	5/22/2008	< 100	< 5.0	**72**	< 5.0	< 10	4.0 J	< 5.0	< 5.0	< 2.0	< 1.0	< 100	1460
075D	75D	11/17/2008	< 100	< 5.0	27	< 5.0	< 10	2.0 J	< 5.0	1.0 J	< 2.0	< 1.0	< 100	1930

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
075D	75D	6/22/2009	< 50	< 0.5	13.2	< 0.5	< 10	1.33	0.37 J	0.75	< 0.5	0.58	4.5 J	1720
075D	75D	11/19/2009	< 50	< 0.5	11	< 0.5	< 10	1.02	0.570 B	0.75	< 0.5	1.49	8.3 J	1650
075D	75D	12/1/2010	< 50	< 0.5	3.17	0.52	< 10	0.380 J	0.53	0.290 J	< 0.5	4.21	**11.3**	1840
075D	75D	5/9/2011	< 50	< 0.5	3.45	< 0.5	< 10	0.430 J	0.320 J	0.250 J	< 0.5	1.48	4.4 J	2220 B
075D	75D	11/17/2011	< 50	< 0.5	2.85	< 0.5	< 10	< 0.5	0.430 J	0.300 J	< 0.5	3.08	8.5 J	1840
075D	75D	5/16/2012	< 50	< 0.5	3.53	< 0.5	< 10	0.260 J	0.250 J	0.450 J	< 0.5	2.06	3.5 J	1860
075D	75D	11/12/2012	< 50	< 0.5	1.91	< 0.5	< 10	< 0.5	< 0.5	0.257 J	< 0.5	0.579	6.4	1500 B
075D	75D	5/24/2013	< 50	< 0.5	3.91	4.61	< 10	0.529	0.355 J	0.358 J	< 0.5	1.73	5.0 J	1060 B
075D	75D	11/11/2013	< 5.0	< 0.5	1.85	1.61	< 5.0	0.255 J	0.207 J	0.384 J	< 0.5	1.26 J	**11.2**	2790
075D	75D	5/19/2014	< 5.0	< 0.5	0.959	0.894	< 5.0	0.211 J	0.183 J	0.384 J	< 0.5	< 1.5	< 10	1280
075D	75D	11/13/2014	< 5.0	< 0.5	1.51	0.355 J	< 5.0	0.195 J	0.251 J	0.270 J	< 0.5	< 1.5	< 10	2250
075D	175D (75D DUP)	11/13/2014	< 5.0	< 0.5	1.41	0.269 J	< 5.0	0.194 J	< 0.5	0.315 J	< 0.5	< 1.5	< 10	2180
103R	103R	5/31/1995	1100 J	**750 J**	< 2000	< 2000	**22000**	< 2000	900 J	< 2000	< 2000	< 2000		
103R	103R	4/1/1996	< 10000	< 5000	< 5000	< 5000	**26000**	< 5000	< 5000	< 5000	< 5000	< 5000		
103R	103R	4/13/2000	< 10	**370 E**	48	9.1	410	< 5.0	3.2 J	2.1 J	< 5.0	20		
103R	103R	7/13/2000	2700 E	**650 E**	**160**	49	**2800 E**	< 5.0	880 E	**14**	< 5.0	170		
103R	103R	12/6/2000	210	**260 E**	**110**	15	1100 E	< 5.0	120	1.3 J	< 5.0	24		
103R	103R	7/26/2001	< 100	**320**	**160**	38	880 E	< 10	140	< 10	< 20	78		
103R	103R	12/19/2001	< 20	**170**	62	11	230	< 10	20	< 10	< 10	< 20		
103R	103R	7/9/2002	< 20	**210**	**82**	11	220	< 10	< 10	< 10	< 10	< 20		
103R	103R	12/19/2002	< 10	**130**	51	7.9	35	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
103R	103R	1/16/2003	< 10	**170**	60	10	35	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**41**	1700
103R	103R	3/13/2003	< 10	**78**	40	5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10	**32**	1600
103R	103R	6/3/2003	< 10	**100**	37	5.3	28	< 5.0	< 5.0	< 5.0	< 5.0	< 10	**21**	1600
103R	103R	10/27/2003	< 10	**73**	35	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	1.0 J	**17**	1940
103R	103R	12/18/2003	< 100	**62**	37	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	1.0 J	**19.5**	1900
103R	103R	2/10/2004	< 10	**63**	31	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	1.0 J	**30.8**	1610
103R	103R	3/24/2004	< 10	**35**	12	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	1.0 J	**18.8**	1520
103R	103R	5/25/2004	< 10	**67**	34	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	2.0 J	**10.3**	1360
103R	103R	11/4/2004	< 10	**76**	38	4.0 J	< 10	< 5.0	< 5.0	1.0 J	< 5.0	2.0 J	**27.6**	1760
103R	103R	5/23/2005	< 100	**28**	18	2.0 J	< 10	4.0 J	< 5.0	< 5.0	< 10	< 1.0	**12.5**	413
103R	103R	11/9/2005	< 100	**70**	37	4.0 J	< 10	< 5.0	< 5.0	1.0 J	< 5.0	2.0	**22.3**	1470
103R	103R	6/27/2006	< 100	**63**	44	3.0 J	4.0 J	< 5.0	< 5.0	1.0 J	< 5.0	2.0	**13.5**	711
103R	103R	8/29/2006	< 100	**72**	46	3.0 J	2.0 J	< 5.0	< 5.0	1.0 J	< 5.0	< 1.0	**18.9**	1230
103R	103R	11/21/2006	< 100	**50**	38	2.0 J	< 10	< 5.0	< 5.0	1.0 J	< 5.0	1.0 J	< 100	1420
103R	103R	2/28/2007	< 100	**73**	8.0	< 5.0	7.0 J	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	3330
103R	103R	6/1/2007	< 100	**25**	17	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	604
103R	103R	11/29/2007	< 100	**26**	17	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 5.0	< 1.0	**22.1 J**	1060
103R	103R	5/23/2008	64 J	5	13	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 2.0	< 1.0	< 100	627
103R	103R	11/18/2008	< 100	**16**	13	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 2.0	< 1.0	< 100	916
103R	103R	6/24/2009	< 50	**9.28**	10.7	0.33 J	< 10	< 0.5	< 0.5	1.29	< 0.5	< 0.5	8.1 J	681
103R	103R	11/24/2009	< 50	**21.1**	12.1	0.9	< 10	< 0.5	< 0.5	1.24	< 0.5	< 0.5	**12.3**	803
103R	103R	12/1/2010	< 50	**22.3**	12	0.58	< 10	< 0.5	< 0.5	0.7	< 0.5	< 0.5	**18.4**	1010
103R	103R	5/9/2011	< 50	**6.84**	14.5	0.250 J	< 10	< 0.5	< 0.5	0.67	< 0.5	< 0.5	**15**	708 B
103R	103R	11/17/2011	< 50	**25.3**	16.2	2.15	< 10	< 0.5	< 0.5	0.97	< 0.5	1.07	**17.3**	1170
103R	103R	5/16/2012	< 50	**36.6**	21.8	3.03	< 10	< 0.5	< 0.5	0.8	< 0.5	1.11	**12.9**	1320
103R	103R	11/12/2012	< 50	**40.7**	24	2.65	< 10	< 0.5	< 0.5	0.862	< 0.5	0.73	9.7 J	1470
103R	103R	5/24/2013	< 50	**29.1**	18.6	2.58	1.18 J	< 0.5	< 0.5	0.999	< 0.5	0.935	**24.7**	1750 B
103R	103R	11/11/2013	< 5.0	**21.3**	16	1.45	< 5.0	< 0.5	< 0.5	0.662	< 0.5	< 1.5	**19.6**	1590
103R	103R	5/19/2014	< 5.0	**17.6**	18.4	1.59	< 5.0	< 0.5	< 0.5	0.403 J	< 0.5	< 1.5	**16**	1080
103R	103R	10/16/2014	< 5.0	**16.5**	18.3	1.17	< 5.0	< 0.5	< 0.5	0.524	< 0.5	< 1.5		
103R	103R	11/10/2014	< 5.0	**15.7**	13.5	1.24	< 5.0	< 0.5	< 0.5	0.784	< 0.5	< 1.5	**14.6**	1430
106R	106R	6/9/1995	< 10	**13**	< 10	< 10	< 10	< 10	< 10	1.0 J	< 10	< 10		
106R	106R	8/23/1995	< 10	**10**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	2.0 J	< 5.0	< 5.0		
106R	106R	11/28/1995	< 10	**13**	8.0	< 5.0	< 10	< 5.0	< 5.0	**7.0**	< 5.0	< 5.0		
106R	106R	4/2/1996	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
106R	106R	5/6/1999	< 10	**11**	1.0 J	< 5.0	< 10	< 5.0	1.6 BJ	1.7 J	< 10	< 15		
106R	106R	2/16/2000	< 10	4.2 J	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 15		
106R	106R	7/26/2001	< 10	**15**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
106R	106R	7/10/2002	< 10	**15**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
106R	106R	12/20/2002	< 10	**16**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
106R	106R	6/3/2003	< 10	**14**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	100
106R	106R	12/17/2003	< 100	**19**	2.0 J	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	9.62	54.7
106R	106R	6/3/2004	< 10	**8.0**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	6.94	91.8
106R	106R	11/9/2004	< 10	**10**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	54.9
106R	106R	5/27/2005	< 100	**11**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 10	< 1.0	< 5.0	82
106R	106R	11/10/2005	< 100	**12**	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0		56.7
106R	106R	7/6/2006	< 100	**15**	2.0 J	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 5.0	< 1.0	5.52	73
106R	106R	11/27/2006	< 100	**15**	2.0 J	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 5.0	< 1.0	< 100	75.5
106R	106R	5/29/2007	< 100	**9.0**	2.0 J	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 5.0	< 1.0	< 100	65.9
106R	106R	11/30/2007	< 100	**17**	2.0 J	< 5.0	< 10	< 5.0	< 5.0	2.0 J	< 5.0	< 1.0	< 100	43.3
106R	106R	5/23/2008	< 100	**6.0**	1.0 J	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 2.0	< 1.0	< 100	62.6
106R	106R	11/19/2008	< 100	**11**	1.0 J	< 5.0	< 10	< 5.0	< 5.0	1.0 J	< 2.0	< 1.0	< 100	43.2
106R	106R	6/25/2009	< 50	**18**	2.93	< 0.5	< 10	< 0.5	< 0.5	1.95	< 0.5	< 0.5	4.5 J	28.3
106R	106R	11/23/2009	< 50	**18.2**	3.15	< 0.5	< 10	< 0.5	< 0.5	1.96	< 0.5	< 0.5	3.9 J	17.6
106R	106R	12/3/2010	< 50	**10.5**	1.7	< 0.5	< 10	< 0.5	< 0.5	1.35	< 0.5	< 0.5	6.0 J	36.1
106R	106R	5/12/2011	< 50	3.06	1.21	< 0.5	< 10	< 0.5	< 0.5	1.24	< 0.5	< 0.5	6.3 J	113
106R	106R	11/18/2011	< 50	**10**	1.58	< 0.5	< 10	< 0.5	< 0.5	1.22	< 0.5	< 0.5	7.6 J	18.2
106R	106R	5/15/2012	< 50	3.62	0.81	< 0.5	< 10	< 0.5	< 0.5	0.72	< 0.5	< 0.5	5.8 J	140
106R	106R	11/14/2012	< 50	**11.3**	2.06	< 0.5	< 10	< 0.5	< 0.5	1.43	< 0.5	< 0.5	4.1 J	43.6

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
106R	106R	5/23/2013	< 50	0.958	0.411 J	< 0.5	< 10	< 0.5	< 0.5	0.51	< 0.5	< 0.5	< 10	79.9 B
106R	106R	11/13/2013	< 5.0	**5.29**	1.33	< 0.5	< 5.0	0.244 J	< 0.5	1.2	< 0.5	< 1.5	< 10	33
106R	106R	5/20/2014	< 5.0	1.45	0.553	< 0.5	< 5.0	0.209 J	< 0.5	0.605	< 0.5	< 1.5	9.3 J	77.6
106R	106R	11/11/2014	< 5.0	4.80	0.963	< 0.5	< 5.0	0.252 J	< 0.5	0.824	< 0.5	< 1.5	< 10	26.8
108R	108R	6/9/1995	11 B	< 10	< 10	< 10	< 10	2.0 J	< 10	< 10	< 10	< 10		
108R	108R	4/9/1996	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
108R	108R	6/4/2003	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10	**25**	76
108R	108R	10/28/2003	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**28**	79.2
108R	108R	12/16/2003	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**29.9**	103
108R	108R	2/10/2004	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**30.7**	85.7
108R	108R	3/24/2004	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**24.6**	80.5
108R	108R	6/1/2005	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 10	< 1.0	**27**	79.4
108R	108R	11/28/2006	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	107
108R	108R	5/31/2007	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	71.3
108R	108R	11/29/2007	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**29 J**	102
108R	108R	5/23/2013	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**21.9**	295
108R	108R	11/13/2013	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**24.5**	254
108R	108R	5/20/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**27.6**	316
108R	108R	10/16/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5		
108R	108R	11/13/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**28.8**	150
169R	169R	10/8/2001	11000	**5600**	**1500**	**1200**	**31000**	< 500	**28000 E**	< 500	< 500	5000		
169R	169R	12/19/2001	30000	**3800**	< 1000	< 1000	**62000**	< 1000	**18000**	< 1000	< 1000	< 2000		
169R	169R	7/10/2002	23000	**4300**	**1400**	< 1000	**39000**	< 1000	**18000**	< 1000	< 1000	2100		
169R	169R	12/19/2002	4500	**2100**	**620**	570	**12000**	< 500	**9100**	< 500	< 500	2100		
169R	169R	1/16/2003	5200	**2200**	**580**	610	< 1000	< 500	**10000**	< 500	< 500	2200	**63**	**4500**
169R	169R	2/17/2003	< 1000	**2400**	**680**	680	**15000**	< 500	**9600**	< 500	< 500	2600	**77**	**5100**
169R	169R	3/12/2003	2600	**2100**	**710**	590	**15000**	< 500	**9100**	< 500	< 500	2200	**72**	**4700**
169R	169R	6/4/2003	1400	**3300**	**800**	**880**	**26000**	< 500	**15000**	< 500	< 500	3500	**80**	**5300**
169R	169R	10/27/2003	86	**2300**	**630**	< 500	1500	< 5.0	**6900**	< 5.0	< 5.0	1540	**90**	**3980**
169R	169R	12/16/2003	< 10000	**2700**	< 5.0	**740**	**5500**	< 5.0	**10000**	< 5.0	< 5.0	2100	**28.8**	**13600**
169R	169R	2/9/2004	1000	**1800**	< 5.0	< 500	**3200**	< 5.0	**5400**	< 5.0	< 5.0	400	**11.3**	**9820**
169R	169R	3/22/2004	570	**2200**	**290 J**	< 1000	**2600**	< 5.0	**7800**	< 5.0	< 5.0	1960	7.95	2960
169R	169R	5/24/2004	810	**1800**	**630**	< 500	**2600**	< 5.0	**5200**	< 5.0	< 5.0	1690	**25.9**	**5090**
169R	169R	11/3/2004	46	**1400**	**460**	380	620	< 5.0	**3100**	< 5.0	0.8 J	1290	**33.7**	**4370**
169R	169R	5/20/2005	< 100	**1900**	**650**	630	860 J	< 5.0	**5200**	< 5.0	2.0 J	2250	**53**	**4620**
169R	169R	11/7/2005	< 100	**1700**	**560**	620	200	< 5.0	**3800**	< 5.0	3.0 J	2180	**56.9**	**4450**
169R	169R	6/28/2006	47 J	**1200**	**520**	460	330	< 5.0	**1900**	< 5.0	2.0 J	1580	**10.4**	
169R	169R	8/29/2006	27 J	**1200**	**410**	330	130	< 5.0	**1300**	< 5.0	< 5.0	1010	**27.9**	**6090**
169R	169R	11/20/2006	< 100	**770**	**350**	240	110	< 5.0	820	< 5.0	1.0 J	730	< 100	2900
169R	169R	2/26/2007	< 100	**900**	**360**	300	9.0 J	< 5.0	580	< 5.0	< 5.0	800	**26.5 J**	**5250**
169R	169R	5/29/2007	14 J	**990**	**400**	300	4.0 J	< 5.0	720	< 5.0	< 5.0	940	**20.8 J**	**4320**
169R	169R	11/27/2007	< 100	**410**	**280**	120	4.0 J	< 5.0	16	< 5.0	< 5.0	282	**42.9 J**	2070
169R	169R	5/20/2008	< 100	**510**	**310**	200	< 10	< 5.0	9.0	< 5.0	1.0 J	363	**31.8 J**	2620
169R	169R	11/18/2008	< 100	**440**	**290**	200	< 10	< 5.0	6.0	< 5.0	< 2.0	296	< 100	2690
169R	269R	11/18/2008	< 100	**450**	**310**	200	< 10	< 5.0	6.0	< 5.0	< 2.0	297	< 100	2730
169R	169R	6/22/2009	< 50	**508**	**302**	240	< 10	< 0.5	5.38	< 0.5	0.69	398	**51.7**	3020
169R	169R	11/18/2009	< 50	**471**	**337**	174	< 10	< 0.5	5.57	< 0.5	0.74	259	**51.8**	2520
169R	169R	11/30/2010	< 50	**234**	**134**	112	< 10	< 0.5	2.27	< 0.5	< 0.5	156	**61**	2320
169R	169R	5/9/2011	< 50	**119**	**90.7**	92.3	< 10	< 0.5	2.0	< 0.5	< 0.5	111	**54.3**	2180 B
169R	169R	11/17/2011	< 50	**113**	**123**	54.2	< 10	< 0.5	1.0	0.52	0.390 J	61	**41.3**	2610
169R	169R	5/15/2012	< 50	**107**	**83.9**	57.9	< 10	< 0.5	0.99	< 0.5	< 0.5	62.1	**58.4**	2370
169R	169R	11/13/2012	< 50	**92.6**	59.5	54.4	< 10	< 0.5	0.805	0.557	< 0.5	54.1	**50.1**	**14900**
169R	169R	5/24/2013	< 50	**74**	44.5	34.6	< 10	< 0.5	0.906	0.466	< 0.5	33.9	**87**	**42000**
169R	169R	11/11/2013	< 5.0	**48.5**	35.2	18.3	< 5.0	< 0.5	0.249 J	0.410 J	< 0.5	17.3	**46.7**	3350
169R	169R	5/19/2014	< 5.0	**88.7**	65.6	27.4	< 5.0	< 0.5	10.8	0.505	0.251 J	19.9	**47.7**	**3910**
169R	169R	10/15/2014	< 5.0	**39.6**	41.2	15.2	< 5.0	< 0.5	0.268 J	0.484 J	< 0.5	13.7		
169R	169R	11/10/2014	< 5.0	**20.4**	16.4	9.87	< 5.0	< 0.5	< 0.5	0.352 J	< 0.5	10.7	**53.4**	2570
201R	201R(55-57')	10/24/2003	< 10	**1100**	**210**	12	19	< 5.0	26	**59**	< 5.0	18		
201R	201R(45-47')	10/24/2003	< 10	**1100**	**210**	12	27	< 5.0	30	**62**	< 5.0	20		
201R	201R(50-52')	10/24/2003	< 10	**1100**	**210**	13	30	< 5.0	30	**63**	< 5.0	20		
201R	201R(40-42')	10/24/2003	< 10	**1100**	**210**	13	25	< 5.0	31	**64**	< 5.0	20		
201R	201R	10/30/2003	120	**940**	**220**	13	120	< 5.0	31	**58**	2.0 J	19	< 3.8	6.94
201R	201R	12/16/2003	370	**530**	**170**	6.0	98	< 5.0	10	**34**	< 5.0	5.0 J	5.26	< 5.0
201R	201R	2/9/2004	310	**120**	**99**	< 5.0	< 10	< 5.0	< 5.0	**27**	< 5.0	1.0 J	6.61	< 5.0
201R	201R	3/22/2004	190	< 5.0	70	< 5.0	< 10	< 5.0	< 5.0	**28**	< 5.0	< 5.0	8.28	< 5.0
201R	201R	5/25/2004	180	< 5.0	57	< 5.0	< 10	< 5.0	< 5.0	**22**	< 5.0	< 5.0	6.15	< 5.0
201R	201R	11/8/2004	43	**110**	56	3.0 J	< 10	< 5.0	< 5.0	**20**	< 5.0	< 5.0	5.44	20.2
201R	201R	6/1/2005	< 100	3.0 J	8.0	< 5.0	< 10	< 5.0	< 5.0	5.0	< 10	< 1.0	9.31	1.44 J
201R	201R	11/10/2005	< 100	**94**	32	1.0 J	< 10	< 5.0	< 5.0	**7.0**	< 5.0	< 1.0	4.36 J	45.3
201R	201R	7/5/2006	< 100	**100**	69	< 5.0	1.0 J	< 5.0	4.0 J	**8.0**	2.0 J	< 1.0	9.45	193
201R	201R	8/31/2006	< 100	**300**	**140**	2.0 J	< 10	< 5.0	8.0	**10**	2.0 J	< 1.0	8.8	220
201R	201R	11/21/2006	20 J	**300**	**130**	2.0 J	< 10	< 5.0	6.0	**9.0**	2.0 J	< 1.0	< 100	82.6
201R	201R	2/27/2007	41 J	**160**	**95**	2.0 J	1.0 J	< 5.0	3.0 J	**6.0**	1.0 J	< 1.0	< 100	162
201R	201R	5/30/2007	< 100	**200**	**91**	2.0 J	5.0 J	< 5.0	3.0 J	4.0 J	3.0 J	< 1.0	< 100	265
201R	201R	11/27/2007	< 100	**230**	**120**	3.0 J	5.0 J	< 5.0	5.0	**6.0**	3.0 J	< 1.0	< 100	313
201R	201R	5/22/2008	17 J	**180**	**91**	2.0 J	< 10	< 5.0	3.0 J	4.0 J	< 2.0	< 1.0	< 100	430
201R	201R	11/21/2008	< 100	**230**	**98**	3.0 J	4.0 J	< 5.0	4.0 J	4.0 J	1.0 J	< 1.0	< 100	534
201R	201R	6/23/2009	< 50	**35**	30	1.28	< 10	< 0.5	1.9	2.46	0.44 J	0.57	< 10	615
201R	201R	11/19/2009	< 50	**135**	**88.6**	1.7	< 10	< 0.5	1.91 B	3.33	< 0.5	1.14	4.3 J	634

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
201R	201R	11/30/2010	< 50	**107**	63.2	0.89	< 10	< 0.5	0.86	2.19	< 0.5	0.99	4.9 J	753
201R	201R	5/10/2011	< 50	0.59	1.91	0.310 J	< 10	< 0.5	< 0.5	1.19	< 0.5	< 0.5	4.2 J	764
201R	201R	11/14/2011	< 50	**93.5**	**127**	2.97	< 10	< 0.5	0.5	1.87	1.09	< 0.5	**11.3**	715
201R	201R	5/16/2012	< 50	0.62	24.9	< 0.5	< 10	< 0.5	< 0.5	1.06	< 0.5	< 0.5	< 10	725
201R	201R	11/14/2012	< 50	**22.7**	**76.4**	0.679	< 10	< 0.5	< 0.5	1.61	0.451 J	< 0.5	9.2 J	627
201R	201R	5/23/2013	< 50	< 0.5	27.4	< 0.5	< 10	< 0.5	< 0.5	1.86	< 0.5	< 0.5	< 10	409 B
201R	201R	11/13/2013	< 5.0	2.14	52.9	< 0.5	< 5.0	< 0.5	< 0.5	2.84	< 0.5	0.977 J	**16.7**	1080
201R	201R	5/20/2014	7.64	1.61	28.2	< 0.5	< 5.0	< 0.5	< 0.5	1.19	< 0.5	< 1.5	< 10	880
201R	201R	9/11/2014	< 5.0	4.88	33.4	0.224 J	< 5.0	< 0.5	< 0.5	0.617	< 0.5	< 1.5		
201R	201R	10/16/2014	< 5.0	4.01	29.2	< 0.5	< 5.0	< 0.5	< 0.5	0.551	< 0.5	< 1.5		
201R	201R	11/11/2014	< 5.0	2.74	24.4	< 0.5	< 5.0	< 0.5	< 0.5	0.558	< 0.5	< 1.5	< 10	680
202R	202R(40-42')	10/24/2003	< 10	**630**	**110**	21	190	< 5.0	70	< 5.0	< 5.0	84		
202R	202R(50-52')	10/24/2003	< 10	**620**	**110**	21	190	< 5.0	71	< 5.0	< 5.0	85		
202R	202R(45-47')	10/24/2003	< 10	**610**	**110**	22	180	< 5.0	72	< 5.0	< 5.0	86		
202R	202R(55-57')	10/24/2003	< 10	**660**	**120**	24	180	< 5.0	82	< 5.0	< 5.0	97		
202R	202R	10/30/2003	91	**660**	**100**	16	860	< 5.0	51	2.0 J	< 5.0	65	3.82	13.5
202R	202R	12/17/2003	320	**470**	**110**	14	1500	< 5.0	62	< 5.0	< 5.0	50	7.74	14.9
202R	202R	2/10/2004	170	**330**	67	21	**2200**	< 5.0	57	< 5.0	< 5.0	66	**12.6**	96.4
202R	202R	3/23/2004	120	**80**	44	17	820	< 5.0	11	< 5.0	< 5.0	45	**11.6**	86.4
202R	202R	5/24/2004	140	**6.0**	19	8.0	1100	< 5.0	< 5.0	< 5.0	< 5.0	5.0 J	**14.8**	119
202R	202R	11/5/2004	73	**26**	9.0	2.0 J	430	< 5.0	< 5.0	< 5.0	< 5.0	7.0	**16.7**	96.6
202R	202R	5/23/2005	61 J	**40**	18	8.0	380	< 5.0	< 5.0	< 5.0	< 10	22	**29.9**	79.8
202R	202R	11/8/2005	29 J	**180**	46	8.0	200	< 5.0	< 5.0	< 5.0	< 5.0	23	**25.9**	136
202R	202R	6/29/2006	25 J	**30**	< 5.0	< 5.0	27	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**42.6**	2860
202R	202R	8/29/2006	54 J	**84**	< 5.0	3.0 J	22	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**24.8**	1150
202R	202R	11/20/2006	13 J	**83**	31	4.0 J	5.0 J	< 5.0	< 5.0	< 5.0	< 5.0	8.0	< 100	256
202R	202R	2/27/2007	< 100	**27**	33	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**25.2 J**	461
202R	202R	5/29/2007	< 100	**13**	32	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	694
202R	202R	11/30/2007	< 100	5	23	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	146
202R	202R	5/19/2008	< 100	< 5.0	7.0 J	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	**42 J**	190
202R	202R	11/20/2008	< 100	2.0 J	35	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	< 100	1840
202R	202R	6/25/2009	< 50	0.97	17.9	< 0.5	< 10	0.400 J	0.280 J	< 0.5	< 0.5	< 0.5	**13.8**	144
202R	202R	11/20/2009	< 50	2.95	39.1	< 0.5	< 10	0.410 J	< 0.5	0.51	< 0.5	< 0.5	**15.9**	853
202R	202R	11/30/2010	< 50	0.53	30.2	< 0.5	< 10	< 0.5	< 0.5	0.57	< 0.5	< 0.5	**20.8**	863
202R	202R	5/10/2011	< 50	< 0.5	15.5	< 0.5	< 10	< 0.5	< 0.5	0.490 J	< 0.5	< 0.5	**18.5**	517
202R	202R	11/15/2011	< 50	0.87	33.1	< 0.5	< 10	< 0.5	< 0.5	0.86	< 0.5	< 0.5	**14.9**	1230
202R	202R	5/15/2012	< 50	< 0.5	12.2	< 0.5	< 10	< 0.5	< 0.5	0.54	< 0.5	< 0.5	7.6 J	166
202R	202R	11/12/2012	< 50	< 0.5	13.2	< 0.5	< 10	< 0.5	< 0.5	0.542	< 0.5	< 0.5	8.4	454 B
202R	202R	5/21/2013	< 50	< 0.5	6.24	< 0.5	< 10	< 0.5	< 0.5	0.658	< 0.5	< 0.5	**13.8**	235 B
202R	202R	11/11/2013	< 5.0	< 0.5	2.71	< 0.5	< 5.0	< 0.5	< 0.5	0.463 J	< 0.5	< 1.5	**17.8**	1410
202R	202R	5/19/2014	6.36	< 0.5	2.57	< 0.5	< 5.0	< 0.5	< 0.5	0.366 J	< 0.5	< 1.5	**19.6**	2090
202R	202R	9/11/2014	< 5.0	0.264 J	2.92	< 0.5	< 5.0	< 0.5	< 0.5	0.316 J	< 0.5	< 1.5		
202R	202R	10/15/2014	< 5.0	0.301 J	2.75	< 0.5	< 5.0	< 0.5	< 0.5	0.292 J	< 0.5	< 1.5		
202R	202R	11/10/2014	< 5.0	0.313 J	2.80	< 0.5	< 5.0	< 0.5	< 0.5	0.314 J	< 0.5	< 1.5	9.6 J	1980
203R	203R(55')	10/28/2003	390	**2100**	**640**	< 500	< 1000	< 5.0	**5600**	< 5.0	< 5.0	1570	**45**	2070
203R	203R(45')	10/28/2003	250	**2600**	**1000**	< 1000	< 2000	< 5.0	**8300**	< 5.0	< 5.0	1950	**69.2**	**4940**
203R	203R(50')	10/28/2003	170	**3200**	**1200**	< 1000	< 2000	< 5.0	**11000**	< 5.0	< 5.0	2780	**84.4**	**6260**
203R	203R (40')	10/28/2003	610	**2400**	**1000**	460 J	1300	< 5.0	**7900**	< 5.0	3.0 J	2200		
203R	203R	5/24/2005	1400	**1200**	< 5.0	< 5.0	200	< 5.0	< 5.0	< 5.0	< 10	< 1.0	< 5.0	**139000**
203R	203R	11/7/2005	950	**1100**	< 5.0	< 5.0	200	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 5.0	**126000**
203R	203R	6/28/2006	200	**700**	< 5.0	< 5.0	130	< 5.0	150	< 5.0	< 5.0	< 1.0	3.98 J	
203R	203R	8/30/2006	310	**110**	< 5.0	< 5.0	120	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	2.54 J	**119000**
203R	203R	11/21/2006	190	**460**	< 5.0	< 5.0	39	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	**47500**
203R	203R	2/27/2007	480	< 5.0	< 5.0	< 5.0	18	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**72.2 J**	**490000**
203R	203R	5/30/2007	210 J	< 5.0	< 5.0	< 5.0	12 J	< 5.0	< 5.0	< 5.0	3.0 J	< 1.0	**49.4 J**	**382000**
203R	203R	11/28/2007	230 J	< 5.0	< 5.0	< 5.0	5.0 J	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**50.8 J**	**356000**
203R	203R	5/19/2008	150 J	< 25	< 25	< 25	< 50	< 25	< 25	< 25	< 10	< 5.0	< 200	**293000**
203R	203R	11/21/2008	42 J	< 5.0	< 5.0	< 5.0	2.0 J	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	< 100	**101000**
203R	203R	6/25/2009	55.2	1.96	< 0.5	< 0.5	25.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10	**37200**
203R	203R	11/24/2009	61.5	**13.6**	< 0.5	< 0.5	12.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10	**24900**
203R	203R	12/3/2010	38.1 J	**192**	41.8	0.74	< 10	< 0.5	3.84	0.280 J	< 0.5	7.07	< 10	2160
203R	203R	5/11/2011	< 50	**528**	**277**	20	< 10	< 0.5	2.76	0.420 J	1.01	31.7	< 10	**4300**
203R	203R	11/15/2011	< 50	**310**	**236**	34.9	< 10	< 0.5	1.62	1.03	0.99	30.8	7.6 J	**6660**
203R	203R	5/15/2012	< 50	**19.5**	59.4	0.440 J	< 10	< 0.5	0.260 J	0.75	< 0.5	2.14	< 10	**8230**
203R	203R	11/12/2012	10.3 J	**140**	**120**	9.72	< 10	< 0.5	2.65	1.15	0.523	13	**14.7**	**9310**
203R	203R	5/24/2013	14.5 J	**82.3**	61.8	4.08	< 10	< 0.5	0.504	0.677	0.367 J	5.29	9.8 J	**10900**
203R	203R	11/12/2013	< 5.0	**365**	**238**	57.9	< 5.0	< 0.5	0.813	0.404 J	0.879	42.5	**33.8**	**7820**
203R	203R	5/20/2014	6.27	**218**	**145**	21.7	< 5.0	< 0.5	0.482 J	0.379 J	0.558	16	**22.5**	**6350**
203R	203R	9/11/2014	< 5.0	**56**	67.1	18.1	< 5.0	< 0.5	0.177 J	0.494 J	0.413 J	15.8		
203R	203R	10/15/2014	< 5.0	**129**	**99**	48.3	< 5.0	< 0.5	0.799	0.504	< 0.5	39.7		
203R	203R	11/10/2014	< 5.0	**227**	**166**	39.3	< 5.0	< 0.5	2.20	0.461 J	0.867	35.7	**40.7**	**7210**
204R	204R(40-42')	10/24/2003	< 10	**8.0**	2.0 J	5.0	< 10	< 5.0	45	< 5.0	< 5.0	21		
204R	204R(50-52')	10/24/2003	< 10	**10**	3.0 J	6.0	< 10	< 5.0	56	< 5.0	< 5.0	25		
204R	204R(45-47')	10/24/2003	< 10	**10**	3.0 J	7.0	< 10	< 5.0	56	< 5.0	< 5.0	26		
204R	204R(55-57')	10/24/2003	< 10	**10**	3.0 J	7.0	< 10	< 5.0	58	< 5.0	< 5.0	26		
204R	204R	12/17/2003	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	8.13	< 5.0
204R	204R	2/9/2004	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	6.74	5.35
204R	204R	3/22/2004	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	8.97	19
204R	204R	5/25/2004	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**10.3**	9.73

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
204R	204R	11/5/2004	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**13.7**	2.84 J
204R	204R	5/23/2005	12 J	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 10	< 1.0	**19.3**	21.5
204R	204R	11/10/2005	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**13.1**	6.76
204R	204R	6/29/2006	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	**14.1**	5.83
204R	204R	11/20/2006	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	4.68 J
204R	204R	5/29/2007	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 1.0	< 100	4.33 J
204R	204R	5/19/2008	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	< 100	13.6
204R	204R	6/25/2009	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	6.5 J	4.6 J
204R	204R	12/2/2010	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**11.7**	4.4 J
204R	204R	5/10/2011	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	8.9 J	12.5 J
204R	204R	11/14/2011	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	0.460 J	< 0.5	< 0.5	< 0.5	**10.4**	< 15
204R	204R	5/17/2012	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**10.9**	10.3 J
204R	204R	11/12/2012	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**10.3**	7.0 J
204R	204R	5/21/2013	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**13**	9.1 JB
204R	204R	11/11/2013	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**13.7**	40.3
204R	204R	5/19/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	0.313 J	< 0.5	< 0.5	< 0.5	**10.8**	64.7
204R	204R	9/11/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
204R	204R	10/15/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5		
204R	204R	11/12/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	0.209 J	< 0.5	< 0.5	< 0.5	8.4 J	111
205R	205R	12/5/2005	800	**1100**	**460**	200 J	**4300**	< 5.0	16	**30**	2.0 J	315		
205R	205R	4/14/2006	680	**960**	**470**	190	**3600**	< 5.0	210 J	**11**	2.0 J	450	**28.4**	761
205R	205R	7/5/2006	440	**870**	**330**	170	**4100**	< 5.0	300	**8.0**	2.0 J	450	**29.8**	893
205R	205R	8/31/2006	510	**910**	**390**	140 J	**4100**	< 5.0	330	**8.0**	2.0 J	290	**30.4**	941
205R	305R	8/31/2006	490	**920**	**400**	140 J	**4600**	< 5.0	340	**7.0**	2.0 J	280	**32.2**	948
205R	205R	11/20/2006	190	**650**	**280**	180	**5400**	< 5.0	210 J	5.0	1.0 J	460	< 100	937
205R	205R	2/27/2007	240	**800**	**380**	130	**2400**	< 5.0	270	5.0	2.0 J	345	**30.2 J**	925
205R	305R	2/27/2007	270	**700**	**330**	130	**2000**	< 5.0	250	5.0	2.0 J	348	**19.2 J**	937
205R	205R	5/31/2007	120	**880**	**310**	160	**2900**	< 5.0	290	4.0 J	3.0 J	440	< 100	920
205R	205R	11/29/2007	55 J	**730**	**240 J**	150	**6600**	< 5.0	220 J	3.0 J	0.9 J	390	**66.3 J**	928
205R	205R	5/21/2008	58 J	**740**	**300**	150	**2500**	< 5.0	180	4.0 J	1.0 J	430	**36.5 J**	892
205R	205R	11/19/2008	23 J	**430**	**200**	94	**4000**	< 5.0	57	3.0 J	0.8 J	205	< 100	916
205R	205R	6/24/2009	13.2 J	**608**	**171**	108	**4630**	< 0.5	89.4	4.6	0.7	273	**23.4**	941
205R	205R	11/20/2009	8.42 J	**256**	**112**	33.5	**1960**	< 0.5	14	4.33	< 0.5	54.9	**27.9**	872
205R	205R	12/1/2010	< 50	**459**	**146**	90.4	**3170**	< 0.5	60.4	2.01	0.52	202	**13.2**	3520
205R	205R	5/11/2011	< 50	**453**	**170**	107	**2650**	< 0.5	54.5	3.77	0.52	208	**25.2**	2560
205R	205R	11/16/2011	< 50	**385**	**124**	80.9	1730	< 0.5	29.5	3.4	0.52	183	**31.5**	1050
205R	205R	5/15/2012	< 50	**378**	**124**	71.6	**1960**	< 0.5	11.5	2.37	< 0.5	145	**27.3**	1100
205R	205R	11/14/2012	< 50	**294**	**107**	67.7	1120	< 0.5	2.82	2.78	0.485 J	127	**25.5**	933
205R	205R	5/24/2013	< 50	**107**	47.6	28	318	< 0.5	< 0.5	3.06	0.261 J	24.4	**32.9**	923
205R	205R	11/12/2013	< 5.0	**70**	32.5	14.2	170	< 0.5	< 0.5	2.11	< 0.5	9.48	**33**	870
205R	205R	5/22/2014	126	**96.8**	44.6	20.3	166	< 0.5	< 0.5	1.77	0.211 J	15.2	**32.1**	871
205R	205R	10/15/2014	< 5.0	**70.1**	29.9	17.9	40.2	< 0.5	< 0.5	1.61	< 0.5	12.2		
205R	205R	11/11/2014	< 5.0	**44.8**	20.5	11.5	16.2	< 0.5	< 0.5	1.90	< 0.5	7.87	**33.9**	664
EW-03S	EW3S	4/4/1996	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0		
EW-03S	EW3S	9/17/1996	< 10	**23**	44	11	< 10	**28**	4.0 J	**32**	< 5.0	7.0		
EW-03S	EW3S	10/14/1996	< 10	4.0 J	7.0	2.0 J	< 10	**6.0**	< 5.0	4.0 J	< 5.0	< 5.0		
EW-03S	EW3S	1/8/1997	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
EW-03S	EW3S	3/21/1997	< 10	< 5.0	2.0 J	< 5.0	< 10	< 5.0	9.0	4.0 J		5.0		
EW-03S	EW3S	4/20/1998	< 10	< 5.0	< 5.0	< 5.0	< 10	5.0	< 5.0	< 5.0	< 5.0	< 5.0	**27**	1600
EW-03S	EW3S	5/5/1999	< 20	< 5.0	< 5.0	1.7 J	< 10	< 5.0	8.5	< 5.0	< 10	2.2 J		
EW-03S	EW3S	12/21/1999	< 10	< 5.0	< 5.0	< 5.0	< 10	1.0 J	< 5.0	< 5.0	< 5.0	< 10		
EW-03S	EW3S	7/13/2000	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	1.8	< 5.0	< 5.0	< 15		
EW-03S	EW3S	12/5/2000	< 25	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 15		
EW-03S	EW3S	7/26/2001	< 50	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 5.0	< 5.0	< 10	< 10		
EW-03S	EW3S	12/18/2001	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	5.6	< 5.0	< 5.0	< 10		
EW-03S	EW3S	7/8/2002	< 10	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 10		
EW-03S	EW-3S	5/19/2005	< 100	< 5.0	**110**	< 5.0	< 10	**14**	< 5.0	< 5.0	< 10	< 1.0	< 5.0	1230
EW-03S	EW-3S	11/8/2005	< 100	< 5.0	53	< 5.0	< 10	4.0 J	< 5.0	1.0 J	< 5.0	< 1.0	< 5.0	287
EW-03S	EW-3S	6/28/2006	< 100	< 5.0	**130**	1.0 J	< 10	5.0	< 5.0	< 5.0	< 5.0	< 1.0	6.85	
EW-03S	EW-3S	11/21/2006	< 100	< 5.0	10	< 5.0	< 10	1.0 J	< 5.0	< 5.0	< 5.0	< 1.0	< 100	312
EW-03S	EW-3S	2/28/2007	< 100	< 5.0	**100**	< 5.0	< 10	4.0 J	< 5.0	1.0 J	< 5.0	< 1.0	< 100	743
EW-03S	EW-3S	5/30/2007	< 100	< 5.0	14	< 5.0	< 10	2.0 J	< 5.0	< 5.0	< 5.0	< 1.0	< 100	10.9
EW-03S	EW-3S	11/29/2007	< 100	< 5.0	**100**	< 5.0	< 10	1.0 J	< 5.0	< 5.0	< 5.0	< 1.0	**45 J**	**15700**
EW-03S	EW-3S	5/21/2008	76 J	< 5.0	19	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	< 100	196
EW-03S	EW-3S	11/17/2008	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	< 100	50.2
EW-03S	EW-3S	6/25/2009	< 50	< 0.5	1.23	< 0.5	< 10	0.280 J	< 0.5	< 0.5	< 0.5	< 0.5	< 10	1430
EW-03S	EW-3S	11/20/2009	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	0.470 J	< 0.5	< 0.5	< 0.5	< 10	104
EW-03S	EW-3S	12/3/2010	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	9.7 J	683
EW-03S	EW-3S	5/11/2011	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**63.8**	**9620**
EW-03S	EW-3S	11/17/2011	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10	618
EW-03S	EW-3S	5/16/2012	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	0.310 J	< 0.5	< 0.5	< 0.5	< 10	72.4
EW-03S	EW-3S	11/15/2012	< 50	< 0.5	0.772	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10	**7660**
EW-03S	EW-3S	5/24/2013	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5.1 J	307
EW-03S	EW-3S	11/11/2013	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10	186
EW-03S	EW-3S	5/19/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 10	69.6
EW-03S	EW-3S	11/10/2014	< 5.0	< 0.5	0.489 J	< 0.5	< 5.0	0.266 J	< 0.5	< 0.5	< 0.5	0.676 J	< 10	**3750**
EW-10S	EW10S	3/21/1997		< 500	< 500	570	< 1000	< 500	**13000**	< 500		7100		
EW-10S	EW10S	5/28/1997	110 J	< 200	< 200	**890**	< 400	< 200	**6400**	< 200	< 200	4500		
EW-10S	EW-10S	6/27/1997	< 250	< 120	< 120	400	< 250	< 120	**2500**	< 120	< 120	2400		

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
EW-10S	EW-10S	8/14/1997	< 100	< 50	< 50	170	< 100	< 50	850	< 50	< 50	800		
EW-10S	EW10S	11/11/1997	< 250	< 120	< 120	170	< 250	< 120	**1800**	< 120	< 120	1600		
EW-10S	EW10S	5/5/1999	< 10	3.7 J	< 5.0	230 E	< 10	< 5.0	510 BE	1.1 J	< 10	540		
EW-10S	EW10S	12/20/1999	19	**6.9**	< 5.0	380 E	< 10	< 5.0	**1100 E**	3.3 J	< 5.0	2200 E		
EW-10S	EW10S	7/12/2000	< 10	3.7 J	< 5.0	330 E	< 10	< 5.0	710 E	1.1 J	< 5.0	1300 E		
EW-10S	EW10S	12/4/2000	< 25	< 6.0	< 8.0	480	< 20	< 8.0	**3500 E**	< 5.0	< 8.0	1800		
EW-10S	EW10S	7/24/2001	< 200	< 100	< 100	680	< 200	< 100	**4700 E**	< 100	< 100	3600		
EW-10S	EW10S	12/17/2001	< 10	< 5.0	< 5.0	**710 E**	< 10	< 5.0	5.3	< 5.0	< 5.0	240		
EW-10S	EW10S	6/13/2002	32	< 25	< 25	110	< 50	< 25	700	< 25		740		
EW-10S	EW10S	7/9/2002	< 100	< 50	< 50	440	< 100	< 50	**1600**	< 50	< 50	1800		
EW-10S	EW10S	12/19/2002	32	< 5.0	< 5.0	46	< 20	< 5.0	88 D	< 5.0	< 5.0	580 E		
EW-10S	EW10S	6/5/2003	< 20	< 10	< 10	88	< 20	< 10	180	< 10	< 10	340	**43**	**4600**
EW-10S	EW-10S	12/19/2003	< 100	< 5.0	< 5.0	110	< 10	< 5.0	820	< 5.0	< 5.0	720	**213**	3600
EW-10S	EW-10	6/1/2004	< 10	< 5.0	< 5.0	310	< 10	< 5.0	**1400**	< 5.0	< 5.0	1570	**171**	**4210**
EW-10S	EW-10S	11/2/2004	18	2.0 J	4.0 J	**1100**	< 10	< 5.0	**10000**	< 5.0	< 5.0	5600	**663**	**16200**
EW-10S	EW-10S	5/17/2005	< 100	< 5.0	< 5.0	230 J	< 10	< 5.0	**1400**	< 5.0	< 10	1180	**77.1**	**5420**
EW-10S	EW-10	11/8/2005	< 100	< 5.0	< 5.0	450	< 10	< 5.0	**2100**	< 5.0	< 5.0	2500	**114**	**2790**
EW-10S	EW-10S	6/29/2006	< 100	< 5.0	< 5.0	19	< 10	< 5.0	62	< 5.0	< 5.0	51	**20.2**	1530
EW-10S	EW-10S	11/21/2006	< 100	< 5.0	< 5.0	26	< 10	< 5.0	120	< 5.0	< 5.0	126	< 100	566
EW-10S	EW-10S	5/29/2007	< 100	< 5.0	< 5.0	100	< 10	< 5.0	**1100**	< 5.0	< 5.0	360	**29.8 J**	2750
EW-10S	EW-10S	11/26/2007	< 100	2.0 J	3.0 J	**740**	< 10	< 5.0	**5700**	0.9 J	< 5.0	3600	**270**	**9460**
EW-10S	EW-10S	5/19/2008	< 100	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	< 5.0	< 2.0	< 1.0	**27.9 J**	1040
EW-10S	EW-10	6/30/2008	< 100	2.0 J	1.0 J	**750**	< 10	< 5.0	**8500**	5.0	< 2.0	3500	**150**	**7730**
EW-10S	EW-10S	11/17/2008	< 100	2.0 J	< 5.0	**830**	< 10	< 5.0	**7600**	4.0 J	< 2.0	3900	**104**	**7930**
EW-10S	EW-10S	6/23/2009	< 50	2.29	< 0.5	**950**	< 10	< 0.5	**9030**	**6.42**	< 0.5	4420	**65**	**8690**
EW-10S	EW-10S	11/19/2009	< 50	2.59 J	8.78 J	**1350**	< 10	< 0.5	**17800**	2.74 J	< 0.5	6160	**92.5**	**10800**
EW-10S	EW-10S	11/30/2010	35.7 J	0.370 J	1.0	496	< 10	< 0.5	**2930**	1.25	< 0.5	4450	**257**	**7820**
EW-10S	EW-10S	5/9/2011	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	1.71	9.0 J	325
EW-10S	EW-10S	11/14/2011	< 50	1.64	1.09	**706**	< 10	< 0.5	**12400**	**5.89**	< 0.5	3190	**213**	**12300**
EW-10S	EW-10S	5/17/2012	< 50	1.09	0.86	429	< 10	< 0.5	**6000**	4	< 0.5	1810	**60.8**	**6740**
EW-10S	EW-10S	11/13/2012	< 50	< 2.5	< 2.5	375	< 50	< 2.5	**22600**	< 2.5	< 2.5	2010	**81.2**	**7570**
EW-10S	EW-10S	5/24/2013	3.39 J	< 0.5	< 0.5	3.61	< 10	< 0.5	40.6	< 0.5	< 0.5	15.9	5.1 J	149 B
EW-10S	EW-10S	11/12/2013	< 50	< 5.0	< 5.0	**1910**	< 50	< 5.0	**18700**	**6.3**	< 5.0	**10400**	**93.1**	**17300**
EW-10S	EW-10S	5/20/2014	< 5.0	< 0.5	< 0.5	0.753	< 5.0	< 0.5	3.35	< 0.5	< 0.5	5.69	< 10	313
EW-10S	EW-10S	11/11/2014	< 5.0	1.17	0.242 J	**2340**	< 5.0	< 0.5	**31400 B**	**12.9**	< 0.5	**12900**	**127**	**14000**
EW-100	EW-100	9/26/2012	< 50	**572**	**207**	212	229	< 0.5	15.1	1.43	0.582	504		
EW-100	EW-100	12/13/2013	< 50	**24**	11.6	12.5	1.53 J	< 0.5	0.314 J	0.69	< 0.5	12.7		
EW-100	EW-100 (31-60')	5/21/2014	< 5.0	**112**	46.3	55.3	5.46	< 0.5	1.33	1.10	< 0.5	47.7		
EW-101	EW-101	9/19/2012	< 50	**77.8**	42.2	19.4	26.1	0.642	2.09	2.56	< 0.5	< 1.5		
EW-101	EW-101	12/13/2013	< 50	**12**	6.48	4.42	< 5.0	0.783	< 0.5	1.19	< 0.5	3.77		
EW-101	EW-101 (35-60')	5/21/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	0.390 J	9.11	0.267 J	< 0.5	< 1.5		
IW-100	IW-100	9/26/2012	12.4 J	**391**	**244**	62	**2320**	< 0.5	157	4.90	0.808	286		
IW-100	IW-100	12/13/2013	< 50	**17.2**	22.7	1.82	1.97 J	0.166 J	< 0.5	2.35	< 0.5	1.14 J		
IW-100	IW-100 (41.5-60')	5/22/2014	27.2	**474**	**198**	84	857	< 0.5	54.3	0.57	0.889	254		
IW-100	IW-100	8/11/2014	< 5.0	**17.1**	20.7	2.06	2.36 J	0.163 J	< 0.5	2.02	< 0.5	1.46 J		
IW-100	IW-100	8/13/2014	< 5.0	**16.6**	22	2.50	4.01 J	0.192 J	< 0.5	2.57	< 0.5	1.91		
IW-100	IW-100	8/15/2014	< 5.0	**21.3**	22.6	3.83	15.3	0.180 J	< 0.5	2.42	< 0.5	6.81		
IW-100	IW-100	8/21/2014	< 5.0	**18.8**	17.4	3.78	15.0	< 0.5	0.711	2.32	< 0.5	5.46		
IW-100	IW-100	8/28/2014	< 5.0	**24.8**	20.9	5.25	24.3	< 0.5	1.08	2.78	< 0.5	7.98		
IW-100	IW-100	9/5/2014	< 5.0	**18.4**	16.1	4.42	13.7	< 0.5	0.994 B	2.11	< 0.5	6.74		
IW-100	IW-100	9/11/2014	< 5.0	**15.1**	18.5	3.77	11	< 0.5	0.635	2.29	< 0.5	5.77		
IW-100	IW-100	9/25/2014	< 5.0	**11.4**	14.3	2.87	6.05	< 0.5	0.194 J	2.00	< 0.5	2.94		
IW-100	IW-100	10/9/2014	< 5.0	**9.17**	14.4	1.77	6.36	< 0.5	< 0.5	1.59	< 0.5	1.76		
IW-100	IW-100	10/15/2014	< 5.0	**37.2**	**77.8**	12.6	16.6	< 0.5	0.822	3.08	0.325 J	12.5		
IW-100	IW-100	11/12/2014	< 5.0	**16.6**	39.4	4.73	4.12 J	< 0.5	0.332	2.87	< 0.5	4.16		
IW-101	IW-101	9/19/2012	< 50	**129**	**198**	32.4	138	< 0.5	23.5	**5.22**	0.821	79.5		
IW-101	IW-101	12/13/2013	< 50	**91.9**	59.7	28.5	75.9	< 0.5	3.06	1.41	0.240 J	35.1		
IW-101	IW-101 (39-45')	5/22/2014	16.1	**17.5**	7.04	5.46	18.9	< 0.5	7.96	0.208 J	< 0.5	9.45		
IW-102	IW-102	9/26/2012	5.59 J	**220**	**206**	10.8	20.8 J	< 0.5	6.92	0.776	0.4 J	155		
IW-102	IW-102	12/12/2013	< 50	**76.9**	51.3	20.1	44.3	< 0.5	0.834	1.1	0.206 J	21.2		
IW-102	IW-102 (39-60')	5/22/2014	< 5.0	**12.4**	21.7	4.23	< 5.0	< 0.5	4.49	0.244 J	< 0.5	4.72		
IW-103	IW-103	9/26/2012	< 50	**99**	**109**	19.8	5.64	< 0.5	3.79	1.28	0.315 J	33.6		
IW-103	IW-103	12/12/2013	< 50	**59.9**	53.5	13.5	< 5.0	0.143 J	< 0.5	0.754	0.217 J	9.24		
IW-103	IW-103 (38.5-60')	5/22/2014	< 5.0	**47.7**	45.3	17.3	< 5.0	< 0.5	0.386 J	0.78	< 0.5	13.8		
IW-103	IW-103	8/11/2014	< 5.0	**55.2**	47.5	16.5	< 5.0	0.163 J	< 0.5	2.02	< 0.5	12.8		
IW-103	IW-103	8/13/2014	< 5.0	**33**	29.4	11.4	< 5.0	0.192 J	< 0.5	2.57	< 0.5	9.8		
IW-103	IW-103	8/15/2014	< 5.0	**35.3**	31.8	13.5	< 5.0	0.180 J	< 0.5	2.42	< 0.5	11.7		
IW-103	IW-103	8/21/2014	< 5.0	**26.7**	21.5	9.08	< 5.0	< 0.5	0.711	2.32	< 0.5	7.28		
IW-103	IW-103	8/28/2014	< 5.0	**34.6**	30.1	11.3	< 5.0	< 0.5	1.08	2.78	< 0.5	9.36		
IW-103	IW-103	9/5/2014	< 5.0	**31.8**	29.2	11.5	< 5.0	< 0.5	0.994 B	2.11	< 0.5	9.81		
IW-103	IW-103	9/11/2014	< 5.0	**24.8**	27.5	8.55	< 5.0	< 0.5	< 0.5	0.564	< 0.5	7.82		
IW-103	IW-103	9/25/2014	< 5.0	**21.1**	21.1	7.85	< 5.0	< 0.5	< 0.5	0.402 J	< 0.5	6.67		
IW-103	IW-103	10/9/2014	< 5.0	**22.7**	26.8	7.73	< 5.0	< 0.5	< 0.5	0.470 J	< 0.5	7.01		
IW-103	IW-103	10/15/2014	< 5.0	**20.3**	25.5	6.00	6.75	0.53	0.295 J	0.530	< 0.5	6.39		
IW-103	IW-103	11/12/2014	< 5.0	**11.9**	19.8	3.02	1.81 J	< 0.5	< 0.5	0.758	< 0.5	3.06		

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
MW-300	MW-300 (20-30)	11/15/2012	< 50	2.86	29	< 0.5	< 10	< 0.5	< 0.5	**8.13**	0.263 J	< 0.5	**94.7**	504
MW-300	MW-300 (20-30)	5/24/2013	< 50	2.74	35.6	< 0.5	< 10	< 0.5	0.534	**6.78**	0.275 J	< 0.5	**65.3**	449 B
MW-300	MW-300 (20-30)	11/13/2013	< 5.0	1.35	10	< 0.5	< 5.0	0.253 J	< 0.5	3.99 B	< 0.5	< 1.5	**63.3**	475
MW-300	MW-300 (20-30)	5/21/2014	< 5.0	**5.44**	10.1	< 0.5	< 5.0	0.407 J	0.329 J	3.27	< 0.5	< 1.5	**28.5**	451
MW-300	MW-300 (20-30)	11/13/2014	< 5.0	0.369 J	1.93	< 0.5	< 5.0	0.176 J	< 0.5	0.790	< 0.5	< 1.5	**22.4**	356
MW-300	MW-300 (40-50)	11/15/2012	< 50	**5.78**	51.2	< 0.5	< 10	0.578	0.731	**10.0**	0.485 J	< 0.5	**15.4**	117
MW-300	MW-300 (40-50)	5/23/2013	< 50	**12.7**	47.4	< 0.5	< 10	1.02	0.523	**12.8**	0.439 J	< 0.5	**11**	112 B
MW-300	MW-300 (40-50)	11/13/2013	< 5.0	2.40	23.3	< 0.5	< 5.0	0.786	1.16	**7.73 B**	< 0.5	< 1.5	**10.8**	176
MW-300	MW-300 (40-50)	5/21/2014	< 5.0	2.08	31.0	< 0.5	< 5.0	0.692	0.735	**7.76**	< 0.5	< 1.5	7.9 J	163
MW-300	MW-300 (40-50)	11/13/2014	< 5.0	2.26	13.0	< 0.5	< 5.0	0.728	0.365 J	**5.12**	< 0.5	< 1.5	9.2 J	95.1
MW-300	MW-300 (80-90)	11/16/2012	< 50	**12.9**	13	< 0.5	< 10	< 0.5	0.890	1.96	< 0.5	< 0.5	**19.5 B**	353
MW-300	MW-300 (80-90)	5/23/2013	4.22 J	1.25	2.72	< 0.5	< 10	< 0.5	0.946	< 0.5	< 0.5	< 0.5	< 10	161 B
MW-300	MW-300 (80-90)	11/13/2013	< 5.0	**18.9**	7.87	< 0.5	< 5.0	< 0.5	4.75	3.56	< 0.5	< 1.5	< 10	368
MW-300	MW-300 (80-90)	5/21/2014	< 5.0	**27.1**	8.54	< 0.5	< 5.0	< 0.5	2.39	4.05	< 0.5	< 1.5	< 10	728
MW-300	MW-300 (80-90)	11/13/2014	< 5.0	**9.06**	6.44	< 0.5	< 5.0	< 0.5	1.19	1.76	< 0.5	< 1.5	< 10	817
MW-300	MW-300 (120-130)	12/4/2012	10.8 J	0.593	2.41	< 0.5	< 10	< 0.5	0.803	< 0.5	< 0.5	< 0.5	4.8 J	110
MW-300	MW-300 (120-130)	5/24/2013	54.2	0.345 J	1.66	< 0.5	< 10	< 0.5	0.311 J	< 0.5	< 0.5	< 0.5	5.7 J	258 B
MW-300	MW-300 (120-130)	11/14/2013	6.27	**5.09**	7.41	< 0.5	< 5.0	< 0.5	3.49	0.588	< 0.5	< 1.5	< 10	58.9
MW-300	MW-300 (120-130)	5/21/2014	< 5.0	4.97	6.12	< 0.5	< 5.0	< 0.5	4.05	0.761	< 0.5	< 1.5	< 10	121
MW-300	MW-300 (120-130)	11/13/2014	3.32 J	4.01	5.51	< 0.5	< 5.0	< 0.5	1.98	0.819	< 0.5	< 1.5	< 10	160
MW-301	MW-301 (35-45)	11/14/2012	< 50	**415**	**192**	157	7.77 J	< 0.5	12	0.348 J	0.806	249	**86.9**	2680
MW-301	MW-301 (35-45)	5/24/2013	< 50	0.785	0.751	0.261 J	3.99 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**96.3**	3070
MW-301	MW-301 (35-45)	11/15/2013	< 5.0	**150**	65.2	49.6	< 5.0	< 0.5	2.14	< 0.5	< 0.5	49.3	**71.4**	2960
MW-301	MW-301 (35-45)	5/22/2014	111	**30.9**	23.4	5.87	< 5.0	< 0.5	0.599	< 0.5	< 0.5	5.08	**118**	1870
MW-301	MW-301 (35-45)	9/12/2014	13.7	**28.1**	12.6	12.2	< 5.0	< 0.5	0.514	< 0.5	< 0.5	10.6		
MW-301	MW-301 (35-45)	10/16/2014	< 5.0	**20.6**	9.45	12.4	< 5.0	< 0.5	0.323 J	< 0.5	< 0.5	10.8		
MW-301	MW-301 (35-45)	11/13/2014	< 5.0	**64.8**	29.5	25.2	< 5.0	< 0.5	0.853	< 0.5	< 0.5	21.9	**58.8**	1350
MW-301	MW-301 (115-125)	11/15/2012	< 50	**5.84**	17.1	< 0.5	< 10	< 0.5	0.524	1.84	< 0.5	< 0.5	6.1 J	673
MW-301	MW-301 (115-125)	5/24/2013	< 50	1.17	5.93	< 0.5	0.970 J	< 0.5	0.383 J	0.919	< 0.5	0.240 J	8.7 J	688 B
MW-301	MW-301 (115-125)	11/14/2013	< 5.0	1.91	13.3	< 0.5	< 5.0	< 0.5	0.234 J	1.94	< 0.5	< 1.5	6.3 J	632 B
MW-301	MW-301 (115-125)	5/22/2014	< 5.0	3.92	10.1	< 0.5	< 5.0	< 0.5	0.659	0.727	< 0.5	< 1.5	< 10	588
MW-301	MW-301 (115-125)	10/16/2014	< 5.0	1.92	9.76	< 0.5	< 5.0	< 0.5	0.952	0.737	< 0.5	< 1.5	< 10	**1530**
MW-301	MW-301 (115-125)	11/13/2014	< 5.0	1.58	7.40	< 0.5	< 5.0	< 0.5	0.254 J	1.70	< 0.5	< 1.5	< 10	444
MW-301	MW-301 (145-155)	12/4/2012	197	2.63	12	< 0.5	6.58 J	< 0.5	1.25	< 0.5	< 0.5	0.670 B	4.7 J	1260
MW-301	MW-301 (145-155)	5/24/2013	20.1 J	0.308 J	0.651	< 0.5	2.49 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	8.7 J	1610 B
MW-301	MW-301 (145-155)	11/15/2013	< 5.0	**24.5**	57.7	< 0.5	< 5.0	< 0.5	0.706	1.29	0.234 J	< 1.5	< 10	1680 B
MW-301	MW-301 (145-155)	5/22/2014	< 5.0	**12.1**	32.4	< 0.5	< 5.0	< 0.5	1.10	0.652	< 0.5	< 1.5	< 10	1530
MW-301	MW-301 (145-155)	10/16/2014	12.1	**9.48**	26.1	< 0.5	< 5.0	< 0.5	1.20	0.344 J	< 0.5	< 1.5		
MW-301	MW-301 (145-155)	11/13/2014	< 5.0	**11.9**	33.2	< 0.5	< 5.0	< 0.5	1.20	0.344 J	< 0.5	< 1.5		
MW-301	MW-301 (240-250)	12/4/2012	225	0.394 J	2.21	< 0.5	61.5	< 0.5	0.627	< 0.5	< 0.5	0.211 JB	**14.2**	1870
MW-301	MW-301 (240-250)	5/1/2013	8.59 J	4.18	3.91	< 0.5	1.38 J	< 0.5	0.494 J	< 0.5	< 0.5	< 0.5	5.2 J	1020 B
MW-301	MW-301 (240-250)	11/15/2013	3.20 J	**12.5**	24.2	< 0.5	< 5.0	< 0.5	2.19	0.309 J	< 0.5	< 1.5	< 10	1120 B
MW-301	MW-301 (240-250)	5/22/2014	7.33	**14.9**	28.9	< 0.5	< 5.0	< 0.5	1.84	0.902	< 0.5	< 1.5	< 10	1170
MW-301	MW-301 (240-250)	11/13/2014	15.3	**8.19**	22.2	< 0.5	< 5.0	< 0.5	1.02	0.444 J	< 0.5	< 1.5	< 10	933
MW-301	MW-301 (290-300)	12/4/2012	290	0.618 J	3.03	< 0.5	195	< 0.5	1.02	< 0.5	< 0.5	0.379 JB	8.2 J	1750
MW-301	MW-301 (290-300)	5/1/2013	17.7	1.48	5.54	< 0.5	3.01 J	< 0.5	0.565	< 0.5	< 0.5	0.193 J	7.2 J	798 B
MW-301	MW-301 (290-300)	11/15/2013	13.2	**7.02**	37	< 0.5	2.03 J	< 0.5	0.806	< 0.5	< 0.5	< 1.5	10	1560 B
MW-301	MW-301 (290-300)	5/22/2014	13.5	**6.05**	41.9	< 0.5	< 5.0	< 0.5	0.664	1.19	0.188 J	< 1.5	**11.9**	1160
MW-301	MW-301 (290-300)	11/13/2014	< 5.0	3.55	24.8	< 0.5	< 5.0	< 0.5	0.629	0.278 J	< 0.5	< 1.5	< 10	926
MW-302	MW-302 (60-70)	11/16/2012	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**22.5 B**	155
MW-302	MW-302 (60-70)	5/24/2013	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**29.1**	217 B
MW-302	MW-302 (60-70)	11/12/2013	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**30.9**	202
MW-302	MW-302 (60-70)	5/21/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**30.6**	109
MW-302	MW-302 (60-70)	11/12/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**29.4**	122
MW-302	MW-302 (100-110)	11/16/2012	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	2.38	< 0.5	< 0.5	< 0.5	**18.9 B**	124
MW-302	MW-302 (100-110)	5/24/2013	< 50	< 0.5	< 0.5	< 0.5	< 10	< 0.5	0.665	< 0.5	< 0.5	0.235 J	**23**	119 B
MW-302	MW-302 (100-110)	11/12/2013	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**27.9**	228
MW-302	MW-302 (100-110)	5/21/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**24.3**	235
MW-302	MW-302 (100-110)	11/12/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**25.7**	147
MW-303	MW-303 (55-65)	11/16/2012	< 50	4.70	0.496 J	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**17.6 B**	28.9
MW-303	MW-303 (55-65)	5/23/2013	< 50	4.02	0.341 J	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**16.2**	31.8 B
MW-303	MW-303 (55-65)	11/14/2013	< 5.0	1.70	< 0.5	< 0.5	< 5.0	< 0.5	0.186 J	< 0.5	< 0.5	1.03 J	**15.6**	39.3
MW-303	MW-303 (55-65)	5/21/2014	< 5.0	3.53	< 0.5	< 0.5	< 5.0	< 0.5	0.235 J	< 0.5	< 0.5	< 1.5	**22.1**	79.7
MW-303	MW-303 (55-65)	11/11/2014	< 5.0	2.05	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**24.4**	41.3
MW-303	MW-303 (115-125)	11/16/2012	< 50	**5.80**	0.552	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**18.1 B**	24.3
MW-303	MW-303 (115-125)	5/23/2013	< 50	**5.04**	0.438 J	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	**21.3**	86.9 B
MW-303	MW-303 (115-125)	11/14/2013	< 5.0	3.13	0.389 J	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	0.818 J	**17.2**	101
MW-303	MW-303 (115-125)	5/21/2014	< 5.0	4.53	0.432 J	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**22.1**	126
MW-303	MW-303 (115-125)	11/11/2014	< 5.0	0.522	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**16.2**	63.9

Table 5 - Summary of Historical Groundwater Analytical Results - Tibbetts Road Site, Barrington, NH

		Chemical Name	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	PCE	Toluene	TCE	VC	Xylenes	Arsenic	Manganese
		ICL:	NA	5	70	700	1825	5	1000	5	NA	10000	10	3650
		Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/l	ug/l
Well	**Sample Name**	**Sample Date**												
MW-304	MW-304 (100)	5/1/2013	60.5	**51.2**	**139**	6.84	14.6	1.24	1.24	0.240 J	0.578	12.3		
MW-304	MW-304 (279-289)	5/1/2013	37.5	**59.1**	**144**	9.83	12.6	< 0.5	1.43	0.312 J	0.591	12.7		
MW-305	MW-305 (100)	5/1/2013	13.3 J	< 0.5	7.48	< 0.5	< 10	0.516	< 0.5	1.26	< 0.5	< 0.5		
MW-305	MW-305 (35-45)	9/13/2013	25.5	< 0.5	1.6	< 0.5	1.91 J	< 0.5	0.405 J	< 0.5	< 0.5	< 1.5		
MW-305	MW-305 (35-45)	11/14/2013	3.10 J	3.14	9.17	< 0.5	< 5.0	0.173 J	2.97	1.07	< 0.5	< 1.5	**17.3**	2180
MW-305	MW-305 (35-45)	5/22/2014	< 5.0	2.27	4.59	< 0.5	< 5.0	< 0.5	1.82	0.208 J	< 0.5	< 1.5	**16**	3050
MW-305	MW-305 (35-45)	10/16/2014	3.06 J	1.36	2.97	< 0.5	< 5.0	< 0.5	1.52	< 0.5	< 0.5	< 1.5		
MW-305	MW-305 (35-45)	11/13/2014	< 5.0	0.592	1.33	< 0.5	< 5.0	< 0.5	1.17	< 0.5	< 0.5	< 1.5	**11.1**	1100
MW-305	MW-305 (62-72)	9/13/2013	< 5.0	0.470 J	2.35	< 0.5	< 5.0	0.632	< 0.5	1.99	< 0.5	< 1.5		
MW-305	MW-305 (62-72)	11/14/2013	< 5.0	2.79	1.94	0.537	< 5.0	< 0.5	0.184 J	0.309 J	< 0.5	< 1.5	**15**	1270
MW-305	MW-305 (62-72)	5/22/2014	< 5.0	4.01	2.81	0.298 J	< 5.0	< 0.5	0.736	0.421 J	< 0.5	< 1.5	**14.8**	1310
MW-305	MW-305 (62-72)	9/12/2014	< 5.0	3.06	1.77	0.354 J	< 5.0	< 0.5	0.842	< 0.5	< 0.5	< 1.5		
MW-305	MW-305 (62-72)	10/16/2014	< 5.0	2.44	1.23	0.306 J	< 5.0	< 0.5	0.818	< 0.5	< 0.5	< 1.5		
MW-305	MW-305 (62-72)	11/13/2014	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	9.6 J	796
MW-305	MW-305 (145-155)	9/13/2013	< 5.0	0.363 J	2.09	< 0.5	< 5.0	0.373 J	< 0.5	1.12	< 0.5	< 1.5		
MW-305	MW-305 (145-155)	11/14/2013	5.07	0.288 J	0.769	< 0.5	< 5.0	< 0.5	0.468 J	< 0.5	< 0.5	< 1.5	< 10	404
MW-305	MW-305 (145-155)	5/22/2014	0.390 J	0.273 J	0.890	< 0.5	< 5.0	< 0.5	1.44	< 0.5	< 0.5	< 1.5	8.9 J	897
MW-305	MW-305 (145-155)	9/12/2014	9.21	0.260 J	0.763	< 0.5	< 5.0	< 0.5	0.886	< 0.5	< 0.5	< 1.5		
MW-305	MW-305 (145-155)	10/16/2014	6.20	0.200 J	0.691	< 0.5	< 5.0	< 0.5	1.04	< 0.5	< 0.5	< 1.5		
MW-305	MW-305 (145-155)	11/13/2014	< 5.0	0.297 J	0.694	< 0.5	< 5.0	< 0.5	1.42	< 0.5	< 0.5	< 1.5	7.6 J	711
MW-305	MW-305 (233-243)	9/13/2013	< 5.0	0.679	1.72	< 0.5	< 5.0	< 0.5	3.86	0.454 J	< 0.5	< 1.5		
MW-305	MW-305 (233-243)	11/14/2013	< 5.0	0.693	4.03	< 0.5	< 5.0	< 0.5	0.817	0.547	< 0.5	< 1.5	**13.3**	908
MW-305	MW-305 (233-243)	5/22/2014	11.7	0.989	4.70	< 0.5	< 5.0	< 0.5	3.44	0.255 J	< 0.5	< 1.5	**13**	1060
MW-305	MW-305 (233-243)	11/13/2014	< 5.0	0.789	6.41	< 0.5	< 5.0	< 0.5	1.64	0.338 J	< 0.5	< 1.5	< 10	998
MW-305	MW-305 (265-275)	9/13/2013	< 5.0	0.772	3.86	< 0.5	< 5.0	< 0.5	1.85	0.641	< 0.5	< 1.5		
MW-305	MW-305 (265-275)	11/14/2013	< 5.0	1.63	10	< 0.5	< 5.0	0.178 J	0.189 J	1.2	< 0.5	< 1.5	< 10	798
MW-305	MW-305 (265-275)	5/22/2014	10.8	1.10	9.39	< 0.5	< 5.0	< 0.5	1.66	0.408 J	< 0.5	< 1.5	< 10	628
MW-305	MW-305 (265-275)	11/13/2014	< 5.0	0.962	11.8	< 0.5	< 5.0	< 0.5	0.589	0.869	< 0.5	< 1.5	< 10	482
MW-305	MW-305 (285-300)	9/13/2013	< 5.0	0.470 J	2.44	< 0.5	< 5.0	< 0.5	2.07	0.269 J	< 0.5	< 1.5		
MW-305	MW-305 (285-300)	11/15/2013	13.4	0.212 J	1.39	< 0.5	< 5.0	< 0.5	1.60	< 0.5	< 0.5	< 1.5	5.5 J	1090 B
MW-305	MW-305 (285-300)	5/22/2014	15.8	0.809	4.63	< 0.5	< 5.0	< 0.5	1.97	< 0.5	< 0.5	< 1.5	9.0 J	**3880**
MW-305	MW-305 (285-300)	11/13/2014	7.71	0.402 J	2.62	< 0.5	< 5.0	< 0.5	1.27	< 0.5	< 0.5	< 1.5	8.1 J	2420
MW-306S	MW-306S (85-100)	9/13/2013	< 5.0	**5.32**	67.3	0.961	1.27 J	< 0.5	1.54	**5.24**	0.280 J	2.7		
MW-306S	MW-306S (85-100)	11/11/2013	< 5.0	1.41	20.7	< 0.5	< 5.0	< 0.5	< 0.5	0.225 J	< 0.5	0.597 J	8.0 J	8.4 J
MW-306S	MW-306S (85-100)	5/22/2014	< 5.0	0.737	23.9	< 0.5	< 5.0	< 0.5	< 0.5	0.391 J	< 0.5	< 1.5	< 10	16.6
MW-306S	MW-306S (85-100)	11/10/2014	< 5.0	1.02	30.8	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	< 10	170
MW-306S	MW-306S (130-140)	9/13/2013	< 5.0	0.410 J	2.99	< 0.5	< 5.0	< 0.5	< 0.5	0.401 J	< 0.5	< 1.5		
MW-306S	MW-306S (130-140)	11/11/2013	< 5.0	< 0.5	0.668	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	0.910 J	**14.3**	7.3 J
MW-306S	MW-306S (130-140)	5/22/2014	< 5.0	< 0.5	5.30	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	**12.2**	20.4
MW-306S	MW-306S (130-140)	11/10/2014	< 5.0	< 0.5	0.451 J	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 1.5	< 10	19.4
MW-306D	MW-306D (185-195)	9/13/2013	< 5.0	**48.8**	**107**	17.2	6.31	< 0.5	22.4	3.99	0.440 J	21.5		
MW-306D	MW-306D (185-195)	11/13/2013	< 5.0	**15.5**	51	4.92	1.90 J	< 0.5	4.26	1.05	< 0.5	2.83	6.4 J	< 15
MW-306D	MW-306D (185-195)	5/22/2014	< 5.0	**41.2**	**242**	1.62	< 5.0	< 0.5	0.358 J	**5.66**	0.879	< 1.5	9.6 J	26.2
MW-306D	MW-306D (185-195)	11/10/2014	< 5.0	4.37	47.4	0.944	< 5.0	< 0.5	0.223 J	1.24	< 0.5	< 1.5	9.7 J	35
MW-306D	MW-306D (280-300)	9/13/2013	< 5.0	**9.70**	**104**	3.93	0.938 J	< 0.5	2.97	**8.44**	0.337 J	4.65		
MW-306D	MW-306D (280-300)	11/13/2013	1.97 J	**8.56**	43.2	< 0.5	< 5.0	< 0.5	1.42	0.672	< 0.5	1.82	< 10	5.1 J
MW-306D	MW-306D (280-300)	5/22/2014	< 5.0	1.89	19.6	< 0.5	< 5.0	< 0.5	< 0.5	1.03	< 0.5	< 1.5	< 10	51.6
MW-306D	MW-306D (280-300)	11/10/2014	< 5.0	2.00	19.1	0.201 J	< 5.0	< 0.5	< 0.5	0.842	< 0.5	< 1.5	< 10	29.4
MW-307S	MW-307S (80-90)	7/8/2014	< 5.0	0.226 J	17.4	< 0.5	< 5.0	< 0.5	< 0.5	**6.87**	< 0.5	< 1.5		
MW-307S	MW-307S (80-90)	11/11/2014	< 5.0	1.51	9.69	< 0.5	< 5.0	0.222 J	0.197 JB	**7.47**	< 0.5	< 1.5	8.0 J	1300
MW-307S	MW-307S (172-187)	7/8/2014	< 5.0	< 0.5	23.6	< 0.5	< 5.0	< 0.5	< 0.5	**7.83**	< 0.5	< 1.5		
MW-307S	MW-307S (172-187)	11/11/2014	< 5.0	< 0.5	4.52	< 0.5	< 5.0	< 0.5	< 0.5	1.28	< 0.5	< 1.5	7.9 J	227
MW-307D	MW-307D (200-210)	7/8/2014	< 5.0	1.37	38.4	< 0.5	< 5.0	< 0.5	9.48	4.95	0.218 J	< 1.5		
MW-307D	MW-307D (200-210)	11/11/2014	< 5.0	0.400 J	25.9	< 0.5	< 5.0	< 0.5	0.981	**5.41**	< 0.5	< 1.5	< 10	47.3

Notes:
ICL - interim groundwater cleanup level
ug/L - micrograms per liter
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 detected in the blank and sample
< - result less than indicated reporting limit (shown in parentheses)
Bold values indicate ICL exceedances
NA - ICL not established for this parameter

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
EW-03S	EW3S	4/20/1998	27	1600	NA	NA
EW-03S	EW-3S	5/19/2005	< 5	1230	1.72	153
EW-03S	EW-3S	11/8/2005	< 5	287	2.50	563
EW-03S	EW-3S	6/28/2006	6.85	NA	1.95	188
EW-03S	EW-3S	11/21/2006	< 100	312	3.97	221
EW-03S	EW-3S	2/28/2007	< 100	743	2.13	156
EW-03S	EW-3S	5/30/2007	< 100	10.9	1.80	-270.5
EW-03S	EW-3S	11/29/2007	45 J	15700	2.06	43.9
EW-03S	EW-3S	5/21/2008	< 100	196	2.35	164
EW-03S	EW-3S	11/17/2008	< 100	50.2	6.53	151
EW-03S	EW-3S	6/25/2009	< 10	1430	0.69	-47.4
EW-03S	EW-3S	11/20/2009	< 10	104	5.63	107
EW-03S	EW-3S	12/3/2010	9.7 J	683	1.38	159.4
EW-03S	EW-3S	5/11/2011	63.8	9620	1.19	26
EW-03S	EW-3S	11/17/2011	< 10	618	3.30	203
EW-03S	EW-3S	5/16/2012	< 10	72.4	7.78	5.6
EW-03S	EW-3S	11/13/2012	< 10	7660	0.38	78.4
EW-03S	EW-3S	5/20/2013	5.1 J	307 B	7.80	235.4
EW-03S	EW-3S	11/11/2013	< 10	186	3.51	178.4
EW-03S	EW-3S	5/19/2014	< 10	69.6	2.39	196
EW-03S	EW-3S	11/10/2014	< 10	3750	0.63	156.1
EW-10S	EW10S	12/19/2002	NA	NA	0.53	NA
EW-10S	EW10S	6/5/2003	43	4600	0.65	7.8
EW-10S	EW-10S	12/19/2003	213	3600	0.21	50.5
EW-10S	EW-10	6/1/2004	171	4210	0.61	NA
EW-10S	EW-10S	11/2/2004	663	16200	0.31	NA
EW-10S	EW-10S	5/17/2005	77.1	5420	0.50	54.6
EW-10S	EW-10	11/8/2005	114	2790	1.08	104
EW-10S	EW-10S	6/29/2006	20.2	1530	0.33	26.8
EW-10S	EW-10S	11/21/2006	< 100	566	NA	19.9
EW-10S	EW-10S	5/29/2007	29.8 J	2750	0.87	-286.7
EW-10S	EW-10S	11/26/2007	270	9460	2.17	-144.9
EW-10S	EW-10S	5/19/2008	27.9 J	1040	3.35	-21.3
EW-10S	EW-10	6/30/2008	150	7730	1.57	-99.7
EW-10S	EW-10S	11/17/2008	104	7930	6.55	-84.3
EW-10S	EW-10S	6/23/2009	65	8690	2.87	-75.2
EW-10S	EW-10S	11/19/2009	92.5	10800	1.04	-78.9
EW-10S	EW-10S	11/30/2010	257	7820	0.56	-104
EW-10S	EW-10S	5/9/2011	9 J	325	0.59	193
EW-10S	EW-10S	11/14/2011	213	12300	0.64	-37.8
EW-10S	EW-10S	5/17/2012	60.8	6740	0.59	-156.2
EW-10S	EW-10S	11/13/2012	81.2	7570	1.98	-8.6
EW-10S	EW-10S	5/20/2013	5.1 J	149 B	3.61	214.6
EW-10S	EW-10S	11/12/2013	93.1	17300	2.07	-20.2
EW-10S	EW-10S	5/19/2014	< 10	313	0.76	128.1
EW-10S	EW-10S	11/11/2014	127	14000	1.00	-57.2

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
MW-300	MW-300 (20-30)	11/15/2012	94.7	504	0.41	-154
MW-300	MW-300 (20-30)	5/22/2013	65.3	449 B	2.46	-142.9
MW-300	MW-300 (20-30)	11/13/2013	63.3	475	0.40	199
MW-300	MW-300 (20-30)	5/21/2014	28.5	451	1.31	154
MW-300	MW-300 (20-30)	11/13/2014	22.4	356	0.93	-242.9
MW-300	MW-300 (40-50)	11/15/2012	15.4	117	0.34	-175.6
MW-300	MW-300 (40-50)	5/23/2013	11	112 B	2.10	-200.7
MW-300	MW-300 (40-50)	11/13/2013	10.8	176	0.74	-45
MW-300	MW-300 (40-50)	5/21/2014	7.9 J	163	0.77	-46.8
MW-300	MW-300 (40-50)	11/13/2014	9.2 J	95.1	0.71	-243.6
MW-300	MW-300 (80-90)	11/16/2012	19.5 B	353	0.72	-129
MW-300	MW-300 (80-90)	5/23/2013	< 10	161 B	9.07	11.8
MW-300	MW-300 (80-90)	11/13/2013	< 10	368	1.10	110.3
MW-300	MW-300 (80-90)	5/21/2014	< 10	728	1.47	52.8
MW-300	MW-300 (80-90)	11/13/2014	< 10	817	1.62	-163.1
MW-300	MW-300 (120-130)	12/4/2012	4.8 J	110	2.14	-17.1
MW-300	MW-300 (120-130)	5/24/2013	5.7 J	258 B	7.62	133.2
MW-300	MW-300 (120-130)	11/14/2013	< 10	58.9	8.77	164
MW-300	MW-300 (120-130)	5/21/2014	< 10	121	4.32	-31.4
MW-300	MW-300 (120-130)	11/13/2014	< 10	160	2.48	-30.2
MW-301	MW-301 (35-45)	11/14/2012	86.9	2680	0.61	-107.7
MW-301	MW-301 (35-45)	5/22/2013	96.3	3700 B	11.89*	-64
MW-301	MW-301 (35-45)	11/14/2013	71.4	2960	8.50	374
MW-301	MW-301 (35-45)	5/22/2014	118	1870	9.37	62.4
MW-301	MW-301 (35-45)	11/13/2014	58.8	1350	4.64	22.3
MW-301	MW-301 (115-125)	11/15/2012	6.1 J	673	0.55	-85.8
MW-301	MW-301 (115-125)	5/22/2013	8.7 J	688 B	13.09*	-107.6
MW-301	MW-301 (115-125)	11/14/2013	6.3 J	632 B	10.45	104
MW-301	MW-301 (115-125)	5/22/2014	< 10	588	10.35	16.6
MW-301	MW-301 (115-125)	11/13/2014	< 10	444	4.61	82.1
MW-301	MW-301 (145-155)	12/4/2012	4.7 J	1260	NA	-21.3
MW-301	MW-301 (145-155)	5/22/2013	8.7 J	1610 B	NA	-29.4
MW-301	MW-301 (145-155)	11/14/2013	< 10	1680 B	5.67	114
MW-301	MW-301 (145-155)	5/22/2014	< 10	1530	8.92	43.4
MW-301	MW-301 (145-155)	11/13/2014	< 10	1530	3.24	85
MW-301	MW-301 (240-250)	12/4/2012	14.2	1870	22.38*	-28.2
MW-301	MW-301 (240-250)	5/1/2013	5.2 J	1020 B	10.28	-44.7
MW-301	MW-301 (240-250)	11/14/2013	< 10	1120 B	3.59	177
MW-301	MW-301 (240-250)	5/22/2014	< 10	1170	10.51	39.5
MW-301	MW-301 (240-250)	11/13/2014	< 10	933	3.67	51.3
MW-301	MW-301 (290-300)	12/4/2012	8.2 J	1750	17.86*	-79.4

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
MW-301	MW-301 (290-300)	5/1/2013	7.2 J	798 B	11.16	32.7
MW-301	MW-301 (290-300)	11/14/2013	10	1560 B	6.48	10
MW-301	MW-301 (290-300)	5/22/2014	11.9	1160	10.33	55.3
MW-301	MW-301 (290-300)	11/13/2014	< 10	926	3.32	22.4
MW-302	MW-302 (60-70)	11/16/2012	22.5 B	155	0.47	-100.1
MW-302	MW-302 (60-70)	5/24/2013	29.1	217 B	7.50	-74.1
MW-302	MW-302 (60-70)	11/12/2013	30.9	202	0.28	-74.3
MW-302	MW-302 (60-70)	5/21/2014	30.6	109	1.66	108.6
MW-302	MW-302 (60-70)	11/12/2014	29.4	122	1.30	-142.3
MW-302	MW-302 (100-110)	11/16/2012	18.9 B	124	0.38	-187.3
MW-302	MW-302 (100-110)	5/24/2013	23	119 B	1.42	-201.2
MW-302	MW-302 (100-110)	11/13/2013	27.9	228	0.40	184
MW-302	MW-302 (100-110)	5/21/2014	24.3	235	0.47	47.9
MW-302	MW-302 (100-110)	11/12/2014	25.7	147	0.90	-154.8
MW-303	MW-303 (55-65)	11/16/2012	17.6 B	28.9	0.54	-223.4
MW-303	MW-303 (55-65)	5/23/2013	16.2	31.8 B	0.54	-314
MW-303	MW-303 (55-65)	11/14/2013	15.6	39.3	0.67	-111.2
MW-303	MW-303 (55-65)	5/21/2014	22.1	79.7	0.45	-148.7
MW-303	MW-303 (55-65)	11/11/2014	24.4	41.3	1.39	-0.3
MW-303	MW-303 (115-125)	11/16/2012	18.1 B	24.3	0.79	-95.2
MW-303	MW-303 (115-125)	5/23/2013	21.3	86.9 B	1.04	-121.7
MW-303	MW-303 (115-125)	11/14/2013	17.2	101	1.02	140.2
MW-303	MW-303 (115-125)	5/21/2014	22.1	126	0.33	-140.2
MW-303	MW-303 (115-125)	11/11/2014	16.2	63.9	2.73	9.8
MW-305	MW-305 (35-45)	11/14/2013	17.3	2180	8.92	159.4
MW-305	MW-305 (35-45)	5/22/2014	16	3050	3.13	64.1
MW-305	MW-305 (35-45)	11/13/2014	11.1	1100	3.92	92.6
MW-305	MW-305 (62-72)	11/13/2013	15	1270	10.60	282.2
MW-305	MW-305 (62-72)	5/22/2014	14.8	1310	2.52	60.7
MW-305	MW-305 (62-72)	11/13/2014	9.6 J	796	3.21	11.2
MW-305	MW-305 (145-155)	11/13/2013	< 10	404	3.90	112.7
MW-305	MW-305 (145-155)	5/22/2014	8.9 J	897	2.97	-21.1
MW-305	MW-305 (145-155)	11/13/2014	7.6 J	711	2.17	39
MW-305	MW-305 (233-243)	11/14/2013	13.3	908	6.67	36.4
MW-305	MW-305 (233-243)	5/22/2014	13	1060	2.24	64.4
MW-305	MW-305 (233-243)	11/13/2014	< 10	998	4.20	-1.2
MW-305	MW-305 (265-275)	11/14/2013	< 10	798	3.20	147.7
MW-305	MW-305 (265-275)	5/22/2014	< 10	628	2.10	170
MW-305	MW-305 (265-275)	11/13/2014	< 10	482	3.54	62.4

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Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
MW-305	MW-305 (285-300)	11/14/2013	5.5 J	1090 B	3.08	51.5
MW-305	MW-305 (285-300)	5/22/2014	9.0 J	3880	2.50	87
MW-305	MW-305 (285-300)	11/13/2014	8.1 J	2420	4.20	30.4
MW-306S	MW-306S (85-100)	11/11/2013	8 J	8.4 J	0.45	-18.2
MW-306S	MW-306S (85-100)	5/22/2014	< 10	16.6	0.43	24.1
MW-306S	MW-306S (85-100)	11/10/2014	< 10	170	2.08	-93.2
MW-306S	MW-306S (130-140)	11/11/2013	14.3	7.3 J	0.49	51.5
MW-306S	MW-306S (130-140)	5/22/2014	12.2	20.4	0.53	90.6
MW-306S	MW-306S (130-140)	11/10/2014	< 10	19.4	1.74	-84.2
MW-306D	MW-306D (185-195)	11/13/2013	6.4 J	< 15	0.79	80.4
MW-306D	MW-306D (185-195)	5/22/2014	9.6 J	21.2	0.41	27.8
MW-306D	MW-306D (185-195)	11/10/2014	9.7 J	35	0.89	-178.4
MW-306D	MW-306D (280-300)	11/13/2013	< 10	5.1 J	1.90	93.8
MW-306D	MW-306D (280-300)	5/22/2014	< 10	51.6	0.88	13.8
MW-306D	MW-306D (280-300)	11/10/2014	< 10	29.4	0.62	-211.6
MW-307S	MW-307S (80-90)	7/8/2014	NA	NA	0.31	-152.7
MW-307S	MW-307S (80-90)	11/11/2014	8.0 J	1300	0.98	-229.7
MW-307S	MW-307S (172-187)	7/8/2014	NA	NA	0.24	-152.1
MW-307S	MW-307S (172-187)	11/11/2014	7.9 J	227	0.90	-219.6
MW-307D	MW-307D (200-210)	7/8/2014	NA	NA	0.08	-202.8
MW-307D	MW-307D (200-210)	11/11/2014	< 10	47.3	3.98	-262.6
035R	35R	4/21/1998	30	870	NA	NA
035R	35R	12/20/2002	NA	NA	0.50	NA
035R	35R	1/16/2003	23	960	NA	NA
035R	35R	3/12/2003	22	960	NA	NA
035R	35R	6/4/2003	21	950	1.11	NA
035R	35R	10/27/2003	21.6	1170	NA	NA
035R	35R	12/17/2003	25.2	1110	0.56	NA
035R	35R	2/10/2004	21.2	1100	NA	NA
035R	35R	3/23/2004	18.6	1200	NA	NA
035R	35R	5/25/2004	19.7	1100	0.73	NA
035R	35R	11/8/2004	19.6	1380	0.51	NA
035R	35R	5/26/2005	20.3	1160	0.32	-98
035R	35R	11/11/2005	19.8	1260	0.63	-9.7
035R	35R	7/5/2006	27	925	0.45	-97.2
035R	35R	8/31/2006	23.8	1060	0.51	-126.2
035R	35R	11/21/2006	< 100	993	0.27	-106.5
035R	35R	2/27/2007	< 100	834	0.51	-69.8
035R	35R	5/30/2007	< 100	823	0.44	-110.6
035R	35R	11/27/2007	44 J	1120	0.40	2
035R	35R	5/22/2008	< 100	926	1.86	-132.4

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
035R	35R	11/21/2008	< 100	1170	1.28	-114.5
035R	35R	6/25/2009	14.2	1250	1.30	44.8
035R	35R	11/24/2009	15.7	1450	1.29	-61.2
035R	35R	11/30/2010	13.8	1820	0.63	-104.6
035R	35R	5/10/2011	16.3	1430	1.04	4.9
035R	35R	11/14/2011	12.9	1700	1.09	-33.3
035R	35R	5/16/2012	14.5	1310	0.79	-62.7
035R	35R	11/12/2012	< 10	304	0.54	-223.4
035R	35R	5/23/2013	< 10	1390	1.03	-31.8
035R	35R	11/12/2013	6.8 J	1840	0.25	73.1
035R	35R	5/21/2014	10.4	1370	0.94	-74.6
035R	35R	9/11/2014	NA	NA	0.23	-7.5
035R	35R	10/15/2014	NA	NA	0.22	2.2
037D	37D	4/3/1996	NA	NA	3.60	NA
037D	37D	4/20/1998	360	3100	NA	NA
037D	37D	6/5/2003	44	2800	2.88	NA
037D	37D	12/19/2003	55.1	3410	0.89	21.5
037D	37D	5/26/2004	52.3	3920	1.23	NA
037D	37D	11/5/2004	53.6	3870	0.83	NA
037D	37D	5/20/2005	51.1	4530	0.59	-14.2
037D	37D	11/14/2005	52	4850	0.87	1.2
037D	37D	6/29/2006	71.5	6640	1.00	3.9
037D	37D	8/30/2006	57.4	5300	0.64	-16.5
037D	37D	11/20/2006	67.7 J	5760	1.00	2.4
037D	37D	2/26/2007	63 J	5770	0.96	-5.2
037D	37D	5/31/2007	51.6 J	6610	1.39	17.4
037D	37D	11/26/2007	50.4 J	5470	0.68	43.5
037D	37D	5/20/2008	61.4 J	6240	0.52	-19.2
037D	37D	11/20/2008	80.6 J	6140	1.27	-41.6
037D	37D	6/24/2009	58.7	6240	2.40	-13.7
037D	37D	11/20/2009	67	7370	1.20	-17.8
037D	37D	12/2/2010	78.9	5390	1.14	-176.7
037D	37D	5/10/2011	50.1	4920	1.02	41.3
037D	37D	11/16/2011	70.5	5030	1.44	18.9
037D	37D	5/16/2012	60.5	5560	0.76	25
037D	37D	11/12/2012	78.2	5370	0.57	25.4
037D	37D	5/21/2013	59.4	5260	0.77	-11.7
037D	37D	11/11/2013	80.4	5720	1.23	3.8
037D	37D	5/19/2014	93.4	4420	1.31	16.3
037D	37D	11/10/2014	247	5880	0.48	7.9
051S	51S	4/10/1996	NA	NA	3.70	NA
051S	51S	8/14/1996	NA	NA	3.00	662
051S	51S	12/18/2002	NA	NA	0.56	NA
051S	51S	6/2/2003	54	5600	0.76	NA
051S	51S	12/19/2003	50.4	4600	3.12	10.6
051S	51S	5/28/2004	75	5370	0.59	NA
051S	51S	11/2/2004	136	6400	0.67	NA

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Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
051S	51S	5/17/2005	125	4510	0.65	-7
051S	51S	11/10/2005	139	5440	1.35	-1.8
051S	51S	6/26/2006	188	NA	0.87	17.3
051S	51S	11/29/2006	150	5690	0.62	-27.3
051S	51S	5/19/2008	133	4250	0.39	-68.4
051S	51S	11/17/2008	208	4420	6.75	-30.4
051S	51S	6/22/2009	134	3430	1.95	-18.5
051S	51S	11/18/2009	172	2860	0.42	-64.2
051S	51S	11/30/2010	21.9	1810	0.96	-54.4
051S	51S	5/9/2011	105	2830 B	0.37	2.4
051S	51S	11/14/2011	165	2800 MHA	0.48	-17.1
051S	51S	5/15/2012	177	2560 MHA	0.60	-65.4
051S	51S	11/13/2012	100	2240	0.74	4.3
051S	51S	5/20/2013	142	1650	3.42	-105.5
051S	51S	11/12/2013	305	12500	0.48	-9.7
051S	51S	5/20/2014	258	10400	0.35	-96
051S	51S	11/11/2014	210	8290	1.08	-91
052S	52S	6/15/1990	NA	NA	NA	NA
052S	52S	10/10/1990	NA	NA	NA	NA
052S	52S	5/31/1991	NA	NA	NA	NA
052S	52S	5/24/1994	NA	NA	NA	NA
052S	52S	6/2/1995	NA	NA	NA	NA
052S	52S	4/3/1996	NA	NA	5.80	NA
052S	52S	8/13/1996	NA	NA	6.30	NA
052S	52S	4/21/1998	2.7	97	NA	NA
052S	52S	5/6/1999	NA	NA	NA	NA
052S	52S	12/21/1999	NA	NA	NA	NA
052S	52S	7/13/2000	NA	NA	NA	NA
052S	52S	12/6/2000	NA	NA	NA	NA
052S	52S	7/26/2001	NA	NA	NA	NA
052S	52S	12/19/2001	NA	NA	NA	NA
052S	52S	7/10/2002	NA	NA	NA	NA
052S	52S	12/18/2002	NA	NA	NA	211
052S	52S	6/4/2003	< 10	50	10.20	292
052S	52S	12/16/2003	< 5	807	3.50	365
052S	52S	2/9/2004	< 5	1960	NA	NA
052S	52S	3/22/2004	< 5	1270	NA	NA
052S	52S	5/20/2005	< 5	650	4.70	226.2
052S	52S	11/27/2006	< 100	1000	7.05	269
052S	52S	11/10/2014	< 10	923	2.95	158.1
057S	57S	4/8/1996	NA	NA	4.60	NA
057S	57S	8/7/1996	NA	NA	1.80	NA
057S	57S	4/20/1998	170	19000	NA	NA
057S	57S	12/17/2002	NA	NA	0.54	3.5
057S	257S	6/6/2003	35	7100	NA	NA
057S	57S	6/6/2003	33	6900	0.75	224
057S	57S	12/19/2003	57.5	8850	3.54	49.8

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
057S	57S	5/27/2004	13.5	5430	0.65	170
057S	57S	11/4/2004	104	10700	0.88	26.1
057S	57S	5/24/2005	36	5440	0.37	90
057S	57S	11/8/2005	51.6	6050	1.93	274
057S	57S	6/27/2006	53.8	4550	0.59	113
057S	57S	11/27/2006	53.6 J	4800	1.13	105
057S	57S	6/1/2007	33 J	5390	0.38	496
057S	57S	11/30/2007	NA	NA	2.20	-174.2
057S	57S	5/23/2008	< 100	2250	0.56	96.2
057S	57S	11/19/2008	78.6 J	6380	1.44	20.7
057S	57S	6/23/2009	45.5	5950	1.59	-137.6
057S	57S	11/19/2009	55	6430	2.28	-7.5
057S	57S	12/2/2010	52.4	2640	0.97	60.2
057S	57S	5/11/2011	5.8 J	196	1.76	124
057S	57S	11/16/2011	19.7	1510	2.12	-88.1
057S	57S	5/17/2012	< 10	1470	0.76	-81.8
057S	57S	11/14/2012	44.4	3770	1.16	105.7
057S	57S	5/20/2013	< 10	1720	2.23	264.1
057S	57S	11/15/2013	9.2 J	1980	0.77	254.5
057S	57S	5/20/2014	< 10	563	1.33	152.9
057S	57S	11/12/2014	63.9	3810	1.07	163.8
061R	61R	11/5/2004	35.6	260	0.08	NA
061R	61R	5/31/2005	51.7	311	NA	NA
061R	61R	5/22/2008	45.8 J	245	0.12	-205.9
061R	61R	6/26/2009	28.6	217	1.48	-92.2
061R	61R	12/2/2010	31	225	0.44	-179.8
061R	61R	5/9/2011	27.5	258	0.28	-149.9
061R	61R	11/14/2011	< 10	61.8	5.55	-6.5
061R	61R	5/15/2012	< 10	209	8.71	76.1
061R	61R (75-90)	11/13/2012	< 10	10.4 J	4.50	-42.1
061R	61R (75-90)	5/20/2013	10.2	14.7 JB	2.34	53.1
061R	61R (75-90)	11/12/2013	13	28.1	0.58	43.4
061R	61R (75-90)	5/19/2014	14.5	78.3	4.07	107.7
061R	61R (75-90)	11/11/2014	12.7	< 15	1.70	-33.9
061R	61R (183-198)	11/13/2012	30.1	329	3.17	42
061R	61R (183-198)	5/21/2013	7.9 J	129 B	1.14	-127.8
061R	61R (183-198)	11/12/2013	12.5	115	0.66	42
061R	61R (183-198)	5/19/2014	12	20.4	0.55	118.6
061R	61R (183-198)	11/11/2014	14.4	146	0.60	-25.4
063R	63R	12/20/2002	NA	NA	0.64	NA
063R	63R	6/6/2003	25	350	0.42	NA
063R	63R	12/22/2003	29.1	336	0.73	NA
063R	63R	6/2/2004	25.9	297	0.43	NA
063R	63R	11/9/2004	25.2	324	0.37	NA
063R	63R	6/3/2005	26	328	NA	NA

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
063R	63R	11/7/2005	15.8	204	0.34	-229.8
063R	63R	6/30/2006	19.4	NA	0.27	-149.9
063R	63R	11/28/2006	< 100	117	1.23	-106.5
063R	63R	6/1/2007	< 100	324	0.65	-340
063R	63R	5/23/2008	39 J	329	2.00	-146.6
063R	63R	6/29/2009	12.2	139 B1	0.73	-215.8
063R	63R	12/3/2010	21.8	314	0.55	-199
063R	63R	5/12/2011	26.6	343	0.87	-156.1
063R	63R	11/18/2011	23	326	1.89	-271.8
063R	63R	5/18/2012	30.1	329	1.12	-68.5
063R	63R (85-100)	11/15/2012	< 10	< 15	0.51	-72.3
063R	63R (85-100)	5/22/2013	< 10	8.5 JB	0.93	-133.2
063R	63R (85-100)	11/14/2013	< 50	< 75	0.19	19.4
063R	63R (85-100)	5/20/2014	< 10	< 15	1.18	190.8
063R	63R (85-100)	11/12/2014	< 10	23	2.27	-186.4
063R	63R (150-165)	11/15/2012	10.8	58.8	0.60	-22.7
063R	63R (150-165)	5/21/2013	28.8	10.7 JB	2.66	-6.8
063R	63R (150-165)	11/14/2013	25.8	25.4	0.61	143.5
063R	63R (150-165)	5/20/2014	34.5	215	0.77	206.8
063R	63R (150-165)	11/12/2014	24.4	18.7	0.99	-210.8
065R	65R	12/20/2002	NA	NA	0.78	NA
065R	65R	6/5/2003	13	770	1.24	NA
065R	65R	12/22/2003	15.5	737	0.76	NA
065R	65R	6/2/2004	13.4	605	0.72	179
065R	65R	11/9/2004	13.2	720	1.13	NA
065R	165R	6/3/2005	41.9	1720	NA	NA
065R	65R	6/3/2005	34.6	1410	NA	NA
065R	65R	11/7/2005	17.1	751	0.29	-194
065R	65R	7/5/2006	12.8	827	0.38	-212.4
065R	65R	11/28/2006	< 100	722	0.55	-207.4
065R	65R	6/1/2007	< 100	850	0.59	-104.4
065R	65R	5/23/2008	< 100	763	2.08	-165.5
065R	65R DUP	5/23/2008	24.7 J	793	NA	NA
065R	65R	11/19/2008	< 100	802	4.42	-135.9
065R	65R	6/24/2009	9 J	632	0.54	-157.1
065R	65R	11/19/2009	11.1	601	3.77	-129.9
065R	65R	12/3/2010	10.6	449	0.85	-129.7
065R	65R	5/11/2011	12.4	477	0.82	-132.6
065R	65R	11/18/2011	10.3	383	1.70	-114.8
065R	65R	5/17/2012	18.2	431	0.72	-94.7
065R	65R (100-115)	11/12/2012	6.4	10.1 JB	0.54	-146.8
065R	65R (100-115)	5/21/2013	9.3 J	3.2 JB	3.45	-168.5
065R	65R (100-115)	11/13/2013	12.7	< 15	0.50	96
065R	65R (100-115)	5/20/2014	12.7	9.0 J	0.26	1.9
065R	65R (100-115)	11/12/2014	13.2	< 15	0.43	-92.1

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
065R	65R (180-195)	11/12/2012	9	0.667 B	0.37	-135.7
065R	65R (180-195)	5/21/2013	8.7 J	71.4 B	1.15	-206.7
065R	65R (180-195)	11/13/2013	10.9	629	0.85	-72.3
065R	65R (180-195)	5/20/2014	< 10	2760	0.50	-133.2
065R	65R (180-195)	11/12/2014	< 10	2020	0.89	-80.9
067R	67R	12/17/2002	NA	NA	1.55	NA
067R	67R	6/9/2003	< 10	300	4.01	NA
067R	67R	12/26/2003	6.94	182	3.84	NA
067R	67R	5/27/2004	< 5	153	0.57	180
067R	67R	11/5/2004	< 5	165	0.07	NA
067R	67R	6/2/2005	14.3	43.7	NA	NA
067R	67R	11/9/2005	10.5	95	0.42	-203.7
067R	67R	6/28/2006	6.28	NA	0.18	-182.8
067R	67R	11/27/2006	< 100	76.6	0.44	-230.1
067R	67R	5/31/2007	< 100	119	0.57	-98.1
067R	67R	5/23/2008	< 100	115	0.13	-155.1
067R	67R	6/29/2009	< 10	92.5 B1	1.45	-186.9
067R	67R	12/2/2010	< 10	70.6	1.52	-88.7
067R	67R	5/11/2011	4 J	89	0.98	-112
067R	67R	11/15/2011	< 10	93.2	0.59	-19.5
067R	67R	5/18/2012	< 10	84.6	0.52	-229.8
067R	67R (83-98)	11/12/2012	< 10	5.2 JB	4.43	-109.1
067R	67R (83-98)	5/21/2013	5.5 J	3.0 JB	1.58	-154.9
067R	67R (83-98)	11/11/2013	< 10	< 15	0.68	-140.9
067R	67R (83-98)	5/19/2014	8.6 J	< 15	0.38	-183.3
067R	67R (83-98)	11/12/2014	8.1 J	< 15	1.05	87.8
067R	67R (149-164)	11/12/2012	< 10	3260 B	0.65	-12.1
067R	67R (149-164)	5/21/2013	5.4 J	2040 B	1.38	-206.8
067R	67R (149-164)	11/11/2013	11.2	4320	1.53	-122.7
067R	67R (149-164)	5/19/2014	< 10	925	0.45	-270.7
067R	67R (149-164)	11/12/2014	< 10	627	0.64	-197.3
069R	69-R	6/9/1997	22	4900	NA	NA
069R	69R	7/10/1997	110	4600	NA	NA
069R	69R	8/25/1997	160	5000	NA	NA
069R	69R	4/21/1998	120	4600	NA	NA
069R	69R	12/18/2002	NA	NA	1.61	NA
069R	69R	1/16/2003	140	4800	NA	NA
069R	69R	2/17/2003	140	5800	NA	NA
069R	69R	3/12/2003	150	4900	NA	NA
069R	69R	6/4/2003	130	4900	0.46	NA
069R	69R	10/27/2003	65.8	1690	NA	NA
069R	69R	12/18/2003	98.4	2290	1.48	NA
069R	69R	2/10/2004	101	2470	NA	NA
069R	69R	3/23/2004	109	2920	NA	NA

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Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
069R	69R	5/26/2004	48.8	1370	1.45	NA
069R	69R	11/3/2004	84.1	1640	0.20	NA
069R	69R	5/20/2005	89	1660	0.39	-154.5
069R	69R	11/9/2005	95.7	2340	0.44	-209.3
069R	69R	6/29/2006	137	3420	0.38	-163
069R	69R	8/30/2006	117	3170	0.30	-127.3
069R	69R	11/20/2006	129	3760	0.60	-138.6
069R	69R	2/26/2007	107	3760	0.35	-144.7
069R	69R	5/31/2007	91.6 J	4050	0.49	-63.7
069R	69R	11/28/2007	75.6 J	3750	0.56	-23.5
069R	69R	5/20/2008	92.8 J	5120	1.09	-118.8
069R	69R	11/20/2008	93.9 J	4190	1.03	-149.7
069R	69R	6/23/2009	102	4460	1.46	-151
069R	69R	11/20/2009	98.3	3950	0.45	-141.3
069R	69R	12/2/2010	108	3410	0.53	174
069R	69R	5/10/2011	83.5	3320	0.30	-93
069R	69R	11/16/2011	89.6	2770	1.04	-129.6
069R	69R	5/16/2012	47.2	1570	0.56	-111.8
069R	69R	11/13/2012	68.3	1990	0.52	-133.3
069R	69R	5/21/2013	70.1	2800 B	0.73	-134.3
069R	69R	11/11/2013	73.6	3060	1.34	-137
069R	69R	5/19/2014	67.1	1880	1.16	-126.5
069R	69R	10/16/2014	NA	NA	0.95	-85.7
069R	69R	11/10/2014	53.6	1660	1.97	122.4
070S	70S	5/31/1991	NA	NA	NA	NA
070S	70S	2/8/1994	NA	NA	NA	NA
070S	70S	5/31/1995	NA	NA	NA	NA
070S	70S	4/4/1996	NA	NA	NA	NA
070S	70SL	4/15/1998	< 2	220	NA	NA
070S	70S (L)	10/27/1998	NA	NA	NA	NA
070S	70S	5/4/1999	NA	NA	NA	NA
070S	70S	12/21/1999	NA	NA	NA	NA
070S	70S	7/13/2000	NA	NA	NA	NA
070S	70S	12/5/2000	NA	NA	NA	NA
070S	70S	7/26/2001	NA	NA	NA	NA
070S	70S	12/18/2001	NA	NA	NA	NA
070S	70S	7/8/2002	NA	NA	NA	NA
070S	70S	5/19/2005	5.24	1820	3.85	150.4
070S	70S	11/9/2005	< 5	1850	6.20	138
070S	70S	6/27/2006	20.5	5800	3.20	753.1
070S	70S	5/29/2007	< 100	1950	4.16	-156
070S	70S	11/30/2007	< 100 B	2690	3.25	58.4
070S	70-S	5/19/2008	< 100	343	5.94	307
070S	70-S	11/13/2014	< 10	8360	3.59	119.8
073S	73S	5/30/1991	NA	NA	NA	NA
073S	73S	2/14/1992	NA	NA	NA	NA
073S	73S	2/8/1994	NA	NA	NA	NA

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Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
073S	73S	4/20/1998	< 2	81	NA	NA
073S	73S	5/4/1999	NA	NA	NA	NA
073S	73S	12/20/1999	NA	NA	NA	NA
073S	73S	7/13/2000	NA	NA	NA	NA
073S	73S	12/5/2000	NA	NA	NA	NA
073S	73S	7/24/2001	NA	NA	NA	NA
073S	73S	12/17/2001	NA	NA	NA	NA
073S	73S	7/8/2002	NA	NA	NA	NA
073S	73S	12/17/2002	NA	NA	4.79	236
073S	73S	6/9/2003	< 10	20	17.3*	150
073S	73S	12/22/2003	< 5	25.4	7.71	188
073S	73S	6/1/2004	< 5	13.5	6.82	142
073S	73S	11/3/2004	< 5	13.4	5.71	123
073S	73S	5/26/2005	< 5	19.8	5.59	223.3
073S	735	11/8/2005	NA	NA	2.80	397
073S	73S	11/8/2005	< 5	86.8	NA	NA
073S	73S	6/26/2006	2.87 J	NA	NA	NA
073S	73S	11/28/2006	< 100	12.4	4.15	238
073S	73S	6/1/2007	< 100	54.6	5.15	129
073S	73S	5/22/2008	< 100	18.2	4.71	197
073S	73S	6/23/2009	< 10	59.1	3.62	-100.8
073S	73S	11/19/2009	< 10	16.5	4.28	113
073S	73S	11/30/2010	< 10	100	2.73	148
073S	73S	5/9/2011	< 10	33.8	1.96	201
073S	73s	11/15/2011	< 10	37.5	3.57	16.6
073S	73S	5/17/2012	< 10	7.7 J	5.22	-48.8
073S	73S	11/13/2012	6.6 J	484	3.97	69.6
073S	73S	5/20/2013	< 10	55.2 B	5.20	78.7
073S	73S	11/12/2013	< 10	130	3.83	183
073S	73S	5/20/2014	< 10	65.1	2.37	64.4
073S	73S	11/12/2014	< 10	90.7	2.35	22.9
075D	75D	12/17/2002	NA	NA	1.15	18.4
075D	75D	6/3/2003	12	1600	0.49	NA
075D	75D	12/18/2003	7.46	1330	1.49	43.2
075D	75D	5/25/2004	20.9	1380	1.59	15.6
075D	75D	11/4/2004	15.2	1420	1.20	NA
075D	75D	5/26/2005	10.5	1610	0.32	55.1
075D	75D	11/9/2005	15.1	1420	1.49	19.8
075D	75D	6/27/2006	12.7	2130	0.90	460
075D	75D	11/21/2006	< 100	1940	0.69	22.9
075D	75D	5/30/2007	< 100	1790	0.96	-285.9
075D	75D	11/29/2007	< 100	1830	0.62	17.3
075D	75D	5/22/2008	< 100	1460	2.35	34.1
075D	75D	11/17/2008	< 100	1930	2.15	39.6
075D	75D	6/22/2009	4.5 J	1720	2.27	43.3
075D	75D	11/19/2009	8.3 J	1650	1.76	-20.4
075D	75D	12/1/2010	11.3	1840	1.05	35.8
075D	75D	5/9/2011	4.4 J	2220 B	1.50	84.2

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Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
075D	75D	11/17/2011	8.5 J	1840	1.62	49.9
075D	75D	5/16/2012	3.5 J	1860	2.01	-83.3
075D	75D	11/12/2012	6.4	1500 B	0.75	45.3
075D	75D	5/20/2013	5.0 J	1060 B	0.64	56.3
075D	75D	11/11/2013	11.2	2790	0.52	32.8
075D	75D	5/19/2014	< 10	1280	0.34	139.5
075D	75D	11/13/2014	< 10	2250	0.84	-31
103R	103R	1/16/2003	41	1700	NA	NA
103R	103R	3/13/2003	32	1600	NA	NA
103R	103R	6/3/2003	21	1600	0.66	NA
103R	103R	10/27/2003	17	1940	NA	NA
103R	103R	12/18/2003	19.5	1900	0.53	NA
103R	103R	2/10/2004	30.8	1610	NA	NA
103R	103R	3/24/2004	18.8	1520	NA	NA
103R	103R	5/25/2004	10.3	1360	0.91	NA
103R	103R	11/4/2004	27.6	1760	1.18	NA
103R	103R	5/23/2005	12.5	413	NA	NA
103R	103R	11/9/2005	22.3	1470	1.14	-109.5
103R	103R	6/27/2006	13.5	711	0.96	230
103R	103R	8/29/2006	18.9	1230	0.45	-209.7
103R	103R	11/21/2006	< 100	1420	0.67	-216.8
103R	103R	2/28/2007	< 100	3330	0.58	540
103R	103R	6/1/2007	< 100	604	0.76	-312.2
103R	103-R	11/29/2007	22.1 J	1060	0.61	57
103R	103R	5/23/2008	< 100	627	0.50	-103.6
103R	103R	11/18/2008	< 100 B	916	1.82	-74.7
103R	103R	6/24/2009	8.1 J	681	1.43	-77.5
103R	103r	11/24/2009	12.3	803	2.31	-53.3
103R	103R	12/1/2010	18.4	1010	1.36	1.7
103R	103R	5/9/2011	15	708 B	0.78	137
103R	103R	11/17/2011	17.3	1170	1.14	-235.7
103R	103R	5/16/2012	12.9	1320	2.87	-154.2
103R	103R	11/12/2012	9.7 J	1470	0.64	-100.7
103R	103R	5/20/2013	24.7	1750 B	0.31	-160.1
103R	103R	11/11/2013	19.6	1590	0.24	-200.8
103R	103R	5/19/2014	16	1080	0.23	-161.9
103R	103R	10/16/2014	NA	NA	1.89	-125.4
103R	103R	11/10/2014	14.6	1430	0.30	-169
106R	106R	12/20/2002	NA	NA	0.49	NA
106R	106R	6/3/2003	< 10	100	0.64	NA
106R	106R	12/17/2003	9.62	54.7	0.53	NA
106R	106R	6/3/2004	6.94	91.8	0.52	NA
106R	106R	11/9/2004	< 5	54.9	0.54	NA
106R	106R	5/27/2005	< 5	82	0.54	-84.4
106R	106R	11/10/2005	NA	56.7	1.32	-56.2
106R	106R	7/6/2006	5.52	73	0.17	-80.4
106R	106R	11/27/2006	< 100	75.5	0.45	-107.2

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Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
106R	106R	5/29/2007	< 100	65.9	0.27	-101.8
106R	106R	11/30/2007	< 100	43.3	0.65	11.2
106R	106R	5/23/2008	< 100	62.6	0.35	-135.8
106R	106R	11/19/2008	< 100	43.2	1.13	-73.2
106R	106R	6/25/2009	4.5 J	28.3	2.57	-31.3
106R	106r	11/23/2009	3.9 J	17.6	2.25	2.6
106R	106R	12/3/2010	6 J	36.1	1.22	-1.2
106R	106R	5/12/2011	6.3 J	113	1.27	-11.4
106R	106R	11/18/2011	7.6 J	18.2	1.05	6.3
106R	106R	5/15/2012	5.8 J	140	1.65	-1.9
106R	106R	11/14/2012	4.1 J	43.6	0.76	-41.7
106R	106R	5/23/2013	< 10	79.9 B	3.01	-23.1
106R	106R	11/13/2013	< 10	33	0.88	60.4
106R	106R	5/20/2014	9.3 J	77.6	0.25	-77
106R	106R	11/11/2014	< 10	26.8	0.34	-94.4
108R	108R	6/4/2003	25	76	1.05	318
108R	108R	10/28/2003	28	79.2	NA	NA
108R	108R	12/16/2003	29.9	103	0.40	NA
108R	108R	2/10/2004	30.7	85.7	NA	NA
108R	108R	3/24/2004	24.6	80.5	NA	NA
108R	108R	6/1/2005	27	79.4	0.63	253
108R	108R	7/5/2006	NA	80.8	0.94	72.1
108R	108R	11/28/2006	< 100	107	0.67	-54.1
108R	108R	5/31/2007	< 100	71.3	0.70	-64.5
108R	108R	11/29/2007	29 J	102	1.67	179
108R	108R	5/23/2013	21.9	295 B	7.39	136.6
108R	108R	11/13/2013	24.5	254	1.72	115.1
108R	108R	5/20/2014	27.6	316	0.65	76.1
108R	108R	10/16/2014	NA	NA	1.50	120.6
108R	108R	11/13/2014	28.8	150	0.96	-225.2
169R	169R	1/16/2003	63	4500	NA	NA
169R	169R	2/17/2003	77	5100	NA	NA
169R	169R	3/12/2003	72	4700	NA	NA
169R	169R	6/4/2003	80	5300	0.62	NA
169R	169R	10/27/2003	90	3980	NA	NA
169R	169R	12/16/2003	28.8	13600	0.21	558
169R	169R	2/9/2004	11.3	9820	NA	NA
169R	169R	3/22/2004	7.95	2960	NA	NA
169R	169R	5/24/2004	25.9	5090	1.34	187
169R	169R	11/3/2004	33.7	4370	0.23	NA
169R	169 R	5/20/2005	53	4620	0.55	-136.4
169R	169R	11/7/2005	56.9	4450	0.35	-138.4
169R	169R	6/28/2006	10.4	NA	0.45	269
169R	169R	8/29/2006	27.9	6090	0.30	290
169R	169R	11/20/2006	< 100	2900	2.55	-142
169R	169R	2/26/2007	26.5 J	5250	0.33	9.8
169R	169R	5/29/2007	20.8 J	4320	0.30	222

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
169R	169R	11/27/2007	42.9 J	2070	1.81	-281.1
169R	169R	5/20/2008	31.8 J	2620	0.38	-179.3
169R	169R	11/18/2008	< 100	2690	1.40	-112.7
169R	169R	6/22/2009	51.7	3020	1.12	-116.5
169R	169R	11/18/2009	51.8	2520	0.65	-151.5
169R	169R	11/30/2010	61	2320	0.55	-150.6
169R	169R	5/9/2011	54.3	2180 B	1.38	-102.4
169R	169R	11/17/2011	41.3	2610	0.95	-125.6
169R	169R	5/15/2012	58.4	2370	1.07	-145.6
169R	169R	11/13/2012	50.1	14900	0.26	-141.6
169R	169R	5/22/2013	87	42000	0.62	-105.9
169R	169R	11/11/2013	46.7	3350	0.37	-133.1
169R	169R	5/19/2014	47.7	3910	0.97	-123
169R	169R	10/15/2014	NA	NA	3.35	-68.8
169R	169R	11/10/2014	53.4	2570	0.81	-12.7
201R	201R	10/30/2003	< 3.8	6.94	NA	NA
201R	201R	12/16/2003	5.26	< 5	5.29	NA
201R	201R	2/9/2004	6.61	< 5	NA	NA
201R	201R	3/22/2004	8.28	< 5	NA	NA
201R	201R	5/25/2004	6.15	< 5	0.98	53.4
201R	201R	11/8/2004	5.44	20.2	0.95	219
201R	201R	6/1/2005	9.31	1.44 J	1.03	276
201R	201R	7/5/2005	NA	NA	0.41	-299.1
201R	201R	11/10/2005	4.36 J	45.3	0.28	-92.3
201R	201R	7/5/2006	9.45	193	0.41	-299.1
201R	201R	8/31/2006	8.8	220	0.61	-318.3
201R	201R	11/21/2006	< 100	82.6	0.97	-140.6
201R	201R	2/27/2007	< 100	162	0.83	-163.4
201R	201R	5/30/2007	< 100	265	1.23	150
201R	201R	11/27/2007	< 100	313	1.00	-32.5
201R	201R	5/22/2008	< 100	430	2.55	-159.6
201R	201R	11/21/2008	< 100	534	1.22	-206.6
201R	201R	6/23/2009	< 10	615	1.96	-163.6
201R	201R	11/19/2009	4.3 J	634	1.82	-167.2
201R	201R	11/30/2010	4.9 J	753	1.51	-159.5
201R	201R	5/10/2011	4.2 J	764	1.07	-41.8
201R	201R	11/14/2011	11.3	715	1.56	-141.1
201R	201R	5/16/2012	< 10	725	1.33	-47.3
201R	201R	11/14/2012	9.2 J	627	0.70	-125.1
201R	201R	5/23/2013	< 10	409 B	4.28	133.9
201R	201R	11/13/2013	16.7	1080	0.32	-18.2
201R	201R	5/20/2014	< 10	880	0.93	-82.5
201R	201R	9/11/2014	NA	NA	0.27	-101.1
201R	201R	10/16/2014	NA	NA	0.38	-126
201R	201R	11/11/2014	< 10	680	0.48	-142.8
202R	202R	10/30/2003	3.82	13.5	NA	NA
202R	202R	12/17/2003	7.74	14.9	4.54	22.6

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
202R	202R	2/10/2004	12.6	96.4	NA	NA
202R	202R	3/23/2004	11.6	86.4	NA	NA
202R	202R	5/24/2004	14.8	119	1.27	39.1
202R	202R	11/5/2004	16.7	96.6	0.75	NA
202R	202R	5/23/2005	29.9	79.8	0.56	18.5
202R	202 R	11/8/2005	NA	NA	0.40	228
202R	202R	11/8/2005	25.9	136	NA	NA
202R	202R	6/29/2006	42.6	2860	0.50	473
202R	202R	8/29/2006	24.8	1150	0.32	431
202R	202R	11/20/2006	< 100	256	0.32	-85.2
202R	202R	2/27/2007	25.2 J	461	0.46	29.4
202R	202-R	5/29/2007	< 100	694	0.23	-36.1
202R	202R	11/30/2007	< 100 B	146	1.59	-209
202R	202R	5/19/2008	42 J	190	0.35	25.8
202R	202R	11/20/2008	< 100	1840	1.58	-164
202R	202R	6/25/2009	13.8	144	0.66	-62.7
202R	202R	11/20/2009	15.9	853	0.64	-43.7
202R	202R	11/30/2010	20.8	863	1.12	-63
202R	202R	5/10/2011	18.5	517	1.46	26.7
202R	202R	11/15/2011	14.9	1230	1.15	66.9
202R	202R	5/15/2012	7.6 J	166	2.10	-124.4
202R	202R	11/12/2012	8.4 J	454 B	0.74	47.4
202R	202R	5/21/2013	13.8	235 B	3.53	168.8
202R	202R	11/11/2013	17.8	1410	4.99	90.3
202R	202R	5/19/2014	19.6	2090	1.17	-79.8
202R	202R	9/11/2014	NA	NA	1.16	-125.9
202R	202R	10/15/2014	NA	NA	0.54	-62.1
202R	202R	11/10/2014	9.6 J	1980	0.45	-115.8
203R	203R(55')	10/28/2003	45	2070	NA	NA
203R	203R(50')	10/28/2003	84.4	6260	NA	NA
203R	203R(45')	10/28/2003	69.2	4940	NA	NA
203R	203R(50') DUP	10/28/2003	84.6	6400	NA	NA
203R	203R	5/24/2005	< 5	139000	4.08	590
203R	203R	11/7/2005	< 5	126000	4.63	599
203R	203R	6/28/2006	3.98 J	NA	4.01	530
203R	203R	8/30/2006	2.54 J	119000	1.59	611
203R	203R	11/21/2006	< 100	47500	1.07	593
203R	203R	2/27/2007	72.2 J	490000	5.56	664
203R	203R	5/30/2007	49.4 J	382000	6.51	641
203R	203R	11/28/2007	50.8 J	356000	7.56	396
203R	203R	5/19/2008	< 200	293000	5.87	616
203R	203R	11/21/2008	< 100	101000	3.63	563
203R	203R	6/25/2009	< 10	37200	5.46	552
203R	203R	11/24/2009	< 10	24900	7.00	543
203R	203R	12/3/2010	< 10	2160	3.07	455
203R	203R	5/11/2011	< 10	4300	0.55	86.4
203R	203R	11/15/2011	7.6 J	6660	0.85	10.6
203R	203R	5/15/2012	< 10	8230	4.30	-117

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	Sample Name	Parameter Unit Sample Date	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
203R	203R	11/12/2012	14.7	9310	0.61	35.2
203R	203R	5/22/2013	9.8 J	10900	0.65	19.5
203R	203R	11/12/2013	33.8	7820	0.29	-59.5
203R	203R	5/20/2014	22.5	6350	0.83	84.7
203R	203R	9/11/2014	NA	NA	0.79	-84.2
203R	203R	10/15/2014	NA	NA	7.06	-0.1
203R	203R	11/10/2014	40.7	7210	0.63	-110
204R	204R	12/17/2003	8.13	< 5	2.31	120
204R	204R	2/9/2004	6.74	5.35	NA	NA
204R	204R	3/22/2004	8.97	19	NA	NA
204R	204R	5/25/2004	10.3	9.73	2.63	88.1
204R	204R	11/5/2004	13.7	2.84 J	2.19	NA
204R	204R	5/23/2005	19.3	21.5	0.61	36.3
204R	204R	11/10/2005	13.1	6.76	1.28	-77.8
204R	204R	6/29/2006	14.1	5.83	2.71	540
204R	204R	8/31/2006	NA	NA	1.34	-5.6
204R	204R	11/20/2006	< 100	4.68 J	0.79	-0.2
204R	204R	5/29/2007	< 100	4.33 J	4.43	26.3
204R	204R	5/19/2008	< 100	13.6	3.67	56.3
204R	204R	6/25/2009	6.5 J	4.6 J	3.92	78.5
204R	204R	12/2/2010	11.7	4.4 J	1.72	-177.4
204R	204R	5/10/2011	8.9 J	12.5 J	1.78	4.4
204R	204R	11/14/2011	10.4	< 15	2.16	94.5
204R	204R	5/17/2012	10.9	10.3 J	1.71	68.9
204R	204R	11/12/2012	10.3	7 J	2.41	96.7
204R	204R	5/21/2013	13	9.1 JB	6.54	150.6
204R	204R	11/11/2013	13.7	40.3	0.94	5
204R	204R	5/19/2014	10.8	64.7	1.53	-120.7
204R	204R	9/11/2014	NA	NA	0.26	-68.9
204R	204R	10/15/2014	NA	NA	0.48	-111.7
204R	204R	11/12/2014	8.4 J	111	0.60	-140.1
205R	205R	4/14/2006	28.4	761	0.00	-177.9
205R	205R	7/5/2006	29.8	893	0.98	-154
205R	205R	8/31/2006	30.4	941	0.43	-167.3
205R	305R	8/31/2006	32.2	948	NA	NA
205R	205R	11/20/2006	< 100	937	0.59	-181.1
205R	205R	2/27/2007	30.2 J	925	0.42	-167.7
205R	305R	2/27/2007	19.2 J	937	NA	NA
205R	205R	5/31/2007	< 100	920	0.54	-170.5
205R	205R	11/29/2007	66.3 J	928	1.51	-47.7
205R	205R	5/21/2008	36.5 J	892	0.47	-288.4
205R	205R	11/19/2008	< 100	916	0.81	-226.4
205R	205R	6/24/2009	23.4	941	0.54	-195.6
205R	205R	11/20/2009	27.9	872	3.59	-151.6
205R	205R	12/1/2010	13.2	3520	NA	20.4
205R	205R	5/11/2011	25.2	2560	0.47	42.6
205R	205R	11/16/2011	31.5	1050	0.69	-168.3

Table 6 - Summary of Historical Monitored Natural Attenuation Analytical Results and Field Parameters through November 2014, Tibbetts Road Site, Barrington, NH

Location ID	**Sample Name**	**Parameter** **Unit** **Sample Date**	Arsenic ug/L	Manganese ug/L	DO mg/L	ORP mV
205R	205R	5/15/2012	27.3	1100	1.74	-174.9
205R	205R	11/14/2012	25.5	933	1.08	-145.8
205R	205R	5/23/2013	32.9	923	0.59	-146.8
205R	205R	11/12/2013	33	870	0.13	-72.7
205R	205R	5/22/2014	32.1	871	4.84	-126
205R	205R	10/15/2014	NA	NA	0.98	-129.3
205R	205R	11/11/2014	33.9	664	0.72	-247.2

< Below reporting limit.
NA Data not available or not sampled.
B **Bold** values indicate exceedances of ICLs
J Estimated concentration.
B Constituent was detected in the associated method blank.
T Total (unfiltered) concentration
DO Dissolved Oxygen
Dup Duplicate Sample
* This value appears to be an erroneous reading due to greater than saturation value.

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-01-IN 1/15/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	0.916 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	< 0.5
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	3.33
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-01-IN 1/15/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	2.54
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	0.328 J
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-02 (RAW) 1/16/2014	CC-02 (RAW) 4/17/2014	CC-02 (RAW) 8/11/2014	CC-02 (RAW) 10/21/2014	CC-02 (POST SOFTENER) 1/16/2014	CC-02 (POST SOFTENER) 4/17/2014	CC-02 (POST SOFTENER) 8/11/2014	CC-02 (POST SOFTENER) 10/21/2014	CC-02 (GAC 1) 1/16/2014	CC-02 (GAC 1) 4/17/2014	CC-02 (GAC 1) 8/11/2014	CC-02 (GAC 1) 10/21/2014	CC-02 (GAC 2) 1/16/2014	CC-02 (GAC 2) 4/17/2014	CC-02 (GAC 2) 8/11/2014	CC-02 (GAC 2) 10/21/2014
VOCs																		
1,1,1,2-Tetrachloroethane	70	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethane	81	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethene	7	ug/L	< 4.0	< 2.0	< 2.0	0.187 J	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloropropene	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 4.0	< 2.0	< 2.0	< 2.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 0.5	< 0.5	< 2.0
1,2-Dibromoethane	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	5	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane	5	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichloropropane	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2,2-Dichloropropane	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 2.5	< 2.5	< 2.5	< 0.5	< 2.5	< 2.5	< 2.5	< 0.5
2-Butanone (MEK)	4000	ug/L	< 20	< 10	< 10	< 5.0	--	--	--	--	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0
2-Chlorotoluene	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Hexanone	--	ug/L	< 20	< 10	< 10	< 10	--	--	--	--	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 2.5	< 10
4-Chlorotoluene	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Isopropyltoluene	260	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 20	< 1.0	< 1.0	< 10	--	--	--	--	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 2.5	< 10
Acetone	6000	ug/L	8.94 J	3.38 J	3.70 J	< 50	--	--	--	--	0.904 J	< 2.5	0.941 J	< 50	0.942 J	< 2.5	0.680 J	< 50
Acrylonitrile	5	ug/L	< 80	< 40	< 40	< 5.0	--	--	--	--	< 10	< 10	< 10	< 5.0	< 10	< 10	< 10	< 5.0
Allyl chloride	7.4	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	5	ug/L	< 4.0	< 2.0	< 2.0	0.278 J	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromobenzene	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	4	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	10	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	70	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	5	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	100	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorodibromomethane	60	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	70	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	30	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	0.0654 J	0.112 J	< 0.5	< 0.5	0.141 J	< 0.5	< 0.5
cis-1,2-Dichloroethene	70	ug/L	69.9	54.2	51.9	44.7	--	--	--	--	< 0.5	< 0.5	< 0.5	0.155 J	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorobromomethane	0.6	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethyl ether	1400	ug/L	< 4.0	< 2.0	< 2.0	< 10	--	--	--	--	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 10
Ethylbenzene	700	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Iodomethane	--	ug/L	< 4.0	< 2.0	< 2.0	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0
Isopropylbenzene	800	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether	13	ug/L	< 4.0	< 2.0	< 2.0	0.146 J	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	ug/L	< 4.0	< 2.0	< 2.0	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0
m-Xylene & p-Xylene	--	ug/L	< 8.0	< 4.0	< 4.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	20	ug/L	< 4.0	< 2.0	< 2.0	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0
n-Butylbenzene	260	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
N-Propylbenzene	260	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
sec-Butylbenzene	260	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	1000	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
t-Butanol	--	ug/L	< 80	< 40	< 40	< 10	--	--	--	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
tert-Butylbenzene	260	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	5	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-02 (RAW) 1/16/2014	CC-02 (RAW) 4/17/2014	CC-02 (RAW) 8/11/2014	CC-02 (RAW) 10/21/2014	CC-02 (POST SOFTENER) 1/16/2014	CC-02 (POST SOFTENER) 4/17/2014	CC-02 (POST SOFTENER) 8/11/2014	CC-02 (POST SOFTENER) 10/21/2014	CC-02 (GAC 1) 1/16/2014	CC-02 (GAC 1) 4/17/2014	CC-02 (GAC 1) 8/11/2014	CC-02 (GAC 1) 10/21/2014	CC-02 (GAC 2) 1/16/2014	CC-02 (GAC 2) 4/17/2014	CC-02 (GAC 2) 8/11/2014	CC-02 (GAC 2) 10/21/2014
Toluene	1000	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,2-Dichloroethene	100	ug/L	1.69 J	1.25 J	1.03 J	1.43	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 2.5	< 2.5	< 2.5	< 0.5	< 2.5	< 2.5	< 2.5	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 20	< 10	< 10	< 5.0	--	--	--	--	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0
Trichloroethene	5	ug/L	4.65	4.04	4.48	4.48 B	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	2000	ug/L	< 4.0	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trihalomethanes, Total	--	ug/L	< 16	< 8.0	< 8.0	< 2.0	--	--	--	--	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Vinyl acetate	--	ug/L	< 20	< 10	< 10	< 5.0	--	--	--	--	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0
Vinyl chloride	2	ug/L	< 4.0*	< 2.0	< 2.0	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes, Total	10000	ug/L	< 8.0	< 4.0	< 4.0	< 1.0	--	--	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals																		
Iron	NA	mg/L	0.0355 J	< 0.05	< 0.05	0.0256 J	< 0.05	< 0.05	< 0.05	< 0.05	--	--	--	--	--	--	--	--
Manganese	0.84	mg/L	0.128 B	0.114 B	0.00594	0.116	0.00078 JB	0.0007 JB	0.123	0.102	--	--	--	--	--	--	--	--

Notes:
1. ug/L - micrograms per liter
2. mg/L - milligrams per liter
3. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
4. J - the concentration is an approximate value
5. B - compound was found in the blank and sample
6. '-- - not analyzed/not available
7. * - reporting limit higher than ICL due to necessary sample dilution, no detections above method detection limit assumed
8. Values in grey indicate VOC detections.
9. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID / Sample Date / Unit	CC-03 (RAW) 1/15/2014	CC-03 (RAW) 4/17/2014	CC-03 (RAW) 7/18/2014	CC-03 (RAW) 10/21/2014	CC-03 (POST FILTER) 1/15/2014	CC-03 (POST FILTER) 4/17/2014	CC-03 (POST FILTER) 7/18/2014	CC-03 (POST FILTER) 10/21/2014	CC-03 (GAC 1) 1/15/2014	CC-03 (GAC 1) 4/17/2014	CC-03 (GAC 1) 7/18/2014	CC-03 (GAC-1) 10/21/2014	CC-03 (GAC 2) 1/15/2014	CC-03 (GAC 2) 4/17/2014	CC-03 (GAC 2) 7/18/2014	CC-03 (GAC-2) 10/21/2014
VOCs																		
1,1,1,2-Tetrachloroethane	70	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethane	81	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethene	7	ug/L	< 1.0	< 1.0	0.106 J	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloropropene	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 1.0	< 1.0	< 0.5	< 2.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 0.5	< 0.5	< 2.0
1,2-Dibromoethane	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane	5	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichloropropane	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2,2-Dichloropropane	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	4000	ug/L	< 5.0	< 5.0	< 2.5	< 5.0	--	--	--	--	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0
2-Chlorotoluene	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Hexanone	--	ug/L	< 5.0	< 5.0	< 2.5	< 10	--	--	--	--	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 2.5	< 10
4-Chlorotoluene	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Isopropyltoluene	260	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 5.0	< 5.0	< 2.5	< 10	--	--	--	--	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 2.5	< 10
Acetone	6000	ug/L	< 5.0	< 5.0	< 2.5	< 50	--	--	--	--	< 2.5	< 2.5	1.07 J	< 50	< 2.5	< 2.5	0.855 J	< 50
Acrylonitrile	5	ug/L	< 20	< 20	< 10	< 5.0	--	--	--	--	< 10	< 10	< 10	< 5.0	< 10	< 10	< 10	< 5.0
Allyl chloride	7.4	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	5	ug/L	0.628 J	0.451 J	0.478 J	0.408 J	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromobenzene	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	4	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	10	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	70	ug/L	1.01	0.663 J	< 0.5	0.365 J	--	--	--	--	0.160 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	5	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	100	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorodibromomethane	60	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	70	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	30	ug/L	< 1.0	0.177 J	0.0941 J	< 0.5	--	--	--	--	< 0.5	0.217 J	0.179 J	< 0.5	< 0.5	0.379 J	0.291 J	< 0.5
cis-1,2-Dichloroethene	70	ug/L	21.9	20.8	31.6	25.8	--	--	--	--	< 0.5	< 0.5	< 0.5	25.8	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorobromomethane	0.6	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorofluoromethane	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethyl ether	1400	ug/L	< 1.0	< 1.0	< 0.5	< 10	--	--	--	--	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 10
Ethylbenzene	700	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Iodomethane	--	ug/L	< 1.0	< 1.0	< 0.5	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0
Isopropylbenzene	800	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether	13	ug/L	0.570 J	0.423 J	0.272 J	0.425 J	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	ug/L	1.13	< 1.0	< 0.5	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0
m-Xylene & p-Xylene	--	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	--	--	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	20	ug/L	< 1.0	< 1.0	< 0.5	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID / Sample Date / Unit	CC-03 (RAW) 1/15/2014	CC-03 (RAW) 4/17/2014	CC-03 (RAW) 7/18/2014	CC-03 (RAW) 10/21/2014	CC-03 (POST FILTER) 1/15/2014	CC-03 (POST FILTER) 4/17/2014	CC-03 (POST FILTER) 7/18/2014	CC-03 (POST FILTER) 10/21/2014	CC-03 (GAC 1) 1/15/2014	CC-03 (GAC 1) 4/17/2014	CC-03 (GAC 1) 7/18/2014	CC-03 (GAC-1) 10/21/2014	CC-03 (GAC 2) 1/15/2014	CC-03 (GAC 2) 4/17/2014	CC-03 (GAC 2) 7/18/2014	CC-03 (GAC-2) 10/21/2014
VOCs																		
n-Butylbenzene	260	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
N-Propylbenzene	260	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
sec-Butylbenzene	260	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	1000	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
t-Amyl methyl ether	140	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
t-Butanol	--	ug/L	< 20	< 20	< 10	< 10	--	--	--	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
tert-Butylbenzene	260	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrahydrofuran	154	ug/L	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Toluene	1000	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,2-Dichloroethene	100	ug/L	0.613 J	0.545 J	0.852	0.489 J	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 5.0	< 5.0	< 2.5	< 5.0	--	--	--	--	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0
Trichloroethene	5	ug/L	1.55	1.46	2.72	2.11 B	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	2000	ug/L	< 1.0	< 1.0	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trihalomethanes, Total	--	ug/L	< 4.0	< 4.0	< 2.0	< 2.0	--	--	--	--	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Vinyl acetate	--	ug/L	< 5.0	< 5.0	< 2.5	< 2.5	--	--	--	--	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Vinyl chloride	2	ug/L	< 1.0	< 1.0	0.139 J	< 0.5	--	--	--	--	< 0.5	< 0.5	0.0594 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes, Total	10000	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	--	--	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals																		
Iron	NA	mg/L	0.319	0.137	0.161	0.0964	0.0845	0.0977	0.807	< 0.05	--	--	--	--	--	--	--	--
Manganese	0.84	mg/L	0.0488 B	0.0435 B	0.0484	0.0464	0.0414 B	0.0436 B	0.0604	0.0608	--	--	--	--	--	--	--	--

Notes:
1. ug/L - micrograms per liter
2. mg/L - milligrams per liter
3. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
4. J - the concentration is an approximate value
5. B - compound was found in the blank and sample
6. '-- - not analyzed/not available
7. * - reporting limit higher than ICL due to necessary sample dilution, no detections above method detection limit assumed
8. Values in grey indicate VOC detections.
9. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID / Sample Date / Unit	CC-04 (RAW) 1/16/2014	CC-04 (RAW) 4/17/2014	CC-04 (RAW) 7/16/2014	CC-04 (RAW) 10/21/2014	CC-04 (POST SOFTENER) 1/16/2014	CC-04 (POST SOFTENER) 4/17/2014	CC-04 (POST SOFTENER) 7/16/2014	CC-04 (POST SOFTENER) 10/20/2014	CC-04 (GAC IN) 1/16/2014	CC-04 (GAC IN) 4/17/2014	CC-04 (GAC IN) 7/16/2014	CC-04 (GAC-(IN) 10/20/2014	CC-04 (GAC 1) 1/16/2014	CC-04 (GAC 1) 4/17/2014	CC-04 (GAC 1) 7/16/2014	CC-04 (GAC-1) 10/20/2014	CC-04 (GAC 2) 1/16/2014	CC-04 (GAC 2) 4/17/2014	CC-04 (GAC 2) 7/16/2014	CC-04 (GAC-2) 10/20/2014
VOCs																						
1,1,1,2-Tetrachloroethane	70	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethane	81	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethene	7	ug/L	< 2.5	< 2.5	0.113 J	0.129 J	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloropropene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 2.5	< 2.5	< 0.5	< 2.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 0.5	< 0.5	< 2.0
1,2-Dibromoethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichloropropane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2,2-Dichloropropane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	4000	ug/L	< 12.5	< 12.5	< 2.5	< 5.0	--	--	--	--	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0
2-Chlorotoluene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Hexanone	--	ug/L	< 12.5	< 12.5	< 2.5	< 10	--	--	--	--	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 2.5	< 10
4-Chlorotoluene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Isopropyltoluene	260	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 12.5	< 12.5	< 2.5	< 10	--	--	--	--	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 2.5	< 10
Acetone	6000	ug/L	< 12.5	< 12.5	1.45 J	< 50	--	--	--	--	5.39	2.34 JB	10.8	4.66 J	2.12 J	0.667 JB	1.70 J	< 50	1.08 J	< 2.5	1.83 J	< 50
Acrylonitrile	5	ug/L	< 50	< 50	< 10	< 5.0	--	--	--	--	< 10	< 10	< 10	< 5.0	< 10	< 10	< 10	< 5.0	< 10	< 10	< 10	< 5.0
Allyl chloride	7.4	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromobenzene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	4	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	10	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	70	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	100	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorodibromomethane	60	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	70	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	30	ug/L	< 2.5	< 2.5	0.584	< 0.5	--	--	--	--	< 0.5	0.284 J	0.214 J	< 0.5	< 0.5	0.587	0.151 J	0.178 JB	< 0.5	0.200 J	0.401 J	< 0.5
cis-1,2-Dichloroethene	70	ug/L	56.7	54.6	42.3	43.4	--	--	--	--	4.03	3.82	1.59	2.23	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorobromomethane	0.6	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorofluoromethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethyl tertiary butyl ether	1400	ug/L	< 2.5	< 2.5	< 0.5	< 10	--	--	--	--	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 10
Ethylbenzene	700	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Iodomethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0
Isopropylbenzene	800	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether	13	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	ug/L	< 2.5	< 2.5	0.548	< 5.0	--	--	--	--	< 0.5	< 0.5	0.474 J	< 5.0	< 0.5	< 0.5	0.457 J	< 5.0	< 0.5	< 0.5	0.555	< 5.0
m-Xylene & p-Xylene	--	ug/L	< 5.0	< 5.0	< 1.0	< 1.0	--	--	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	20	ug/L	< 2.5	< 2.5	< 0.5	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0
n-Butylbenzene	260	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
N-Propylbenzene	260	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
sec-Butylbenzene	260	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	1000	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
t-Amyl methyl ether	--	ug/L	< 50	< 50	< 10	< 10	--	--	--	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
tert-Butylbenzene	260	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	1000	ug/L	< 2.5	< 2.5	0.180 J	0.0741 J	--	--	--	--	0.340 J	0.381 J	1.29	0.561	< 0.5	< 0.5	0.114 J	< 0.5	< 0.5	< 0.5	0.267 J	< 0.5
trans-1,2-Dichloroethene	100	ug/L	1.01 J	0.791 J	0.869	0.528	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 12.5	< 12.5	< 2.5	< 5.0	--	--	--	--	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0
Trichloroethene	5	ug/L	**5.43**	**5.06**	4.74	4.59 B	--	--	--	--	0.222 J	0.173 J	0.0761 J	0.171 JB	< 0.5	< 0.5	< 0.5	0.0830 JB	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	2000	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trihalomethanes, Total	--	ug/L	< 10	< 10	< 2.0	< 2.0	--	--	--	--	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Vinyl acetate	--	ug/L	< 12.5	< 12.5	< 2.5	< 2.5	--	--	--	--	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID / Sample Date / Unit	CC-04 (RAW) 1/16/2014	CC-04 (RAW) 4/17/2014	CC-04 (RAW) 7/16/2014	CC-04 (RAW) 10/21/2014	CC-04 (POST SOFTENER) 1/16/2014	CC-04 (POST SOFTENER) 4/17/2014	CC-04 (POST SOFTENER) 7/16/2014	CC-04 (POST SOFTENER) 10/20/2014	CC-04 (GAC IN) 1/16/2014	CC-04 (GAC IN) 4/17/2014	CC-04 (GAC IN) 7/16/2014	CC-04 (GAC-(IN) 10/20/2014	CC-04 (GAC 1) 1/16/2014	CC-04 (GAC 1) 4/17/2014	CC-04 (GAC 1) 7/16/2014	CC-04 (GAC-1) 10/20/2014	CC-04 (GAC 2) 1/16/2014	CC-04 (GAC 2) 4/17/2014	CC-04 (GAC 2) 7/16/2014	CC-04 (GAC-2) 10/20/2014
VOCs																						
Vinyl chloride	2	ug/L	< 2.5*	< 2.5*	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes, Total	10000	ug/L	< 5.0	< 5.0	< 1.0	< 1.0	--	--	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals																						
Iron	NA	mg/L	0.152	0.101	0.205	0.369	< 0.05	0.0338 J	0.0209 J	0.0221 J	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	0.84	mg/L	0.139 B	0.130 B	0.132	0.127	< 0.003	0.00051 JB	< 0.003	< 0.003	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
1. ug/L - micrograms per liter
2. mg/L - milligrams per liter
3. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
4. J - the concentration is an approximate value
5. B - compound was found in the blank and sample
6. '-- - not analyzed/not available
7. * - reporting limit higher than ICL due to necessary sample dilution, no detections above method detection limit assumed
8. Values in grey indicate VOC detections.
9. Values in yellow indicate VOC exceedances.
10. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-05-OUT 1/15/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	1.14 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	< 0.5
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	1.09
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-05-OUT 1/15/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	2.38
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	0.147 J
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID / Sample Date / Unit	CC-06 (RAW) 5/2/2014	CC-06 (RAW) 7/18/2014	CC-06 (RAW) 10/20/2014	CC-06 (POST FILTER) 5/2/2014	CC-06 (POST FILTER) 7/18/2014	CC-06 (POST FILTER) 10/20/2014	CC-06 (GAC IN) 5/2/2014	CC-06 (GAC IN) 7/18/2014	CC-06 (GAC IN) 10/20/2014	CC-06 (GAC 1) 5/2/2014	CC-06 (GAC 1) 7/18/2014	CC-06 (GAC 1) 10/20/2014	CC-06 (GAC 2) 5/2/2014	CC-06 (GAC 2) 7/18/2014	CC-06 (GAC 2) 10/20/2014
VOCs																	
1,1,1,2-Tetrachloroethane	70	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethane	81	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethene	7	ug/L	< 2.0	0.116 J	0.131 J	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloropropene	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 2.0	< 0.5	< 2.0	--	--	--	< 0.5	< 0.5	< 2.0	< 0.5	< 0.5	< 2.0	< 0.5	< 0.5	< 2.0
1,2-Dibromoethane	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	5	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane	5	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichloropropane	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2,2-Dichloropropane	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	4000	ug/L	< 10	< 2.5	< 5.0	--	--	--	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 5.0
2-Chlorotoluene	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Hexanone	--	ug/L	< 10	< 2.5	< 10	--	--	--	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 10
4-Chlorotoluene	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Isopropyltoluene	260	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 10	< 2.5	< 10	--	--	--	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 10
Acetone	6000	ug/L	< 10	1.76 J	< 50	--	--	--	10.7	6.63	6.05 J	< 2.5	1.78 J	1.25 J	0.738 J	1.26 J	< 50
Acrylonitrile	5	ug/L	< 40	< 10	< 5.0	--	--	--	< 10	< 10	< 5.0	< 10	< 10	< 5.0	< 10	< 10	< 5.0
Allyl chloride	7.4	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	5	ug/L	0.568 J	0.295 J	0.349 J	--	--	--	< 0.5	< 0.5	0.300 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromobenzene	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	4	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	10	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	70	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	0.257 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon tetrachloride	5	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	100	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorodibromomethane	60	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	70	ug/L	0.584 J	0.187 J	0.185 JB	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	30	ug/L	< 2.0	0.497 J	< 0.5	--	--	--	0.162 J	0.171 J	< 0.5	0.204 J	0.119 J	< 0.5	0.0988 J	0.127 J	< 0.5
cis-1,2-Dichloroethene	70	ug/L	60.3	47.6	48.8	--	--	--	4.09	1.87	2.93	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorobromomethane	0.6	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorofluoromethane	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethyl ether	1400	ug/L	< 2.0	< 0.5	< 10	--	--	--	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 10
Ethylbenzene	700	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	0.103 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Iodomethane	--	ug/L	< 2.0	< 0.5	< 5.0	--	--	--	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 5.0
Isopropylbenzene	800	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether	13	ug/L	< 2.0	< 0.5	0.113 J	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	ug/L	< 2.0	< 0.5	< 5.0	--	--	--	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 5.0
m-Xylene & p-Xylene	--	ug/L	< 4.0	< 1.0	< 1.0	--	--	--	0.243 J	< 1.0	0.308 J	< 1.0	< 1.0	< 0.5	< 1.0	< 1.0	< 0.5
Naphthalene	20	ug/L	< 2.0	< 0.5	< 5.0	--	--	--	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 5.0
n-Butylbenzene	260	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
N-Propylbenzene	260	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID / Sample Date / Unit	CC-06 (RAW) 5/2/2014	CC-06 (RAW) 7/18/2014	CC-06 (RAW) 10/20/2014	CC-06 (POST FILTER) 5/2/2014	CC-06 (POST FILTER) 7/18/2014	CC-06 (POST FILTER) 10/20/2014	CC-06 (GAC IN) 5/2/2014	CC-06 (GAC IN) 7/18/2014	CC-06 (GAC IN) 10/20/2014	CC-06 (GAC 1) 5/2/2014	CC-06 (GAC 1) 7/18/2014	CC-06 (GAC 1) 10/20/2014	CC-06 (GAC 2) 5/2/2014	CC-06 (GAC 2) 7/18/2014	CC-06 (GAC 2) 10/20/2014
VOCs																	
o-Xylene	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	0.107 J	< 0.5	0.119 J	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
sec-Butylbenzene	260	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	1000	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
t-Butanol	--	ug/L	< 40	< 10	< 10	--	--	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
tert-Butylbenzene	260	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	5	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	1000	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	1.02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,2-Dichloroethene	100	ug/L	1.37 J	0.978	0.754	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 10	< 2.5	< 5.0	--	--	--	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 5.0
Trichloroethene	5	ug/L	4.46	4.21	3.84 B	--	--	--	0.154 J	0.0797 J	0.173 JB	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	2000	ug/L	< 2.0	< 0.5	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trihalomethanes, Total	--	ug/L	< 8.0	< 2.0	< 2.0	--	--	--	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Vinyl acetate	--	ug/L	< 10	< 2.5	< 2.5	--	--	--	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Vinyl chloride	2	ug/L	< 2.0	0.0894 J	< 0.5	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes, Total	10000	ug/L	< 4.0	< 1.0	< 1.0	--	--	--	0.350 J	< 1.0	0.427 J	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals																	
Iron	NA	mg/L	0.0476 J	0.0347 J	0.0537	0.0343 J	1.23	< 0.05	--	--	--	--	--	--	--	--	--
Manganese	840	mg/L	0.0689 B	0.0526	0.0642	0.0747 B	0.111	0.0164 J	--	--	--	--	--	--	--	--	--
General Chemistry																	
Hardness as calcium carbonate	NA	mg/L	60	--	--	--	--	--	--	--	--	--	--	--	60	--	--
pH	NA	SU	7.84 HF	--	--	--	--	--	--	--	--	--	--	--	9.05 HF	--	--
Alkalinity, total	NA	mg/L	70.9 B	--	--	--	--	--	--	--	--	--	--	--	77.8 B	--	--
Microbiology																	
Total Coliform	NA	mg/L	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
E. Coli	NA	mg/L	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Radiochemical Analysis																	
Radon 222	NA	pCi/L	1.25E+04	--	--	--	--	--	--	--	--	3.96E+01 J	--	--	--	--	--

Notes:
1. ug/L - micrograms per liter
2. mg/L - milligrams per liter
3. pCi/L - picocuries per liter
4. SU - standard unit
5. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
6. J - the concentration is an approximate value
7. B - compound was found in the blank and sample
8. HF - field parameter with a holding time of 15 minutes
9. ND - not detected
10. '-- - not analyzed/not available
11. Values in grey indicate VOC detections.
12. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-07-OUT 1/15/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	1.67 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5
Ethyl ether	1400	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	0.217 J

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-07-OUT 1/15/2014
VOCs			
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	0.472 J
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	0.0718 J
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-08-OUT 1/14/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	1.90 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	< 0.5
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	0.140 J
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-08-OUT 1/14/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	0.664
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	0.121 J
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-10-OUT 1/16/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	1.52 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	0.418 J
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5
Ethyl ether	1400	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	0.160 J

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-10-OUT 1/16/2014
VOCs			
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	8.16 J
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	0.664
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-11-OUT 1/15/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	0.624 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	1.49
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	22.4
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-11-OUT 1/15/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	0.146 J
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	0.303 J
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	1.4
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	0.0602 J
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-12-OUT 1/15/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	0.920 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	< 0.5
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	0.141 J
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-12-OUT 1/15/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	0.81
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	0.0981 J
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-13-OUT 1/15/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	0.967 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	< 0.5
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-13-OUT 1/15/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	0.389 J
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	< 0.5
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-14-OUT 1/15/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	1.03 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	< 0.5
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	0.726
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-14-OUT 1/15/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	2.22
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	0.134 J
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID / Sample Date / Unit	CC-15 (RAW) 1/15/2014	CC-15 (RAW) 4/17/2014	CC-15 (RAW) 7/16/2014	CC-15 (RAW) 10/20/2014	CC-15 (POST FILTER) 1/15/2014	CC-15 (POST FILTER) 4/17/2014	CC-15 (POST FILTER) 7/16/2014	CC-15 (POST FILTER) 10/20/2014	CC-15 (GAC 1) 1/15/2014	CC-15 (GAC 1) 4/17/2014	CC-15 (GAC 1) 7/16/2014	CC-15 (GAC-1) 10/20/2014	CC-15 (GAC 2) 1/15/2014	CC-15 (GAC 2) 4/17/2014	CC-15 (GAC 2) 7/16/2014	CC-15 (GAC-2) 10/20/2014
VOCs																		
1,1,1,2-Tetrachloroethane	70	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethane	81	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethene	7	ug/L	< 2.5	< 2.5	0.129 J	0.141 J	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloropropene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 2.5	< 2.5	< 0.5	< 2.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 0.5	< 0.5	< 2.0
1,2-Dibromoethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichloropropane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2,2-Dichloropropane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	4000	ug/L	< 12.5	< 12.5	< 2.5	< 5.0	--	--	--	--	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0
2-Chlorotoluene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Hexanone	--	ug/L	< 12.5	< 12.5	< 2.5	< 10	--	--	--	--	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 2.5	< 10
4-Chlorotoluene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Isopropyltoluene	260	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 12.5	< 12.5	< 2.5	< 10	--	--	--	--	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 2.5	< 2.5	< 10
Acetone	6000	ug/L	5.00 J	< 12.5	1.24 J	< 50	--	--	--	--	0.656 J	< 2.5	1.42 J	< 50	0.572 J	0.934 JB	1.58 J	< 50
Acrylonitrile	5	ug/L	< 50	< 50	< 10	< 5.0	--	--	--	--	< 10	< 10	< 10	< 5.0	< 10	< 10	< 10	< 5.0
Allyl chloride	7.4	ug/L	< 2.5	< 12.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	5	ug/L	< 2.5	< 2.5	0.359 J	0.334 J	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromobenzene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	4	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	10	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	70	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	0.565	< 0.5	0.191 J	< 0.5	0.363 J	< 0.5
Carbon tetrachloride	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	100	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorodibromomethane	60	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	70	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	30	ug/L	< 2.5	< 2.5	0.112 J	< 0.5	--	--	--	--	< 0.5	0.278 J	0.194 J	< 0.5	< 0.5	0.192 J	0.382 J	< 0.5
cis-1,2-Dichloroethene	70	ug/L	60.2	46.8	46.1	48	--	--	--	--	< 0.5	< 0.5	< 0.5	48	< 0.5	< 0.5	< 0.5	48
cis-1,3-Dichloropropene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorobromomethane	0.6	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorofluoromethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethyl ether	1400	ug/L	< 2.5	< 2.5	< 0.5	< 10	--	--	--	--	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 0.5	< 0.5	< 10
Ethylbenzene	700	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Iodomethane	--	ug/L	< 2.5	< 2.5	< 0.5	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0
Isopropylbenzene	800	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether	13	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	ug/L	< 2.5	< 2.5	0.377 J	< 5.0	--	--	--	--	0.277 J	< 0.5	0.465 J	< 5.0	0.436 J	< 0.5	0.430 J	< 5.0
m-Xylene & p-Xylene	--	ug/L	< 5.0	< 5.0	< 1.0	< 0.5	--	--	--	--	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0	< 1.0	< 1.0	< 0.5
Naphthalene	20	ug/L	< 2.5	< 2.5	< 0.5	< 5.0	--	--	--	--	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0
n-Butylbenzene	260	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
N-Propylbenzene	260	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
sec-Butylbenzene	260	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	1000	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
t-Butanol	--	ug/L	< 50	< 50	< 10	< 10	--	--	--	--	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
tert-Butylbenzene	260	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	5	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID / Sample Date / Unit	CC-15 (RAW) 1/15/2014	CC-15 (RAW) 4/17/2014	CC-15 (RAW) 7/16/2014	CC-15 (RAW) 10/20/2014	CC-15 (POST FILTER) 1/15/2014	CC-15 (POST FILTER) 4/17/2014	CC-15 (POST FILTER) 7/16/2014	CC-15 (POST FILTER) 10/20/2014	CC-15 (GAC 1) 1/15/2014	CC-15 (GAC 1) 4/17/2014	CC-15 (GAC 1) 7/16/2014	CC-15 (GAC-1) 10/20/2014	CC-15 (GAC 2) 1/15/2014	CC-15 (GAC 2) 4/17/2014	CC-15 (GAC 2) 7/16/2014	CC-15 (GAC-2) 10/20/2014
VOCs																		
Toluene	1000	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,2-Dichloroethene	100	ug/L	1.65 J	1.10 J	1.03	0.910	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 12.5	< 12.5	< 2.5	< 5.0	--	--	--	--	< 2.5	< 2.5	< 2.5	< 5.0	< 2.5	< 2.5	< 2.5	< 5.0
Trichloroethene	5	ug/L	**5.13**	4.34	4.71	4.38 B	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	2000	ug/L	< 2.5	< 2.5	< 0.5	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trihalomethanes, Total	--	ug/L	< 10	< 10	< 2.0	< 2.0	--	--	--	--	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Vinyl acetate	--	ug/L	< 12.5	< 12.5	< 2.5	< 2.5	--	--	--	--	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Vinyl chloride	2	ug/L	< 2.5*	< 2.5*	0.137 J	< 0.5	--	--	--	--	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes, Total	10000	ug/L	< 5.0	< 5.0	< 1.0	< 1.0	--	--	--	--	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Metals																		
Iron	NA	mg/L	< 0.05	< 0.05	< 0.05	0.0198 J	< 0.05	< 0.05	< 0.05	< 0.05	--	--	--	--	--	--	--	--
Manganese	0.84	mg/L	0.102 B	0.981 B	0.1	0.0962	0.104 B	0.0998 B	0.0944	0.0962	--	--	--	--	--	--	--	--

Notes:
1. ug/L - micrograms per liter
2. mg/L - milligrams per liter
3. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
4. J - the concentration is an approximate value
5. B - compound was found in the blank and sample
6. '-- - not analyzed/not available
7. * - reporting limit higher than ICL due to necessary sample dilution, no detections above method detection limit assumed
8. Values in grey indicate VOC detections.
9. Values in yellow indicate VOC exceedances.
10. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-16-OUT 1/15/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	1.37 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	< 0.5
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-16-OUT 1/15/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	0.149 J
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	< 0.5
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-17-OUT 1/16/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	11.2
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	0.142 J
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-17-OUT 1/16/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	< 0.5
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	0.246 J
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	0.130 J
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	0.516
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	< 0.5
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	0.376 J

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-18-OUT 1/16/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	3.2
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	< 0.5
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	CC-18-OUT 1/16/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	< 0.5
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	< 0.5
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	29R 1/15/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	1.27 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	< 0.5
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	29R 1/15/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	< 0.5
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	< 0.5
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	26R 9/25/2014
VOCs			
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5
1,1,2-Trichloro-1,2,2-trifluoroethane	--	ug/L	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 0.5
1,2-Dibromoethane	--	ug/L	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5
2,2-Dichloropropane	--	ug/L	< 0.5
2-Butanone (MEK)	4000	ug/L	< 2.5
2-Chlorotoluene	--	ug/L	< 0.5
2-Hexanone	--	ug/L	< 2.5
4-Chlorotoluene	--	ug/L	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 2.5
Acetone	6000	ug/L	1.68 J
Acrylonitrile	5	ug/L	< 10
Allyl chloride	7.4	ug/L	< 0.5
Benzene	5	ug/L	0.472 J
Bromobenzene	--	ug/L	< 0.5
Bromochloromethane	--	ug/L	< 0.5
Bromoform	4	ug/L	< 0.5
Bromomethane	10	ug/L	< 0.5
Carbon disulfide	70	ug/L	< 0.5
Carbon tetrachloride	5	ug/L	< 0.5
Chlorobenzene	100	ug/L	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5
Chloroethane	--	ug/L	< 0.5
Chloroform	70	ug/L	< 0.5
Chloromethane	30	ug/L	< 0.5
cis-1,2-Dichloroethene	70	ug/L	1.75
cis-1,3-Dichloropropene	--	ug/L	< 0.5
Dibromomethane	--	ug/L	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5
Dichlorofluoromethane	--	ug/L	< 0.5

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

Chemical Name	NH GW-1	Location ID Sample Date Unit	26R 9/25/2014
VOCs			
Ethyl ether	1400	ug/L	< 0.5
Ethylbenzene	700	ug/L	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5
Iodomethane	--	ug/L	< 0.5
Isopropylbenzene	800	ug/L	< 0.5
Methyl tert-butyl ether	13	ug/L	< 0.5
Methylene Chloride	5	ug/L	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 1.0
Naphthalene	20	ug/L	< 0.5
n-Butylbenzene	260	ug/L	< 0.5
N-Propylbenzene	260	ug/L	< 0.5
o-Xylene	--	ug/L	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5
Styrene	1000	ug/L	< 0.5
t-Butanol	--	ug/L	< 10
tert-Butylbenzene	260	ug/L	< 0.5
Tetrachloroethene	5	ug/L	< 0.5
Toluene	1000	ug/L	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 0.5
trans-1,4-Dichloro-2-butene	--	ug/L	< 2.5
Trichloroethene	5	ug/L	0.312 J
Trichlorofluoromethane	2000	ug/L	< 0.5
Trihalomethanes, Total	--	ug/L	< 2.0
Vinyl acetate	--	ug/L	< 2.5
Vinyl chloride	2	ug/L	< 0.5
Xylenes, Total	10000	ug/L	< 1.0

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. '-- - not analyzed/not available
5. Values in grey indicate VOC detections.
6. CC - confidential and arbitrary sample identification

Table 7 - Summary of 2014 Residential Water Analytical Results
Tibbetts Road Site, Barrington, New Hampshire

		Location ID	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
		Sample Date	1/16/2014	4/17/2014	4/17/2014	5/2/2014	7/16/2014	7/18/2014	8/11/2014	10/21/2014
Chemical Name	**NH GW-1**	**Unit**								
VOCs										
1,1,1,2-Tetrachloroethane	70	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane	200	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane	2	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethane	81	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethene	7	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloropropene	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichlorobenzene	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichloropropane	40	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trichlorobenzene	70	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trimethylbenzene	330	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dibromo-3-Chloropropane	--	ug/L	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,2-Dibromoethane	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichlorobenzene	600	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane	5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3,5-Trimethylbenzene	330	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	600	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichloropropane	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	75	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2,2-Dichloropropane	--	ug/L	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
2-Butanone (MEK)	4000	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
2-Chlorotoluene	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Hexanone	--	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
4-Chlorotoluene	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Isopropyltoluene	260	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	2000	ug/L	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acetone	6000	ug/L	1.17 J	< 2.5	< 2.5	< 2.5	1.46 J	1.58 J	< 2.5	< 2.5
Benzene	5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromobenzene	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	4	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	10	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	70	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon tetrachloride	5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	100	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorodibromomethane	60	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	70	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	30	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.0850 J	< 0.5	0.248 JB
cis-1,2-Dichloroethene	70	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorobromomethane	0.6	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	1000	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Diethyl ether	1400	ug/L	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Diisopropyl ether	120	ug/L	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Ethyl ether	1400	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethyl tertiary butyl ether	40	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	700	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Hexachlorobutadiene	0.5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Isopropylbenzene	800	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl tert-butyl ether	13	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	5	ug/L	< 0.5	0.859	0.794	0.905	0.754	< 0.5	1.21	< 0.5
m-Xylene & p-Xylene	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	20	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
n-Butylbenzene	260	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
N-Propylbenzene	260	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	--	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
sec-Butylbenzene	260	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Styrene	1000	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
t-Amyl Methyl Ether	140	ug/L	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
t-Butanol	--	ug/L	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
tert-Butylbenzene	260	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tetrahydrofuran	154	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	1000	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,2-Dichloroethene	100	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene	--	ug/L	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Trichloroethene	5	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	2000	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	2	ug/L	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Notes:
1. ug/L - micrograms per liter
2. NH GW-1 - New Hampshire Method 1 Ambient Ground Water Quality Standard
3. J - the concentration is an approximate value
4. B - compound was found in the blank and sample
5. '-- - not analyzed/not available
6. Values in grey indicate VOC detections.

Table 8 - Summary of Historical VOC Detections in Residential Wells, Tibbetts Road Site, Barrington, NH

	Parameter:	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	Toluene	TCE	Xylenes
	NHDES GW-1	6000	5	70	700	2000	1000	5	10000
	NHDES GW-2	NA	2900	NA	1500	50000	50000	20	17000
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Sample ID	**Sample Date**								
1R	1/24/1984	19.1	**31**	--	--	23.9	--	--	29.3
1R	1/13/1984	16	**11**	--	--	10 J	--	--	31
1R	6/27/1990	--	**18**	--	--	20 J	--	--	35
1R	3/5/1984	--	**37**	--	--	11	14	**4.0**	73
1R	4/3/1984	--	**19**	--	--	25	--	**9.0**	100
1R	2/19/1987	23	**39.8**	5.0 J	5.0 J	45	--	**7.1**	111.9
1R	8/10/1983	48	**40**	--	--	58	--	--	119
1R	2/10/1987	23	**46.9**	5.0 J	5.0 J	45	--	**7.9**	121.6
1R	10/11/1985	52.5	**40.2**	--	5.9	68.3	--	**6.4**	126.1
1R	10/11/1985	29.8	**37.4**	--	5.8	60	--	**6.1**	129.8
1R	3/6/1986	--	**42.2**	5.0 J	6.3	46.4	--	**7.2**	133.5
1R	3/15/1985	--	**43.3**	--	5.9	--	--	**7.7**	137.7
1R	9/18/1984	55	**47.7**	--	6.3	62	5.0 J	**7.9**	140
1R	3/15/1985	--	**41.9**	--	6.5	--	--	**7.2**	140.6
1R	3/6/1986	--	**40**	5.0 J	6.2	44.1	--	**7.2**	141
1R	7/11/1985	--	**76.6**	--	7.9	--	--	**12.2**	143.1
1R	7/20/1982	--	**37**	--	--	--	4.0	--	147
1R	7/11/1985	--	**69.4**	--	7.2	--	--	**9.4**	161.7
1R	6/4/1982	--	**45**	--	--	--	--	--	183
1R	1/23/1987	--	**17.2**	5.0 J	--	--	--	**6.0**	--
1R	3/5/2013	< 2.5	< 0.5	1.3	< 0.5	< 2.5	< 0.5	0.12 J	< 1.0
2R	9/12/1985	--	1.0	--	--	--	--	**1.2**	--
2R	9/12/1985	--	--	--	--	--	--	**1.2**	--
2R	4/1/1985	--	--	--	--	--	--	**2.9**	--
2R	5/31/1985	--	1.9	--	--	--	--	**5.1**	--
2R	5/31/1985	--	1.9	--	--	--	--	**5.5**	--
2R	12/27/1985	--	3.2	--	--	--	--	**8.3**	--
2R	12/27/1985	--	4.2	--	--	--	--	**10.1**	--
2R	3/6/1986	--	5.0	--	--	--	--	**10.8**	--
2R	3/6/1986	--	5.0	--	--	--	--	**13.4**	--
2R	1/23/1987	--	5.0 J	--	--	--	--	**15.4**	--
2R	6/4/1982	--	--	--	--	--	--	--	--
2R	4/6/1984	--	--	--	--	--	--	--	--
2R	10/18/1984	--	--	--	--	--	--	--	--
2R	6/28/1990	--	--	--	--	--	--	--	--
2R	3/15/1985	--	--	--	--	--	--	5.0 J	--
2R	3/4/2013	< 2.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5	< 1.0
3R	1/23/1987	--	**10.6**	5.0 J	--	--	--	**13.9**	--
3R	10/18/1984	--	**8.9**	--	--	--	5.0 J	**14.7**	--
3R	11/26/1985	--	**13.7**	--	--	--	--	**26.1**	--
3R	3/6/1986	--	**17.1**	--	--	--	--	**27.9**	--
3R	5/20/1985	--	**13.2**	--	--	--	--	**28**	--
3R	5/20/1985	--	**12**	--	--	--	--	**29.4**	--
3R	8/28/1985	--	**15.3**	--	--	--	--	**29.9**	--
3R	3/6/1986	--	**17.8**	--	--	--	--	**31.3**	--

Table 8 - Summary of Historical VOC Detections in Residential Wells, Tibbetts Road Site, Barrington, NH

	Parameter:	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	Toluene	TCE	Xylenes
	NHDES GW-1	6000	5	70	700	2000	1000	5	10000
	NHDES GW-2	NA	2900	NA	1500	50000	50000	20	17000
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Sample ID	**Sample Date**								
3R	3/5/1984	--	3.0	--	--	--	--	--	--
3R	6/4/1982	--	--	--	--	--	--	--	--
3R	1/14/1984	--	--	--	--	--	--	--	--
3R	4/3/1984	--	--	--	--	--	--	--	--
3R	4/18/1984	--	--	--	--	--	--	--	--
3R	11/5/1984	--	**17.8**	--	--	--	5.0 J	**35**	5.0 J
4R	11/5/1984	--	5.0 J	--	--	--	--	**7.5**	--
4R	8/28/1985	--	5.0 J	--	--	--	--	**8.5**	--
4R	8/28/1985	--	5.0 J	--	--	--	--	**8.7**	--
4R	5/20/1985	--	5.0 J	--	--	--	--	**10.5**	--
4R	5/20/1985	--	5.0 J	--	--	--	--	**11.9**	--
4R	11/26/1985	--	**5.9**	--	--	--	--	**16.0**	--
4R	3/6/1986	--	**6.5**	--	--	--	--	**16.7**	--
4R	3/6/1986	--	**7.2**	--	--	--	--	**18.6**	--
4R	1/23/1987	--	**5.5**	--	--	--	--	**27.8**	--
4R	6/4/1982	--	--	--	--	--	--	--	--
4R	1/13/1984	--	--	--	--	--	--	--	--
4R	4/5/1984	--	--	--	--	--	--	--	--
4R	10/17/1984	9.3	5.0 J	--	--	--	--	5.0 J	--
4R	6/21/1990	--	--	--				--	
5R	1/24/1984	--	4.3	--	--	--	--	**11.1**	--
5R	4/3/1984	--	5.0	--	--	--	--	**22**	--
5R	3/5/1984	--	**10**	--	--	--	--	**22**	--
5R	9/18/1984	--	**9.4**	--	--	--	--	**35.1**	--
5R	3/15/1985	--	**15.3**	--	--	--	--	**49.4**	--
5R	10/11/1985	--	**14.5**	--	--	--	--	**49.8**	--
5R	10/11/1985	--	**14.6**	--	--	--	--	**50.4**	--
5R	6/27/1990	--	**20.0**	--	--	--	--	**57.0**	--
5R	1/23/1987	--	**25.1**	5.0 J	--	--	--	**64.3**	--
5R	6/5/1991	--	**27.0**	3.0 J	--	--	2.0 J	**75.0**	--
5R	2/12/1986	--	**28.7**	5.0 J	--	--	--	**93.3**	--
5R	2/12/1986	--	**30.4**	5.0 J	--	--	--	**101.1**	--
5R	7/11/1985	--	**41.1**	--	--	--	--	**109.9**	--
5R	7/11/1985	--	**43.8**	--	--	--	--	**115.9**	--
5R	6/4/1982	--	--	--	--	--	--	--	--
5R	1/13/1984	--	3.2	--	--	--	--	< 10	--
6R	2/12/1986	--	--	--	--	--	--	**5.5**	--
6R	2/12/1986	--	--	--	--	--	--	**5.5**	--
6R	6/20/1990	--	--	--	--	--	--	--	--
6R	9/24/1985	--	--	--	--	--	--	5.0 J	--
6R	9/24/1985	--	--	--	--	--	--	5.0 J	--
6R	3/6/2013	< 2.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	0.11 J	< 1.0
7R	7/17/1985	--	--	--	--	--	--	**10.7**	--

Table 8 - Summary of Historical VOC Detections in Residential Wells, Tibbetts Road Site, Barrington, NH

	Parameter:	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	Toluene	TCE	Xylenes
	NHDES GW-1	6000	5	70	700	2000	1000	5	10000
	NHDES GW-2	NA	2900	NA	1500	50000	50000	20	17000
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Sample ID	**Sample Date**								
7R	7/17/1985	--	--	--	--	--	--	**10.7**	--
7R	7/11/1985	--	--	--	--	--	--	**13.7**	--
7R	5/8/1986	--	--	--	--	--	--	**18.0**	--
7R	6/20/1990	--	--	--	--	--	--	**19.0**	--
7R	10/11/1985	--	--	--	--	--	--	5.0 J	--
7R	10/11/1985	--	--	--	--	--	--	5.0 J	--
7R	3/4/2013	< 2.5	< 0.5	0.76	< 0.5	< 2.5	< 0.5	**1.0**	< 1.0
8R	6/10/1985	--	--	--	--	--	--	**6.0**	--
8R	6/21/1985	--	--	--	--	--	--	**7.5**	--
8R	1/15/1986	--	--	--	--	--	--	**7.7**	--
8R	1/15/1986	--	--	--	--	--	--	**8.6**	--
8R	6/21/1985	--	--	--	--	--	--	**9.3**	--
8R	8/6/1986	--	--	--	--	--	--	**9.3**	--
8R	10/11/1985	--	--	--	--	--	--	**10.3**	--
8R	10/11/1985	--	--	--	--	--	--	**10.5**	--
8R	7/2/1985	--	--	--	--	--	--	**13.0**	--
8R	7/2/1985	--	--	--	--	--	--	**13.5**	--
8R	6/20/1990	--	--	--	--	--	--	--	--
8R	6/4/1991	--	--	--	--	--	--	--	--
9R	6/21/1990	--	--	--	--	--	--	--	--
13R	9/12/1985	--	1.0	--	--	--	--	--	--
13R	9/12/1985	--	2.8	--	--	--	--	--	--
13R	12/27/1985	--	--	--	--	--	--	--	--
13R	6/20/1990	--	--	--	--	--	--	--	--
14R	10/17/1984	14	--	--	--	24.5	--	--	--
14R	6/4/1982	--	--	--	--	--	--	--	--
14R	4/3/1984	--	--	--	--	--	--	--	--
14R	11/5/1984	--	--	--	--	--	--	--	--
14R	11/21/1984	--	--	--	--	--	--	--	--
14R	3/7/1985	--	--	--	--	--	--	--	--
14R	4/26/1985	--	--	--	--	--	--	--	--
14R	5/20/1985	--	--	--	--	--	--	--	--
14R	6/10/1985	--	--	--	--	--	--	--	--
14R	7/11/1985	--	--	--	--	--	--	--	--
14R	8/28/1985	--	--	--	--	--	--	--	--
14R	10/11/1985	--	--	--	--	--	--	--	--
14R	11/26/1985	--	--	--	--	--	--	--	--
14R	3/6/1986	--	--	--	--	--	--	--	--
14R	6/28/1990	--	--	--	--	--	--	--	--
14R	1/23/1987	--	--	--	--	--	--	5.0 J	--
15R	9/12/1985	--	1.0	--	--	--	--	--	--
15R	9/12/1985	--	1.5	--	--	--	--	--	--

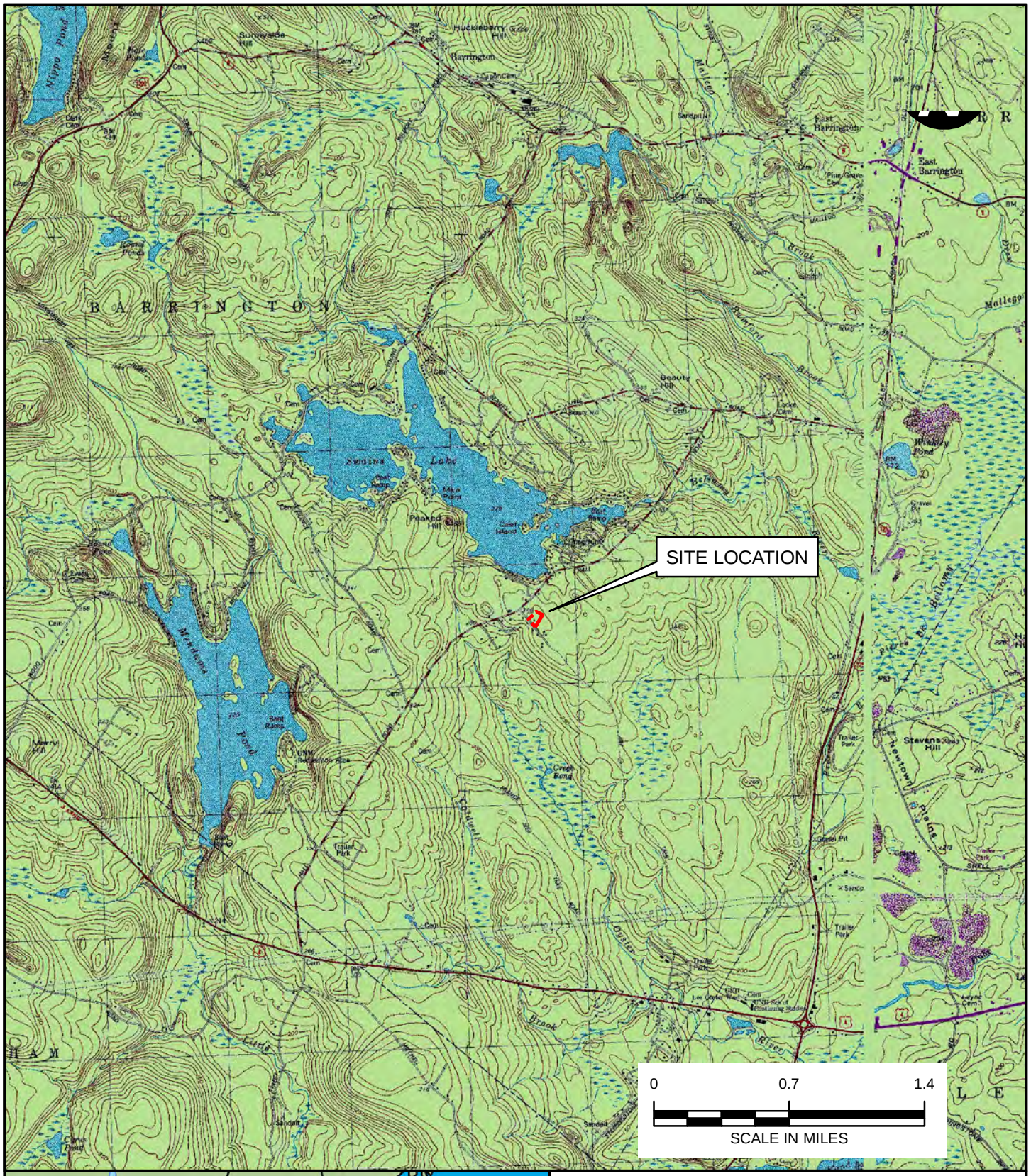
Table 8 - Summary of Historical VOC Detections in Residential Wells, Tibbetts Road Site, Barrington, NH

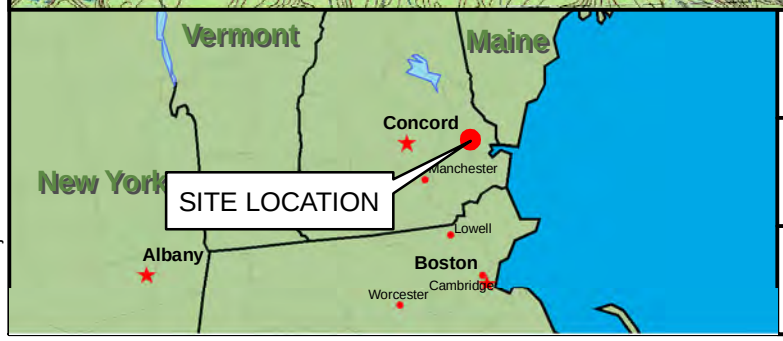
	Parameter:	Acetone	Benzene	cis-1,2-DCE	Ethylbenzene	MIBK	Toluene	TCE	Xylenes
	NHDES GW-1	6000	5	70	700	2000	1000	5	10000
	NHDES GW-2	NA	2900	NA	1500	50000	50000	20	17000
	Unit	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Sample ID	**Sample Date**								
15R	12/27/1985	--	--	--	--	--	--	--	--
15R	5/8/1986	--	--	--	--	--	--	--	--
15R	6/20/1990	--	--	--	--	--	--	--	--
15R	3/1/2013	< 2.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5	< 1.0
24R	3/1/2013	< 2.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5	< 1.0
25R	3/4/2013	0.94 J	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5	< 1.0
26R	9/25/2014	1.68 J	0.472 J	1.75	< 0.5	< 2.5	< 0.5	0.312 J	< 1.0
28R	3/6/2013	< 2.5	< 0.5	< 0.5	< 0.5	< 2.5	0.15 J	< 0.5	< 1.0
29R	1/15/2014	1.27 J	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5	< 1.0
30R	3/1/2013	< 2.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5	< 1.0
47S	11/21/1984	--	--	--	--	--	--	--	--
47S	6/6/1985	--	--	--	--	--	--	--	--
47S	11/26/1985	--	--	--	--	--	--	--	--
47S	5/8/1986	--	--	--	--	--	--	--	--
47S	10/26/1984	--	5.0 J	--	--	--	--	5.0 J	--

Notes:
ICL - interim groundwater cleanup level
ug/L - micrograms per liter
J - result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
< - result less than indicated reporting limit (shown in parentheses)
Bold values indicate NHDES GW-1 exceedances
Bold values in grey indicate NHDES GW-2 exceedances
NA - ICL not established for this parameter
-- - not detected

Table 9 - Summary of Water Well Construction, Cedar Creek Development, Barrington, NH

Well ID	Address	Tax Map Number	Lot Number	Date Completed	Builder	Driller Name	Type	Use	Total Depth (ft)	Depth to Bedrock (ft)	Casing (ft)	Yield (gal/min)	Static Water Level (ft)
015.1423	24 Cedar Creek	262	1	5/9/2008	Four Star Builders	Comac Pump & Well LLC	Bedrock	Domestic	405	32	60	8	26
015.1479	26 Cedar Creek	262-14	2	8/31/2009	Cain Development	Clearwater Artesian Well Co	Bedrock	Domestic	437	57	88	60	--
015.1429	28 Cedar Creek	262-14	3	11/5/2008	Patco Construction	Drillrite Inc.	Bedrock	Domestic	300	42	75	3	--
015.1458	34 Cedar Creek	262	4	3/17/2009	JP Ventures	Comac Pump & Well LLC	Bedrock	Domestic	385	25	90	100	0
015.1489	38 Cedar Creek	262	5	10/12/2009	Four Star Builders	Comac Pump & Well LLC	Bedrock	Domestic	305	10	44	45	2
015.1475	40 Cedar Creek	262	6	7/25/2009	Four Star Builders	Comac Pump & Well LLC	Bedrock	Domestic	485	13	40	5	8
015.1496	44 Cedar Creek	262	7	4/15/2010	Four Star Builders	Comac Pump & Well LLC	Bedrock	Domestic	205	24	40	70	6
015.1497	45 Cedar Creek	262	8	4/16/2010	Four Star Builders	Comac Pump & Well LLC	Bedrock	Domestic	225	22	40	45	10
1-10821	43 Cedar Creek	262	10	4/22/2013	JP Ventures	Contoocook Artesian Well	Bedrock	Domestic	180	24	42	24	0
1-10809	41 Cedar Creek	262	11	3/15/2013	JP Ventures	Contoocook Artesian Well	Bedrock	Domestic	300	24	42	20	25
015.1524	39 Cedar Creek	262	12	4/20/2010	JP Ventures	Comac Pump & Well LLC	Bedrock	Domestic	325	14	40	4	80
015.1447	37 Cedar Creek	262-14	13	3/12/2009	Mueller	Drillrite Inc.	Bedrock	Domestic	500	23	50	4	--
015.1488	31 Cedar Creek	262	14	10/8/2009	Four Star Builders	Comac Pump & Well LLC	Bedrock	Domestic	325	29	50	40	45
015.1499	29 Cedar Creek	260	15	1/21/2010	Four Star Builders	Comac Pump & Well LLC	Bedrock	Domestic	245	6	40	15	--
015.1498	27 Cedar Creek	262	16	1/17/2010	Four Star Builders	Comac Pump & Well LLC	Bedrock	Domestic	205	8	40	13	10
015.1465	25 Cedar Creek	262	17	7/7/2009	Cain Development	Clearwater Artesian Well Co Inc.	Bedrock	Domestic	280	22	60	10	--
015.1437	23 Cedar Creek	262	18	10/10/2008	Four Star Builders	Comac Pump & Well LLC	Bedrock	Domestic	305	51	70	15	27





TIBBETTS ROAD SITE
BARRINGTON, NEW HAMPSHIRE

SITE LOCATION MAP

ARCADIS

FIGURE
1

CITY: NOVI DIV/GROUP: ENV DB: KW PIC: EC PM: DS TM: PJC
Project (Project #) MA000725
G:\GIS\Project Files\Ford\TibbetsRoad\Documents\SiteLocation.mxd

TIBBETTS ROAD
BARRINGTON, NEW HAMPSHIRE

SITE LAYOUT MAP

ARCADIS

FIGURE
2

CITY: KNOXVILLE DIV: ENV DB: A.SMITH PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
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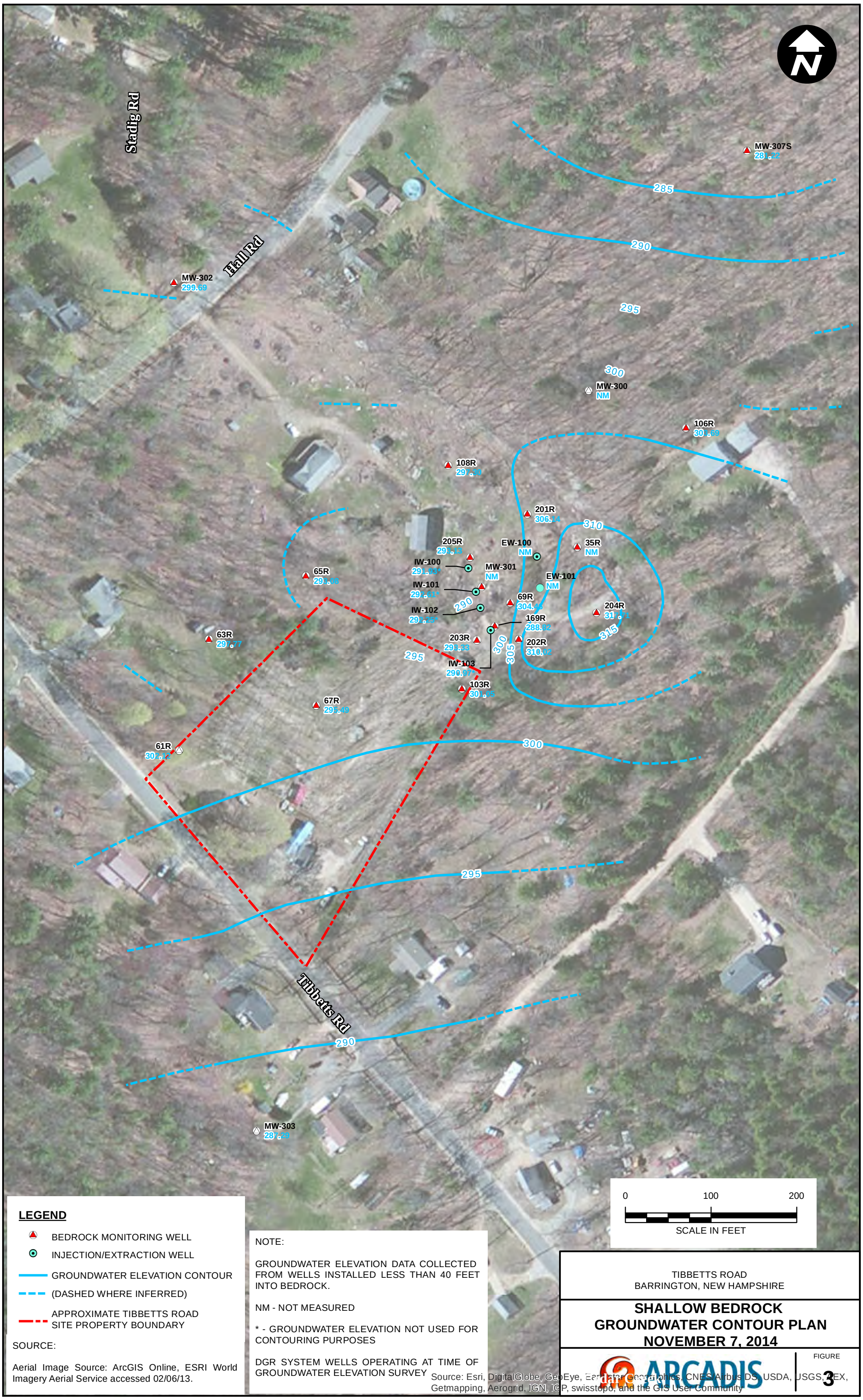

TIBBETTS ROAD
BARRINGTON, NEW HAMPSHIRE

SHALLOW BEDROCK GROUNDWATER CONTOUR PLAN NOVEMBER 7, 2014

ARCADIS

FIGURE 3

CITY: KNOXVILLE DIV: ENV DB: A.SMITH PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
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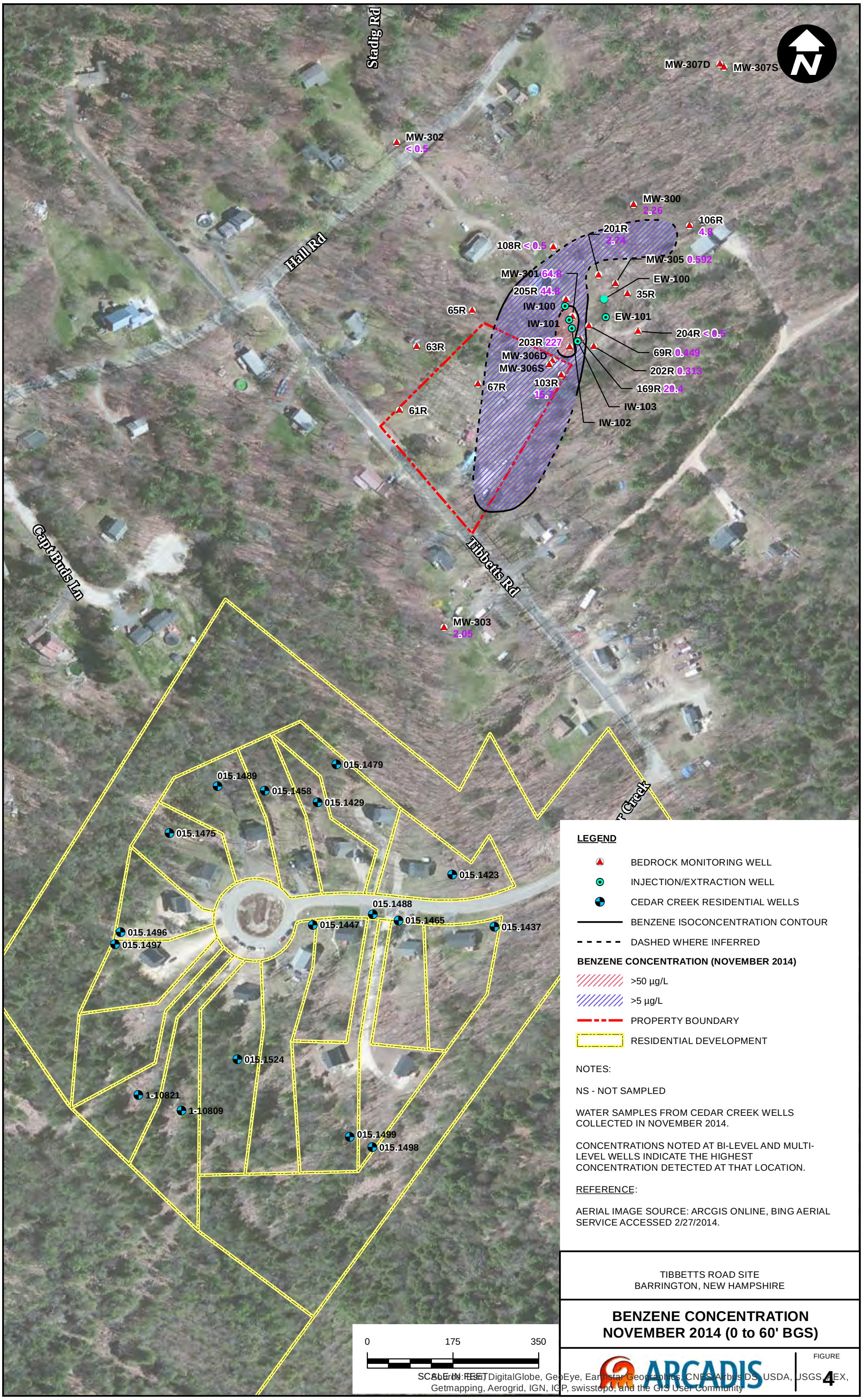

LEGEND

- BEDROCK MONITORING WELL
- INJECTION/EXTRACTION WELL
- CEDAR CREEK RESIDENTIAL WELLS
- BENZENE ISOCONCENTRATION CONTOUR
- DASHED WHERE INFERRED

BENZENE CONCENTRATION (NOVEMBER 2014)

- >50 µg/L
- >5 µg/L
- PROPERTY BOUNDARY
- RESIDENTIAL DEVELOPMENT

NOTES:

NS - NOT SAMPLED

WATER SAMPLES FROM CEDAR CREEK WELLS COLLECTED IN NOVEMBER 2014.

CONCENTRATIONS NOTED AT BI-LEVEL AND MULTI-LEVEL WELLS INDICATE THE HIGHEST CONCENTRATION DETECTED AT THAT LOCATION.

REFERENCE:

AERIAL IMAGE SOURCE: ARCGIS ONLINE, BING AERIAL SERVICE ACCESSED 2/27/2014.

TIBBETTS ROAD SITE
BARRINGTON, NEW HAMPSHIRE

BENZENE CONCENTRATION NOVEMBER 2014 (0 to 60' BGS)

ARCADIS

FIGURE
4

CITY: KNOXVILLE DIV: ENV DB: A.SMITH PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
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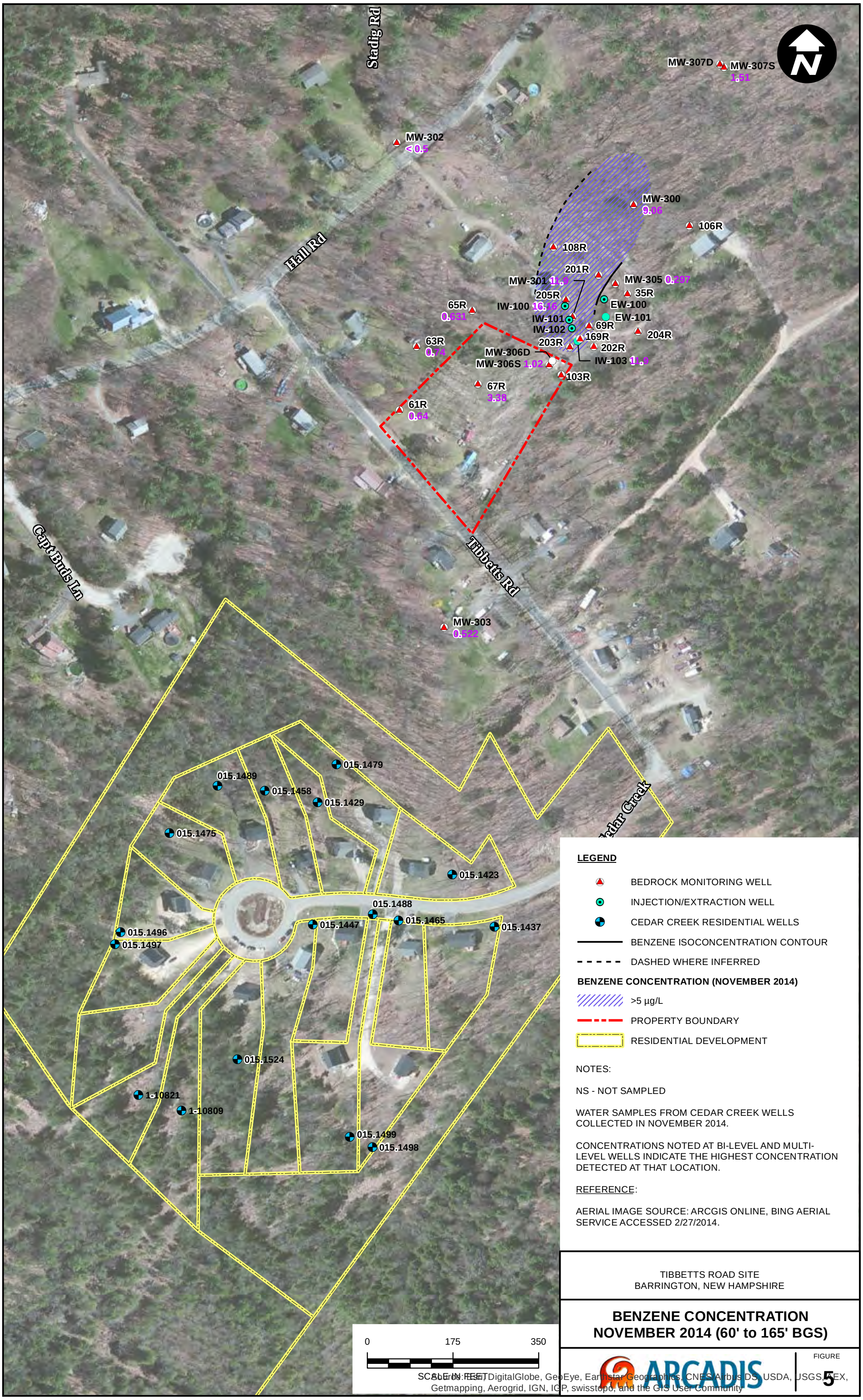

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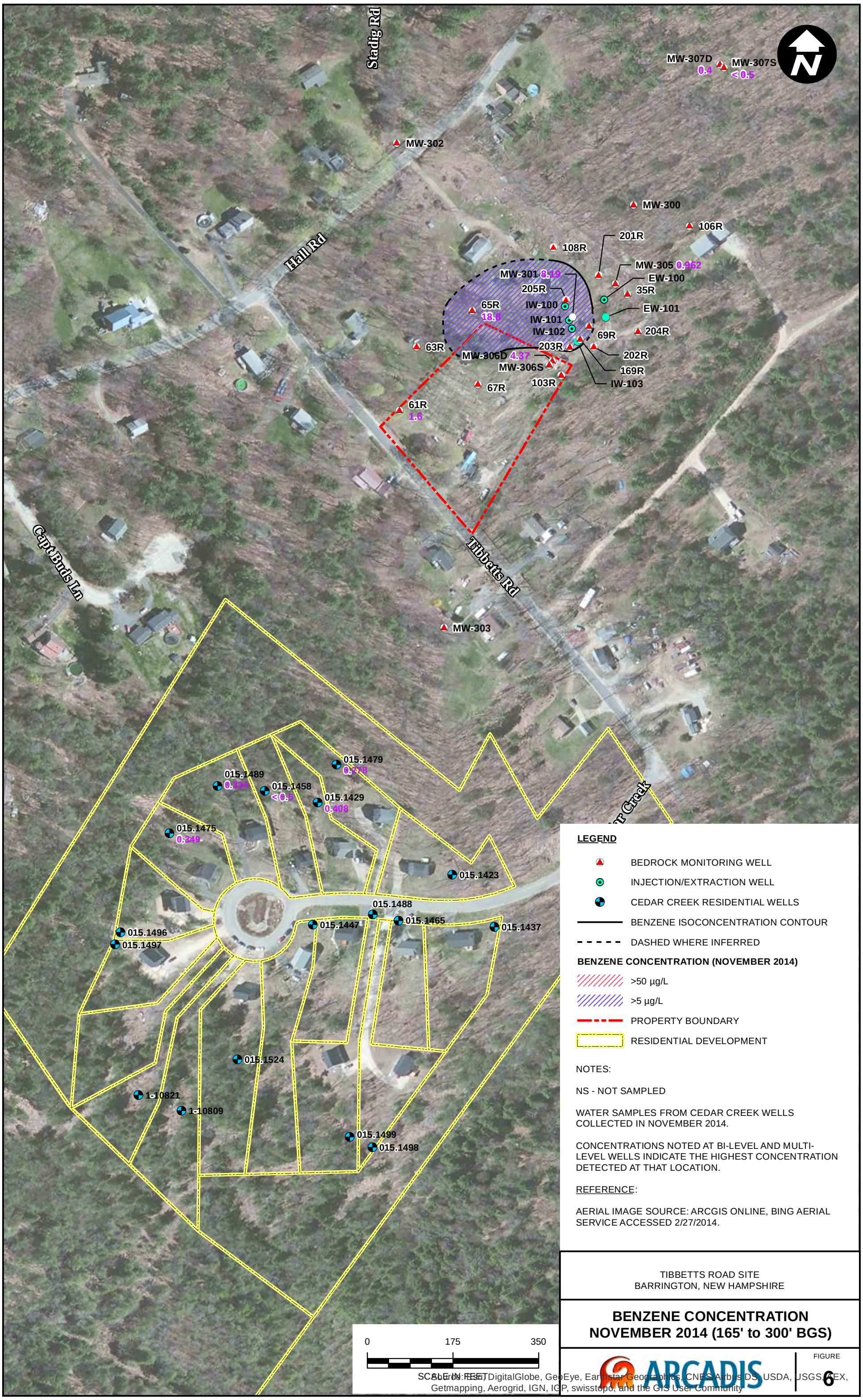

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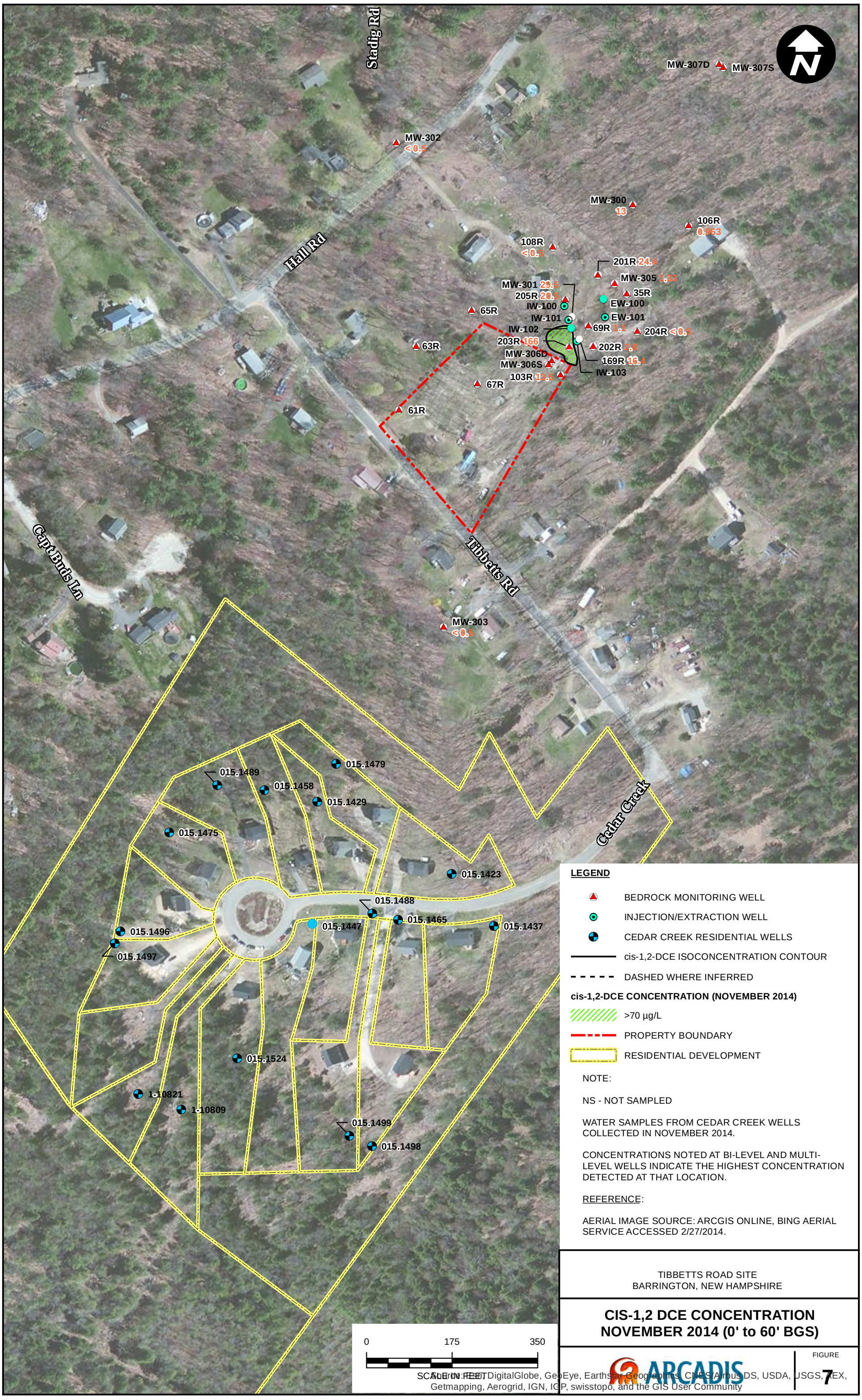

CITY: KNOXVILLE DIV: ENV DB: A.SMITH PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
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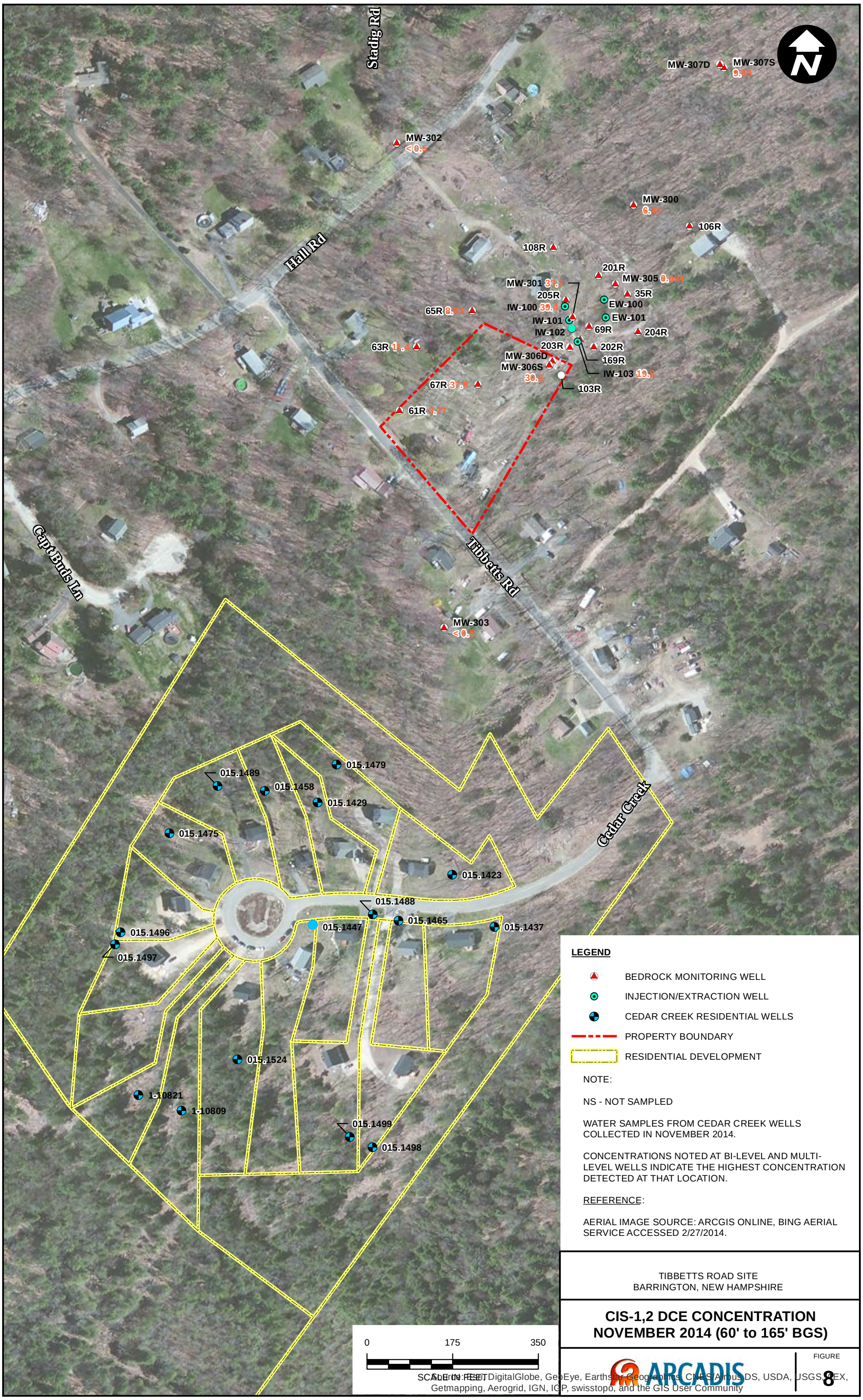

TIBBETTS ROAD SITE
BARRINGTON, NEW HAMPSHIRE

CIS-1,2 DCE CONCENTRATION NOVEMBER 2014 (60' to 165' BGS)

ARCADIS

FIGURE
8

CITY: KNOXVILLE DIV: ENV DB: A.SMITH PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
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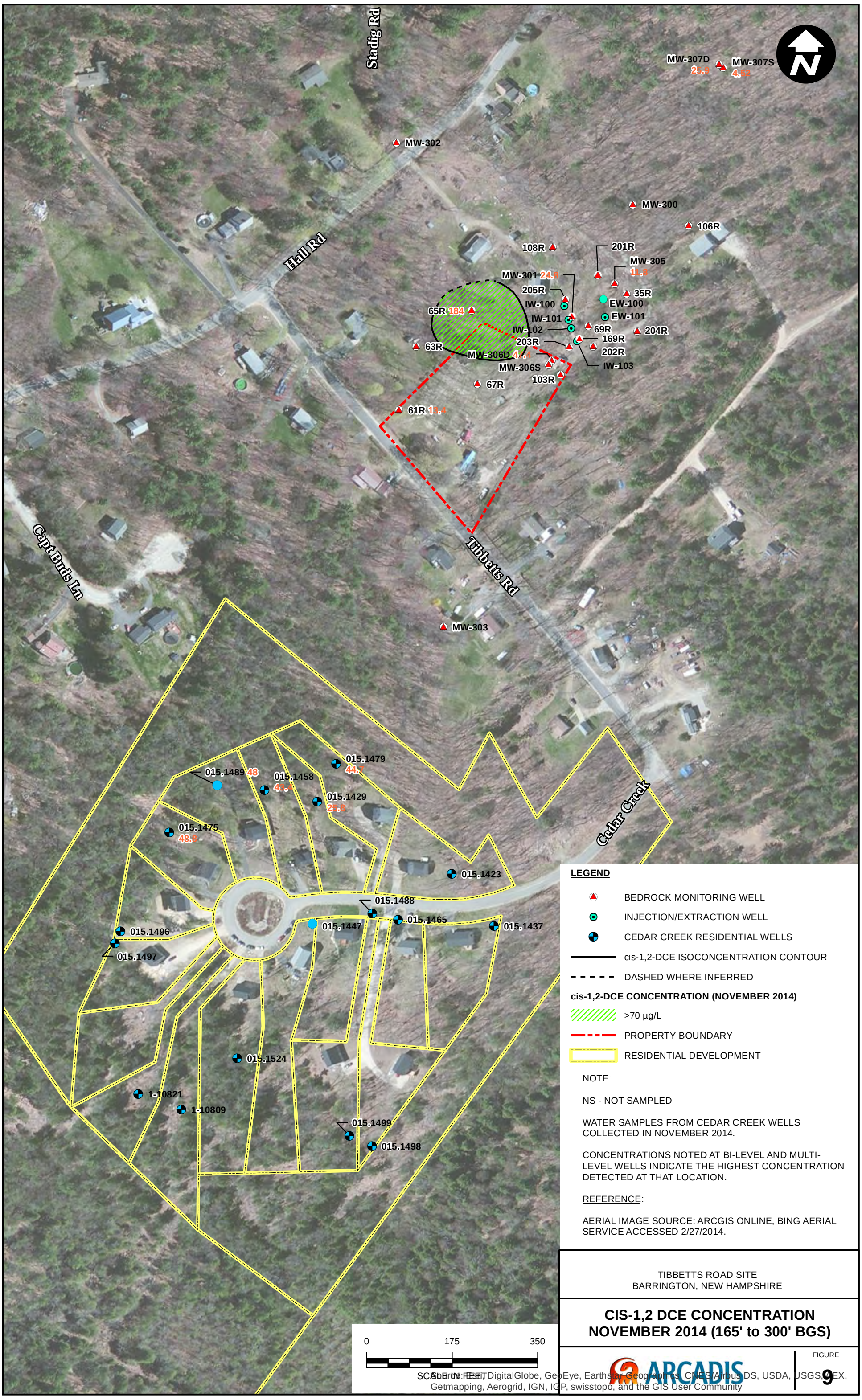

LEGEND

- BEDROCK MONITORING WELL
- INJECTION/EXTRACTION WELL
- CEDAR CREEK RESIDENTIAL WELLS
- cis-1,2-DCE ISOCONCENTRATION CONTOUR
- DASHED WHERE INFERRED

cis-1,2-DCE CONCENTRATION (NOVEMBER 2014)

- >70 µg/L
- PROPERTY BOUNDARY
- RESIDENTIAL DEVELOPMENT

NOTE:

NS - NOT SAMPLED

WATER SAMPLES FROM CEDAR CREEK WELLS COLLECTED IN NOVEMBER 2014.

CONCENTRATIONS NOTED AT BI-LEVEL AND MULTI-LEVEL WELLS INDICATE THE HIGHEST CONCENTRATION DETECTED AT THAT LOCATION.

REFERENCE:

AERIAL IMAGE SOURCE: ARCGIS ONLINE, BING AERIAL SERVICE ACCESSED 2/27/2014.

TIBBETTS ROAD SITE
BARRINGTON, NEW HAMPSHIRE

CIS-1,2 DCE CONCENTRATION NOVEMBER 2014 (165' to 300' BGS)

ARCADIS

FIGURE
9

CITY: KNOXVILLE DIV: ENV DB: A.SMITH PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
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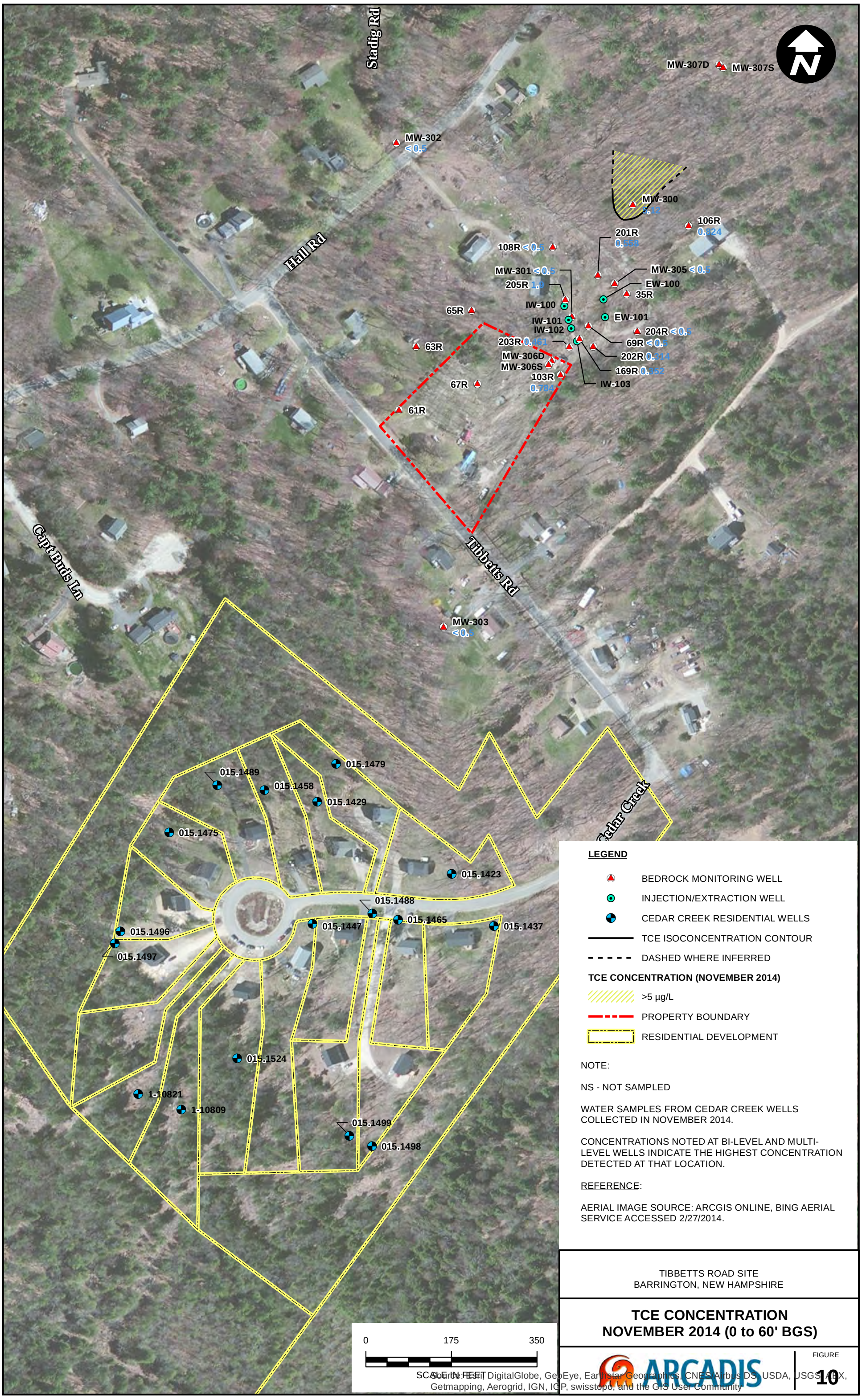

TIBBETTS ROAD SITE
BARRINGTON, NEW HAMPSHIRE

TCE CONCENTRATION NOVEMBER 2014 (0 to 60' BGS)

ARCADIS

FIGURE
10

CITY: KNOXVILLE DIV: ENV DB: A.SMITH PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
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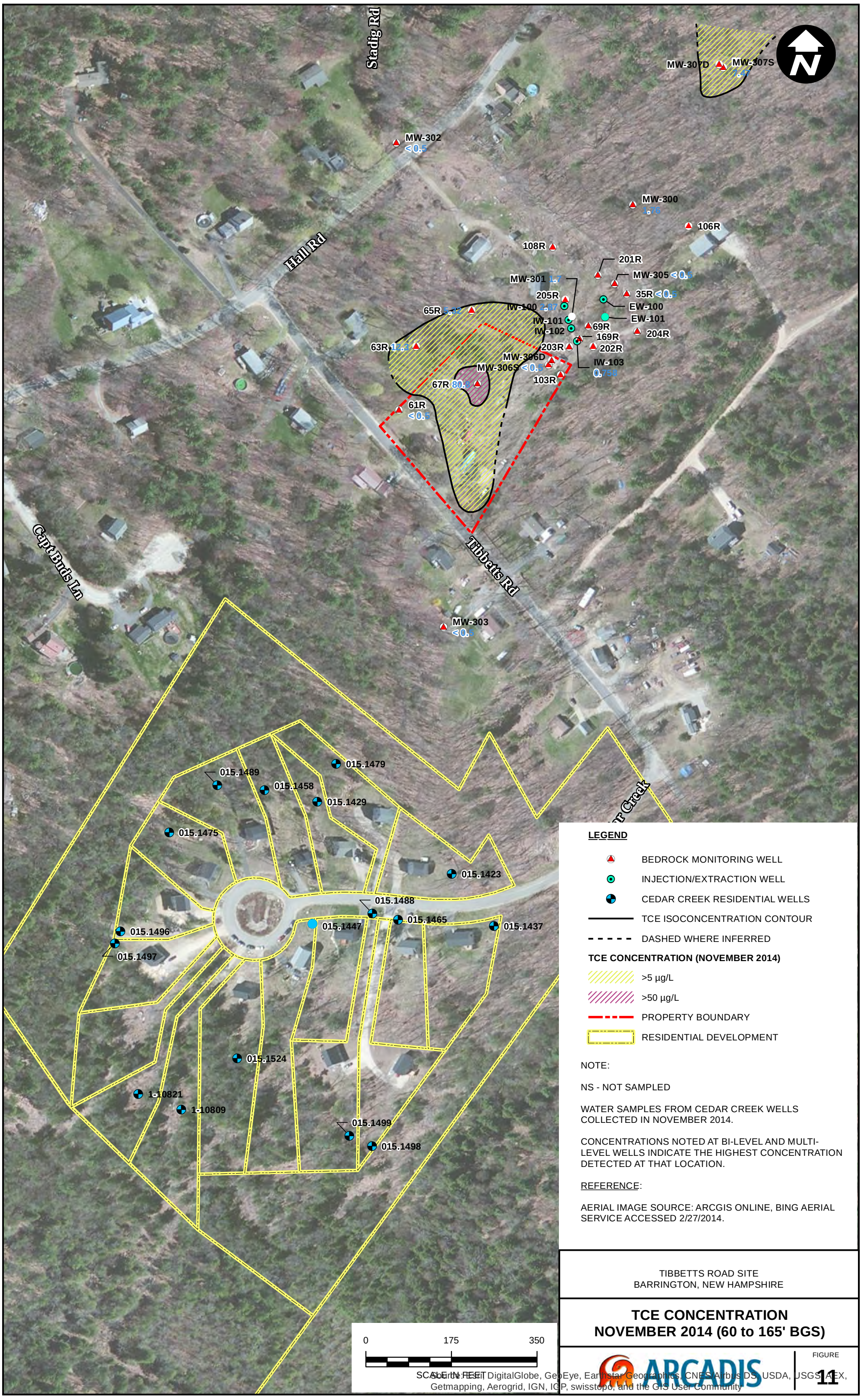


NOTE:

NS - NOT SAMPLED

WATER SAMPLES FROM CEDAR CREEK WELLS COLLECTED IN NOVEMBER 2014.

CONCENTRATIONS NOTED AT BI-LEVEL AND MULTI-LEVEL WELLS INDICATE THE HIGHEST CONCENTRATION DETECTED AT THAT LOCATION.

REFERENCE:

AERIAL IMAGE SOURCE: ARCGIS ONLINE, BING AERIAL SERVICE ACCESSED 2/27/2014.

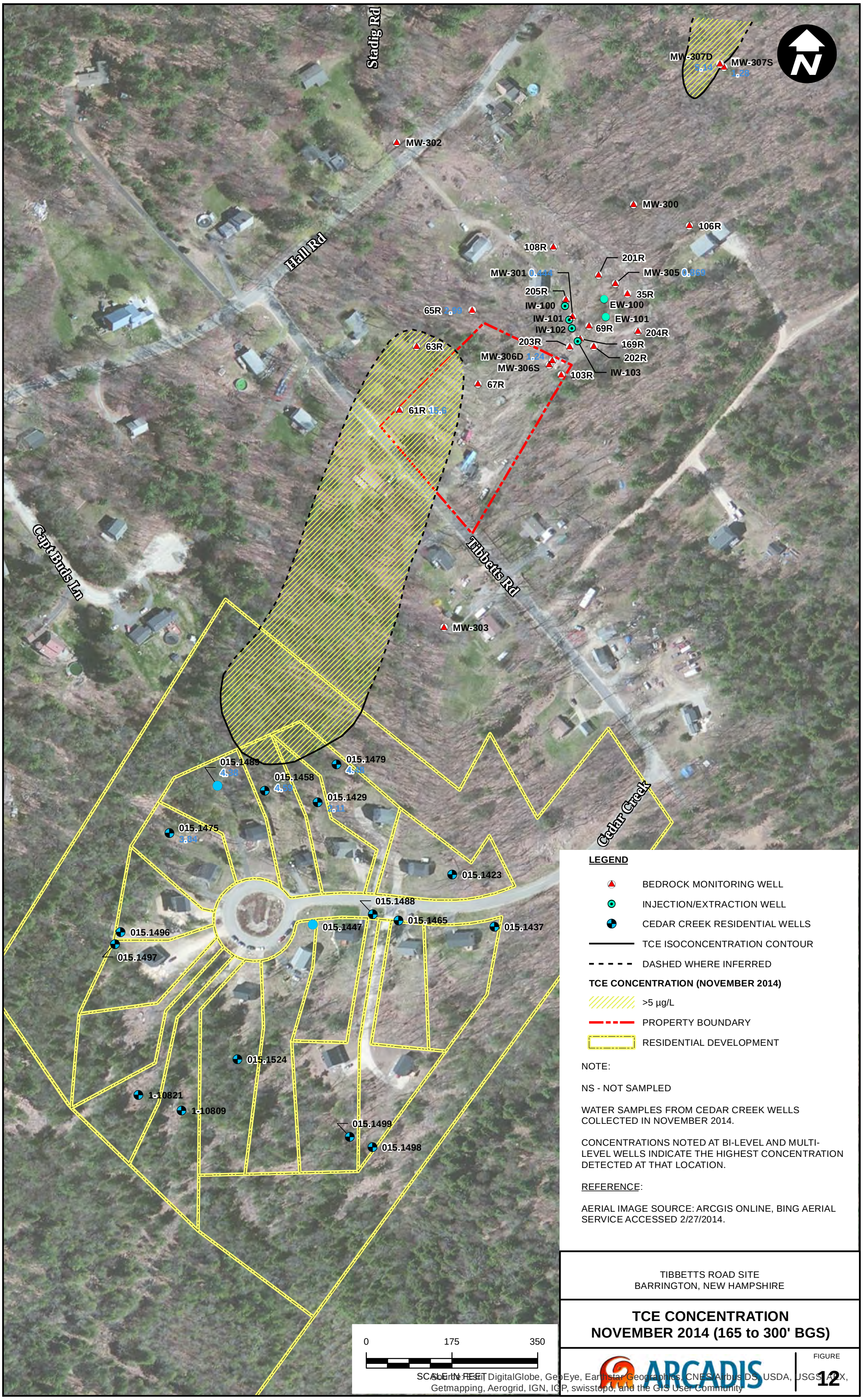
TIBBETTS ROAD SITE
BARRINGTON, NEW HAMPSHIRE

TCE CONCENTRATION
NOVEMBER 2014 (60 to 165' BGS)

ARCADIS

FIGURE
11

CITY: KNOXVILLE DIV: ENV DB: A.SMITH PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
G:\GIS\FordTibbetsRoad\Documents_AnnualReport_2014\11_TCE_2014_CedarCreek_60-165_BGS.mxd PLOTTED: 3/18/2015 12:31:02 PM BY: aasmith



LEGEND

- BEDROCK MONITORING WELL
- INJECTION/EXTRACTION WELL
- CEDAR CREEK RESIDENTIAL WELLS
- TCE ISOCONCENTRATION CONTOUR
- DASHED WHERE INFERRED

TCE CONCENTRATION (NOVEMBER 2014)

- >5 µg/L
- PROPERTY BOUNDARY
- RESIDENTIAL DEVELOPMENT

NOTE:

NS - NOT SAMPLED

WATER SAMPLES FROM CEDAR CREEK WELLS COLLECTED IN NOVEMBER 2014.

CONCENTRATIONS NOTED AT BI-LEVEL AND MULTI-LEVEL WELLS INDICATE THE HIGHEST CONCENTRATION DETECTED AT THAT LOCATION.

REFERENCE:

AERIAL IMAGE SOURCE: ARCGIS ONLINE, BING AERIAL SERVICE ACCESSED 2/27/2014.

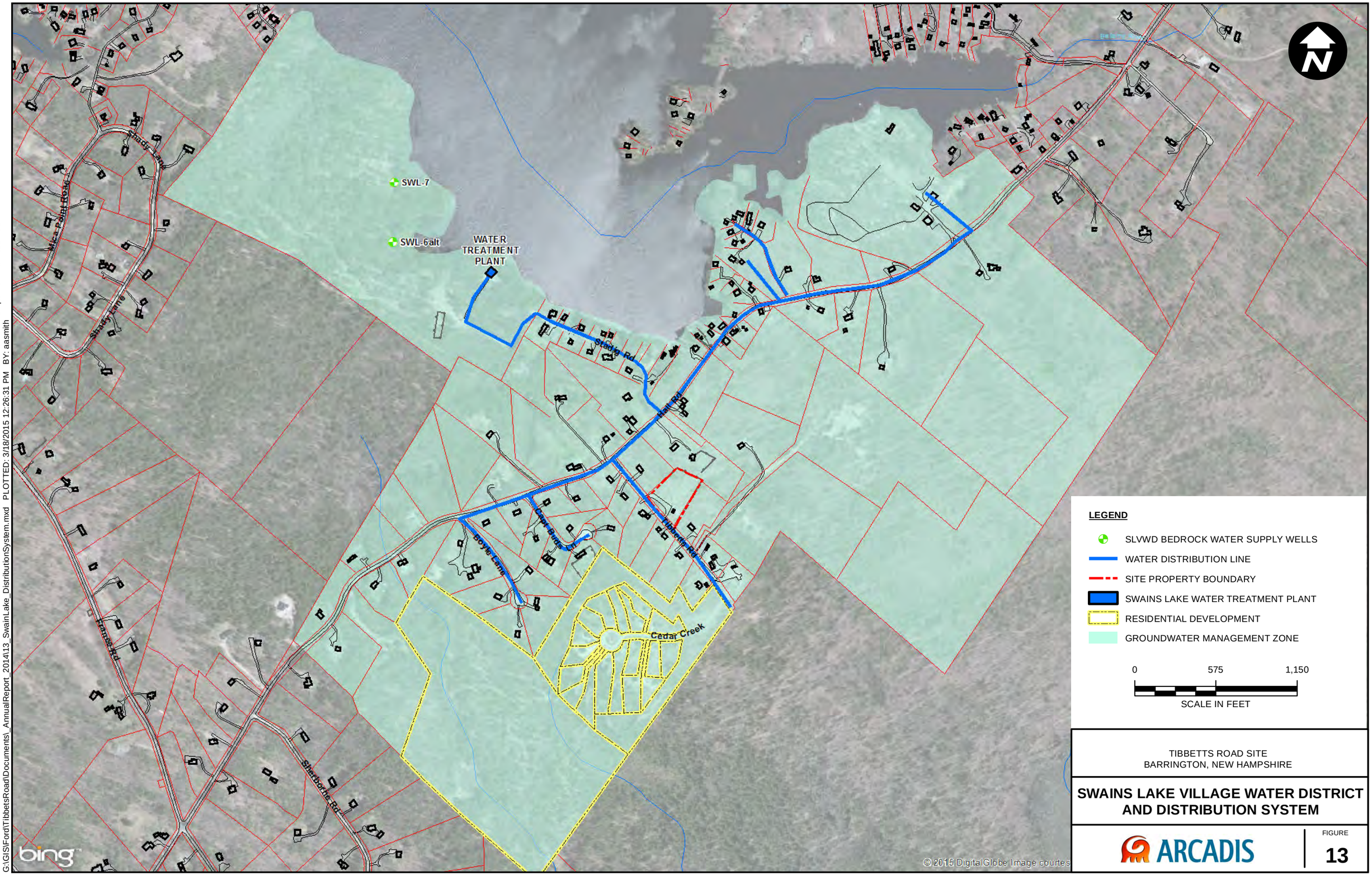
TIBBETTS ROAD SITE
BARRINGTON, NEW HAMPSHIRE

TCE CONCENTRATION
NOVEMBER 2014 (165 to 300' BGS)

ARCADIS

FIGURE
12

CITY: KNOXVILLE DIV: ENV DB: A.SMITH PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
G:\GIS\Ford\TibbetsRoad\Documents_AnnualReport_2014\12_TCE_2014_CedarCreek_165-300_BGS.mxd PLOTTED: 3/18/2015 12:41:48 PM BY: aasmith



TIBBETTS ROAD SITE
BARRINGTON, NEW HAMPSHIRE

SWAINS LAKE VILLAGE WATER DISTRICT AND DISTRIBUTION SYSTEM

ARCADIS

FIGURE
13

CITY: KNOXVILLE DIV: ENV DB: A.SMITH PIC: PM: TM: TR: PROJECT NUMBER: COORDINATE SYSTEM: NAD 1983 StatePlane New Hampshire FIPS 2800 Feet
G:\GIS\Ford\TibbetsRoad\Documents_AnnualReport_2014\13_SwainLake_DistributionSystem.mxd PLOTTED: 3/18/2015 12:26:31 PM BY: aasmith

ARCADIS

Appendix **A**

Laboratory Analytical Reports (Semi-Annual Groundwater Sampling)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-53551-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
5/30/2014 12:08:50 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Definitions 5
Client Sample Results 6
QC Sample Results 19
QC Association 30
Chronicle 32
Method Summary 35
Certification Summary 36
Chain of Custody 37
Receipt Checklists 40

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-53551-1	204R	Water	05/19/14 10:30	05/20/14 08:30
490-53551-2	37D	Water	05/19/14 12:15	05/20/14 08:30
490-53551-3	69R	Water	05/19/14 13:10	05/20/14 08:30
490-53551-4	202R	Water	05/19/14 14:20	05/20/14 08:30
490-53551-5	EW-3S	Water	05/19/14 10:25	05/20/14 08:30
490-53551-6	175D	Water	05/19/14 11:00	05/20/14 08:30
490-53551-7	75D	Water	05/19/14 11:25	05/20/14 08:30
490-53551-8	103R	Water	05/19/14 14:45	05/20/14 08:30
490-53551-9	61R (75-90)	Water	05/19/14 10:15	05/20/14 08:30
490-53551-10	61RC (183-198)	Water	05/19/14 11:40	05/20/14 08:30
490-53551-11	67R (83-98)	Water	05/19/14 14:45	05/20/14 08:30
490-53551-12	Trip Blank	Water	04/30/14 00:01	05/20/14 08:30
490-53551-13	67R (149-164)	Water	05/19/14 15:50	05/20/14 08:30

Job ID: 490-53551-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-53551-1

Comments
No additional comments.

Receipt
The samples were received on 5/20/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.7º C.

GC/MS VOA
Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 165509 recovered outside control limits for the following analytes: chlorodibromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

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

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

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.
F1	MS and/or MSD Recovery exceeds the 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 204R

Date Collected: 05/19/14 10:30
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/29/14 14:03	1
Benzene	ND		0.500	0.200	ug/L			05/29/14 14:03	1
Bromoform	ND		0.500	0.290	ug/L			05/29/14 14:03	1
Bromomethane	ND		0.500	0.350	ug/L			05/29/14 14:03	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/29/14 14:03	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/29/14 14:03	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/29/14 14:03	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/29/14 14:03	1
Chlorodibromomethane	ND	*	0.500	0.250	ug/L			05/29/14 14:03	1
Chloroethane	ND		0.500	0.360	ug/L			05/29/14 14:03	1
Chloroform	ND		0.500	0.230	ug/L			05/29/14 14:03	1
Chloromethane	ND		0.500	0.360	ug/L			05/29/14 14:03	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/29/14 14:03	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 14:03	1
Dibromomethane	ND		0.500	0.450	ug/L			05/29/14 14:03	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/29/14 14:03	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/29/14 14:03	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/29/14 14:03	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/29/14 14:03	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/29/14 14:03	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/29/14 14:03	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/29/14 14:03	1
2-Hexanone	ND		5.00	1.28	ug/L			05/29/14 14:03	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/29/14 14:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/29/14 14:03	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/29/14 14:03	1
o-Xylene	ND		0.500	0.200	ug/L			05/29/14 14:03	1
Styrene	ND		0.500	0.280	ug/L			05/29/14 14:03	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/29/14 14:03	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/29/14 14:03	1
Toluene	**0.313**	**J**	0.500	0.170	ug/L			05/29/14 14:03	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/29/14 14:03	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 14:03	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/29/14 14:03	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 14:03	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 14:03	1
Trichloroethene	ND		0.500	0.200	ug/L			05/29/14 14:03	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/29/14 14:03	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/29/14 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*05/29/14 14:03*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*05/29/14 14:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*05/29/14 14:03*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*05/29/14 14:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0108**		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 19:38	1
Manganese	**0.0647**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 19:38	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 37D

Date Collected: 05/19/14 12:15
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.33**		5.00	2.66	ug/L			05/28/14 17:49	1
Benzene	ND		0.500	0.200	ug/L			05/28/14 17:49	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 17:49	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 17:49	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 17:49	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 17:49	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 17:49	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 17:49	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 17:49	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 17:49	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 17:49	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 17:49	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/28/14 17:49	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 17:49	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 17:49	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 17:49	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 17:49	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 17:49	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 17:49	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 17:49	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 17:49	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/28/14 17:49	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 17:49	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 17:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 17:49	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 17:49	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 17:49	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 17:49	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 17:49	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 17:49	1
Toluene	ND		0.500	0.170	ug/L			05/28/14 17:49	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/28/14 17:49	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 17:49	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 17:49	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 17:49	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 17:49	1
Trichloroethene	ND		0.500	0.200	ug/L			05/28/14 17:49	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 17:49	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*05/28/14 17:49*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*05/28/14 17:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*05/28/14 17:49*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*05/28/14 17:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0934**		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 19:48	1
Manganese	**4.42**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 19:48	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 69R

Date Collected: 05/19/14 13:10
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.11**	**J**	5.00	2.66	ug/L			05/28/14 18:14	1
Benzene	**3.10**		0.500	0.200	ug/L			05/28/14 18:14	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 18:14	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 18:14	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 18:14	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 18:14	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 18:14	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 18:14	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 18:14	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 18:14	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 18:14	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 18:14	1
cis-1,2-Dichloroethene	**8.10**		0.500	0.210	ug/L			05/28/14 18:14	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 18:14	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 18:14	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 18:14	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 18:14	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 18:14	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 18:14	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 18:14	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 18:14	1
Ethylbenzene	**1.68**		0.500	0.190	ug/L			05/28/14 18:14	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 18:14	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 18:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 18:14	1
m-Xylene & p-Xylene	**1.48**		0.500	0.380	ug/L			05/28/14 18:14	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 18:14	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 18:14	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 18:14	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 18:14	1
Toluene	**21.0**		0.500	0.170	ug/L			05/28/14 18:14	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/28/14 18:14	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 18:14	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 18:14	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 18:14	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 18:14	1
Trichloroethene	**0.344**	**J**	0.500	0.200	ug/L			05/28/14 18:14	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 18:14	1
Xylenes, Total	**1.56**		1.50	0.580	ug/L			05/28/14 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*05/28/14 18:14*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*05/28/14 18:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*05/28/14 18:14*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*05/28/14 18:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0671**		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 19:52	1
Manganese	**1.88**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 19:52	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 202R

Date Collected: 05/19/14 14:20
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.36**		5.00	2.66	ug/L			05/28/14 18:40	1
Benzene	ND		0.500	0.200	ug/L			05/28/14 18:40	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 18:40	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 18:40	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 18:40	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 18:40	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 18:40	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 18:40	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 18:40	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 18:40	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 18:40	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 18:40	1
cis-1,2-Dichloroethene	**2.57**		0.500	0.210	ug/L			05/28/14 18:40	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 18:40	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 18:40	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 18:40	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 18:40	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 18:40	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 18:40	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 18:40	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 18:40	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/28/14 18:40	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 18:40	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 18:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 18:40	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 18:40	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 18:40	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 18:40	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 18:40	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 18:40	1
Toluene	ND		0.500	0.170	ug/L			05/28/14 18:40	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/28/14 18:40	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 18:40	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 18:40	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 18:40	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 18:40	1
Trichloroethene	**0.366**	**J**	0.500	0.200	ug/L			05/28/14 18:40	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 18:40	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/28/14 18:40*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*05/28/14 18:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*05/28/14 18:40*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*05/28/14 18:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0196**		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 19:55	1
Manganese	**2.09**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 19:55	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: EW-3S

Date Collected: 05/19/14 10:25
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/28/14 19:06	1
Benzene	ND		0.500	0.200	ug/L			05/28/14 19:06	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 19:06	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 19:06	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 19:06	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 19:06	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 19:06	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 19:06	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 19:06	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 19:06	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 19:06	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 19:06	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/28/14 19:06	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 19:06	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 19:06	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 19:06	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 19:06	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 19:06	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 19:06	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 19:06	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 19:06	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/28/14 19:06	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 19:06	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 19:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 19:06	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 19:06	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 19:06	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 19:06	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 19:06	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 19:06	1
Toluene	ND		0.500	0.170	ug/L			05/28/14 19:06	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/28/14 19:06	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 19:06	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 19:06	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 19:06	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 19:06	1
Trichloroethene	ND		0.500	0.200	ug/L			05/28/14 19:06	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 19:06	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/28/14 19:06*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*05/28/14 19:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*05/28/14 19:06*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*05/28/14 19:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 19:59	1
Manganese	**0.0696**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 19:59	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 175D

Date Collected: 05/19/14 11:00
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/28/14 19:32	1
Benzene	ND		0.500	0.200	ug/L			05/28/14 19:32	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 19:32	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 19:32	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 19:32	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 19:32	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 19:32	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 19:32	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 19:32	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 19:32	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 19:32	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 19:32	1
cis-1,2-Dichloroethene	**0.722**		0.500	0.210	ug/L			05/28/14 19:32	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 19:32	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 19:32	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 19:32	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 19:32	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 19:32	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 19:32	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 19:32	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 19:32	1
Ethylbenzene	**1.48**		0.500	0.190	ug/L			05/28/14 19:32	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 19:32	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 19:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 19:32	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 19:32	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 19:32	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 19:32	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 19:32	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 19:32	1
Toluene	ND		0.500	0.170	ug/L			05/28/14 19:32	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/28/14 19:32	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 19:32	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 19:32	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 19:32	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 19:32	1
Trichloroethene	ND		0.500	0.200	ug/L			05/28/14 19:32	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 19:32	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/28/14 19:32*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*05/28/14 19:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*05/28/14 19:32*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*05/28/14 19:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 20:02	1
Manganese	**1.03**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 20:02	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 75D

Lab Sample ID: 490-53551-7

Date Collected: 05/19/14 11:25
Date Received: 05/20/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/28/14 19:58	1
Benzene	ND		0.500	0.200	ug/L			05/28/14 19:58	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 19:58	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 19:58	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 19:58	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 19:58	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 19:58	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 19:58	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 19:58	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 19:58	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 19:58	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 19:58	1
cis-1,2-Dichloroethene	**0.959**		0.500	0.210	ug/L			05/28/14 19:58	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 19:58	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 19:58	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 19:58	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 19:58	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 19:58	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 19:58	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 19:58	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 19:58	1
Ethylbenzene	**0.894**		0.500	0.190	ug/L			05/28/14 19:58	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 19:58	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 19:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 19:58	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 19:58	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 19:58	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 19:58	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 19:58	1
Tetrachloroethene	**0.211**	**J**	0.500	0.140	ug/L			05/28/14 19:58	1
Toluene	**0.183**	**J**	0.500	0.170	ug/L			05/28/14 19:58	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/28/14 19:58	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 19:58	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 19:58	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 19:58	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 19:58	1
Trichloroethene	ND		0.500	0.200	ug/L			05/28/14 19:58	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 19:58	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/28/14 19:58*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*05/28/14 19:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*05/28/14 19:58*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/28/14 19:58*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 20:06	1
Manganese	**1.28**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 20:06	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 103R

Date Collected: 05/19/14 14:45
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/28/14 20:23	1
Benzene	**17.6**		0.500	0.200	ug/L			05/28/14 20:23	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 20:23	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 20:23	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 20:23	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 20:23	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 20:23	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 20:23	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 20:23	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 20:23	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 20:23	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 20:23	1
cis-1,2-Dichloroethene	**18.4**		0.500	0.210	ug/L			05/28/14 20:23	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 20:23	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 20:23	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 20:23	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 20:23	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 20:23	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 20:23	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 20:23	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 20:23	1
Ethylbenzene	**1.59**		0.500	0.190	ug/L			05/28/14 20:23	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 20:23	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 20:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 20:23	1
m-Xylene & p-Xylene	**0.445**	**J**	0.500	0.380	ug/L			05/28/14 20:23	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 20:23	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 20:23	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 20:23	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 20:23	1
Toluene	ND		0.500	0.170	ug/L			05/28/14 20:23	1
trans-1,2-Dichloroethene	**1.60**		0.500	0.230	ug/L			05/28/14 20:23	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 20:23	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 20:23	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 20:23	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 20:23	1
Trichloroethene	**0.403**	**J**	0.500	0.200	ug/L			05/28/14 20:23	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 20:23	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/28/14 20:23*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*05/28/14 20:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 130*		*05/28/14 20:23*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/28/14 20:23*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0160**		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 20:21	1
Manganese	**1.08**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 20:21	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 61R (75-90)

Date Collected: 05/19/14 10:15
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/28/14 20:49	1
Benzene	**1.66**		0.500	0.200	ug/L			05/28/14 20:49	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 20:49	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 20:49	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 20:49	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 20:49	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 20:49	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 20:49	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 20:49	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 20:49	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 20:49	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 20:49	1
cis-1,2-Dichloroethene	**5.05**		0.500	0.210	ug/L			05/28/14 20:49	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 20:49	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 20:49	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 20:49	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 20:49	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 20:49	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 20:49	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 20:49	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 20:49	1
Ethylbenzene	**0.599**		0.500	0.190	ug/L			05/28/14 20:49	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 20:49	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 20:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 20:49	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 20:49	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 20:49	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 20:49	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 20:49	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 20:49	1
Toluene	ND		0.500	0.170	ug/L			05/28/14 20:49	1
trans-1,2-Dichloroethene	**0.697**		0.500	0.230	ug/L			05/28/14 20:49	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 20:49	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 20:49	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 20:49	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 20:49	1
Trichloroethene	ND		0.500	0.200	ug/L			05/28/14 20:49	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 20:49	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*05/28/14 20:49*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*05/28/14 20:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*05/28/14 20:49*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*05/28/14 20:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0145**		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 20:25	1
Manganese	**0.0783**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 20:25	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 61RC (183-198)

Date Collected: 05/19/14 11:40
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/28/14 21:15	1
Benzene	ND		0.500	0.200	ug/L			05/28/14 21:15	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 21:15	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 21:15	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 21:15	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 21:15	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 21:15	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 21:15	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 21:15	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 21:15	1
Chloroform	**1.45**		0.500	0.230	ug/L			05/28/14 21:15	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 21:15	1
cis-1,2-Dichloroethene	**13.2**		0.500	0.210	ug/L			05/28/14 21:15	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 21:15	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 21:15	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 21:15	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 21:15	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 21:15	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 21:15	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 21:15	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 21:15	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/28/14 21:15	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 21:15	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 21:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 21:15	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 21:15	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 21:15	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 21:15	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 21:15	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 21:15	1
Toluene	ND		0.500	0.170	ug/L			05/28/14 21:15	1
trans-1,2-Dichloroethene	**8.21**		0.500	0.230	ug/L			05/28/14 21:15	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 21:15	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 21:15	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 21:15	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 21:15	1
Trichloroethene	**24.4**		0.500	0.200	ug/L			05/28/14 21:15	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 21:15	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/28/14 21:15*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*05/28/14 21:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*		*05/28/14 21:15*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/28/14 21:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0120**		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 20:29	1
Manganese	**0.0204**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 20:29	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 67R (83-98)

Date Collected: 05/19/14 14:45
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.67**	**J**	5.00	2.66	ug/L			05/28/14 21:41	1
Benzene	**5.79**		0.500	0.200	ug/L			05/28/14 21:41	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 21:41	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 21:41	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 21:41	1
Carbon disulfide	**5.40**		0.500	0.220	ug/L			05/28/14 21:41	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 21:41	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 21:41	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 21:41	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 21:41	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 21:41	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 21:41	1
cis-1,2-Dichloroethene	**40.7**		0.500	0.210	ug/L			05/28/14 21:41	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 21:41	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 21:41	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 21:41	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 21:41	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 21:41	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 21:41	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 21:41	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 21:41	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/28/14 21:41	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 21:41	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 21:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 21:41	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 21:41	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 21:41	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 21:41	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 21:41	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 21:41	1
Toluene	**1.39**		0.500	0.170	ug/L			05/28/14 21:41	1
trans-1,2-Dichloroethene	**20.3**		0.500	0.230	ug/L			05/28/14 21:41	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 21:41	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 21:41	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 21:41	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 21:41	1
Trichloroethene	**72.6**		0.500	0.200	ug/L			05/28/14 21:41	1
Vinyl chloride	**0.262**	**J**	0.500	0.180	ug/L			05/28/14 21:41	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*05/28/14 21:41*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*05/28/14 21:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*05/28/14 21:41*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*05/28/14 21:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00860**	**J**	0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 20:32	1
Manganese	ND		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 20:32	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: Trip Blank

Date Collected: 04/30/14 00:01
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/28/14 15:13	1
Benzene	ND		0.500	0.200	ug/L			05/28/14 15:13	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 15:13	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 15:13	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 15:13	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 15:13	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 15:13	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 15:13	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 15:13	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 15:13	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 15:13	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 15:13	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/28/14 15:13	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 15:13	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 15:13	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 15:13	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 15:13	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 15:13	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 15:13	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 15:13	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 15:13	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/28/14 15:13	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 15:13	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 15:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 15:13	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 15:13	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 15:13	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 15:13	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 15:13	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 15:13	1
Toluene	ND		0.500	0.170	ug/L			05/28/14 15:13	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/28/14 15:13	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 15:13	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 15:13	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 15:13	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 15:13	1
Trichloroethene	ND		0.500	0.200	ug/L			05/28/14 15:13	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 15:13	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/28/14 15:13*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*05/28/14 15:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*05/28/14 15:13*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/28/14 15:13*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 67R (149-164)

Date Collected: 05/19/14 15:50
Date Received: 05/20/14 08:30

Lab Sample ID: 490-53551-13

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**18.6**		5.00	2.66	ug/L			05/28/14 22:07	1
Benzene	**1.31**		0.500	0.200	ug/L			05/28/14 22:07	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 22:07	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 22:07	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 22:07	1
Carbon disulfide	**14.7**		0.500	0.220	ug/L			05/28/14 22:07	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 22:07	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 22:07	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 22:07	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 22:07	1
Chloroform	**0.766**		0.500	0.230	ug/L			05/28/14 22:07	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 22:07	1
cis-1,2-Dichloroethene	**8.11**		0.500	0.210	ug/L			05/28/14 22:07	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 22:07	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 22:07	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 22:07	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 22:07	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 22:07	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 22:07	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 22:07	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 22:07	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/28/14 22:07	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 22:07	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 22:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 22:07	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 22:07	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 22:07	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 22:07	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 22:07	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 22:07	1
Toluene	**0.443**	**J**	0.500	0.170	ug/L			05/28/14 22:07	1
trans-1,2-Dichloroethene	**2.51**		0.500	0.230	ug/L			05/28/14 22:07	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 22:07	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 22:07	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 22:07	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 22:07	1
Trichloroethene	**11.3**		0.500	0.200	ug/L			05/28/14 22:07	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 22:07	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/28/14 22:07*	*1*
Dibromofluoromethane (Surr)	*113*		*70 - 130*		*05/28/14 22:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*		*05/28/14 22:07*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/28/14 22:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 20:36	1
Manganese	**0.925**		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 20:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-165226/7
Matrix: Water
Analysis Batch: 165226

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/28/14 14:47	1
Benzene	ND		0.500	0.200	ug/L			05/28/14 14:47	1
Bromoform	ND		0.500	0.290	ug/L			05/28/14 14:47	1
Bromomethane	ND		0.500	0.350	ug/L			05/28/14 14:47	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/28/14 14:47	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/28/14 14:47	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/28/14 14:47	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/28/14 14:47	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/28/14 14:47	1
Chloroethane	ND		0.500	0.360	ug/L			05/28/14 14:47	1
Chloroform	ND		0.500	0.230	ug/L			05/28/14 14:47	1
Chloromethane	ND		0.500	0.360	ug/L			05/28/14 14:47	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/28/14 14:47	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 14:47	1
Dibromomethane	ND		0.500	0.450	ug/L			05/28/14 14:47	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/28/14 14:47	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/28/14 14:47	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/28/14 14:47	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/28/14 14:47	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/28/14 14:47	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/28/14 14:47	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/28/14 14:47	1
2-Hexanone	ND		5.00	1.28	ug/L			05/28/14 14:47	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/28/14 14:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/28/14 14:47	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/28/14 14:47	1
o-Xylene	ND		0.500	0.200	ug/L			05/28/14 14:47	1
Styrene	ND		0.500	0.280	ug/L			05/28/14 14:47	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/28/14 14:47	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/28/14 14:47	1
Toluene	ND		0.500	0.170	ug/L			05/28/14 14:47	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/28/14 14:47	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/28/14 14:47	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/28/14 14:47	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 14:47	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/28/14 14:47	1
Trichloroethene	ND		0.500	0.200	ug/L			05/28/14 14:47	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/28/14 14:47	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/28/14 14:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/28/14 14:47*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*05/28/14 14:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*05/28/14 14:47*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*05/28/14 14:47*	*1*

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

Lab Sample ID: LCS 490-165226/3
Matrix: Water
Analysis Batch: 165226

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	270.3		ug/L		108	54 - 145
Benzene	50.0	48.48		ug/L		97	80 - 121
Bromoform	50.0	59.52		ug/L		119	46 - 145
Bromomethane	50.0	47.50		ug/L		95	41 - 150
2-Butanone (MEK)	250	260.5		ug/L		104	62 - 133
Carbon disulfide	50.0	50.90		ug/L		102	77 - 126
Carbon tetrachloride	50.0	59.37		ug/L		119	64 - 147
Chlorobenzene	50.0	53.16		ug/L		106	80 - 120
Chlorodibromomethane	50.0	64.40		ug/L		129	69 - 133
Chloroethane	50.0	53.35		ug/L		107	72 - 120
Chloroform	50.0	53.85		ug/L		108	73 - 129
Chloromethane	50.0	45.66		ug/L		91	12 - 150
cis-1,2-Dichloroethene	50.0	51.77		ug/L		104	76 - 125
cis-1,3-Dichloropropene	50.0	58.44		ug/L		117	74 - 140
Dibromomethane	50.0	53.65		ug/L		107	71 - 125
Dichlorobromomethane	50.0	55.46		ug/L		111	75 - 129
1,1-Dichloroethane	50.0	51.46		ug/L		103	78 - 125
1,2-Dichloroethane	50.0	56.56		ug/L		113	77 - 121
1,1-Dichloroethene	50.0	50.07		ug/L		100	79 - 124
1,2-Dichloropropane	50.0	49.13		ug/L		98	75 - 120
1,1-Dichloropropene	50.0	53.35		ug/L		107	80 - 122
Ethylbenzene	50.0	50.41		ug/L		101	80 - 130
2-Hexanone	250	304.3		ug/L		122	60 - 142
Methylene Chloride	50.0	50.56		ug/L		101	79 - 123
4-Methyl-2-pentanone (MIBK)	250	286.7		ug/L		115	60 - 137
m-Xylene & p-Xylene	50.0	49.45		ug/L		99	80 - 141
o-Xylene	50.0	50.21		ug/L		100	80 - 127
Styrene	50.0	51.00		ug/L		102	80 - 127
1,1,1,2-Tetrachloroethane	50.0	55.35		ug/L		111	74 - 135
Tetrachloroethene	50.0	57.78		ug/L		116	80 - 126
Toluene	50.0	52.88		ug/L		106	80 - 126
trans-1,2-Dichloroethene	50.0	51.36		ug/L		103	79 - 126
trans-1,3-Dichloropropene	50.0	60.53		ug/L		121	63 - 134
1,3,5-Trichlorobenzene	50.0	51.33		ug/L		103	70 - 130
1,1,1-Trichloroethane	50.0	57.25		ug/L		115	78 - 135
1,1,2-Trichloroethane	50.0	54.16		ug/L		108	80 - 124
Trichloroethene	50.0	51.56		ug/L		103	80 - 123
Vinyl chloride	50.0	48.16		ug/L		96	68 - 120
Xylenes, Total	100	99.66		ug/L		100	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

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

Lab Sample ID: LCSD 490-165226/4
Matrix: Water
Analysis Batch: 165226

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
Acetone	250	270.7		ug/L		108	54 - 145	0	21
Benzene	50.0	49.14		ug/L		98	80 - 121	1	17
Bromoform	50.0	58.50		ug/L		117	46 - 145	2	16
Bromomethane	50.0	47.90		ug/L		96	41 - 150	1	50
2-Butanone (MEK)	250	256.2		ug/L		102	62 - 133	2	19
Carbon disulfide	50.0	51.48		ug/L		103	77 - 126	1	21
Carbon tetrachloride	50.0	59.90		ug/L		120	64 - 147	1	19
Chlorobenzene	50.0	53.73		ug/L		107	80 - 120	1	14
Chlorodibromomethane	50.0	64.58		ug/L		129	69 - 133	0	15
Chloroethane	50.0	53.39		ug/L		107	72 - 120	0	20
Chloroform	50.0	53.60		ug/L		107	73 - 129	0	18
Chloromethane	50.0	46.38		ug/L		93	12 - 150	2	31
cis-1,2-Dichloroethene	50.0	50.76		ug/L		102	76 - 125	2	17
cis-1,3-Dichloropropene	50.0	56.08		ug/L		112	74 - 140	4	15
Dibromomethane	50.0	55.36		ug/L		111	71 - 125	3	16
Dichlorobromomethane	50.0	56.36		ug/L		113	75 - 129	2	18
1,1-Dichloroethane	50.0	53.04		ug/L		106	78 - 125	3	17
1,2-Dichloroethane	50.0	57.02		ug/L		114	77 - 121	1	17
1,1-Dichloroethene	50.0	51.11		ug/L		102	79 - 124	2	17
1,2-Dichloropropane	50.0	49.85		ug/L		100	75 - 120	1	17
1,1-Dichloropropene	50.0	54.38		ug/L		109	80 - 122	2	17
Ethylbenzene	50.0	51.39		ug/L		103	80 - 130	2	15
2-Hexanone	250	297.1		ug/L		119	60 - 142	2	15
Methylene Chloride	50.0	52.39		ug/L		105	79 - 123	4	17
4-Methyl-2-pentanone (MIBK)	250	280.4		ug/L		112	60 - 137	2	17
m-Xylene & p-Xylene	50.0	50.18		ug/L		100	80 - 141	1	16
o-Xylene	50.0	50.64		ug/L		101	80 - 127	1	14
Styrene	50.0	50.84		ug/L		102	80 - 127	0	24
1,1,1,2-Tetrachloroethane	50.0	56.43		ug/L		113	74 - 135	2	16
Tetrachloroethene	50.0	57.48		ug/L		115	80 - 126	1	16
Toluene	50.0	52.18		ug/L		104	80 - 126	1	15
trans-1,2-Dichloroethene	50.0	51.96		ug/L		104	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	59.91		ug/L		120	63 - 134	1	14
1,3,5-Trichlorobenzene	50.0	50.82		ug/L		102	70 - 130	1	30
1,1,1-Trichloroethane	50.0	56.12		ug/L		112	78 - 135	2	17
1,1,2-Trichloroethane	50.0	54.15		ug/L		108	80 - 124	0	15
Trichloroethene	50.0	51.41		ug/L		103	80 - 123	0	17
Vinyl chloride	50.0	49.49		ug/L		99	68 - 120	3	17
Xylenes, Total	100	100.8		ug/L		101	80 - 132	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: 490-53503-C-8 MS
Matrix: Water
Analysis Batch: 165226

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	236.5		ug/L		95	45 - 141
Benzene	ND		50.0	49.99		ug/L		100	75 - 133
Bromoform	ND		50.0	59.98		ug/L		120	42 - 147
Bromomethane	ND		50.0	28.18		ug/L		56	16 - 163
2-Butanone (MEK)	ND		250	234.3		ug/L		94	50 - 138
Carbon disulfide	ND		50.0	50.95		ug/L		102	48 - 152
Carbon tetrachloride	ND		50.0	66.48		ug/L		133	62 - 164
Chlorobenzene	ND		50.0	54.30		ug/L		109	80 - 129
Chlorodibromomethane	ND		50.0	67.16		ug/L		134	66 - 140
Chloroethane	ND		50.0	51.95		ug/L		104	58 - 137
Chloroform	ND		50.0	56.30		ug/L		113	66 - 138
Chloromethane	ND		50.0	39.93		ug/L		80	10 - 169
cis-1,2-Dichloroethene	ND		50.0	53.17		ug/L		106	68 - 138
cis-1,3-Dichloropropene	ND		50.0	59.56		ug/L		119	71 - 141
Dibromomethane	ND		50.0	55.97		ug/L		112	58 - 140
Dichlorobromomethane	ND		50.0	60.12		ug/L		120	70 - 140
1,1-Dichloroethane	ND		50.0	55.59		ug/L		111	71 - 139
1,2-Dichloroethane	ND		50.0	61.32		ug/L		123	64 - 136
1,1-Dichloroethene	ND		50.0	52.53		ug/L		105	70 - 142
1,2-Dichloropropane	ND		50.0	50.63		ug/L		101	67 - 131
1,1-Dichloropropene	ND		50.0	56.46		ug/L		113	76 - 139
Ethylbenzene	ND		50.0	53.22		ug/L		106	79 - 139
2-Hexanone	ND		250	301.5		ug/L		121	50 - 150
Methylene Chloride	ND		50.0	50.60		ug/L		101	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	290.4		ug/L		116	50 - 147
m-Xylene & p-Xylene	ND		50.0	50.91		ug/L		102	80 - 153
o-Xylene	ND		50.0	50.77		ug/L		102	74 - 138
Styrene	ND		50.0	52.30		ug/L		105	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	59.63		ug/L		119	73 - 141
Tetrachloroethene	ND		50.0	60.93		ug/L		122	72 - 145
Toluene	ND		50.0	55.34		ug/L		111	75 - 136
trans-1,2-Dichloroethene	ND		50.0	54.48		ug/L		109	66 - 143
trans-1,3-Dichloropropene	ND		50.0	64.18		ug/L		128	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	47.13		ug/L		94	60 - 140
1,1,1-Trichloroethane	ND		50.0	60.22		ug/L		120	76 - 149
1,1,2-Trichloroethane	ND		50.0	55.86		ug/L		112	74 - 134
Trichloroethene	ND		50.0	53.46		ug/L		107	73 - 144
Vinyl chloride	ND		50.0	46.69		ug/L		93	56 - 129
Xylenes, Total	ND		100	101.7		ug/L		102	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

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

Lab Sample ID: 490-53503-D-8 MSD
Matrix: Water
Analysis Batch: 165226

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	230.9		ug/L		92	45 - 141	2	21
Benzene	ND		50.0	50.25		ug/L		100	75 - 133	1	17
Bromoform	ND		50.0	56.99		ug/L		114	42 - 147	5	16
Bromomethane	ND		50.0	33.47		ug/L		67	16 - 163	17	50
2-Butanone (MEK)	ND		250	234.1		ug/L		94	50 - 138	0	19
Carbon disulfide	ND		50.0	50.37		ug/L		101	48 - 152	1	21
Carbon tetrachloride	ND		50.0	66.54		ug/L		133	62 - 164	0	19
Chlorobenzene	ND		50.0	54.33		ug/L		109	80 - 129	0	14
Chlorodibromomethane	ND		50.0	65.47		ug/L		131	66 - 140	3	15
Chloroethane	ND		50.0	51.06		ug/L		102	58 - 137	2	20
Chloroform	ND		50.0	57.10		ug/L		114	66 - 138	1	18
Chloromethane	ND		50.0	39.75		ug/L		79	10 - 169	0	31
cis-1,2-Dichloroethene	ND		50.0	53.16		ug/L		106	68 - 138	0	17
cis-1,3-Dichloropropene	ND		50.0	56.95		ug/L		114	71 - 141	4	15
Dibromomethane	ND		50.0	54.91		ug/L		110	58 - 140	2	16
Dichlorobromomethane	ND		50.0	58.96		ug/L		118	70 - 140	2	18
1,1-Dichloroethane	ND		50.0	53.62		ug/L		107	71 - 139	4	17
1,2-Dichloroethane	ND		50.0	61.20		ug/L		122	64 - 136	0	17
1,1-Dichloroethene	ND		50.0	50.96		ug/L		102	70 - 142	3	17
1,2-Dichloropropane	ND		50.0	49.52		ug/L		99	67 - 131	2	17
1,1-Dichloropropene	ND		50.0	56.69		ug/L		113	76 - 139	0	17
Ethylbenzene	ND		50.0	52.34		ug/L		105	79 - 139	2	15
2-Hexanone	ND		250	291.9		ug/L		117	50 - 150	3	15
Methylene Chloride	ND		50.0	51.91		ug/L		104	64 - 139	3	17
4-Methyl-2-pentanone (MIBK)	ND		250	278.0		ug/L		111	50 - 147	4	17
m-Xylene & p-Xylene	ND		50.0	51.69		ug/L		103	80 - 153	2	16
o-Xylene	ND		50.0	52.09		ug/L		104	74 - 138	3	14
Styrene	ND		50.0	51.63		ug/L		103	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	57.41		ug/L		115	73 - 141	4	16
Tetrachloroethene	ND		50.0	58.94		ug/L		118	72 - 145	3	16
Toluene	ND		50.0	52.76		ug/L		106	75 - 136	5	15
trans-1,2-Dichloroethene	ND		50.0	53.70		ug/L		107	66 - 143	1	16
trans-1,3-Dichloropropene	ND		50.0	60.99		ug/L		122	59 - 135	5	14
1,3,5-Trichlorobenzene	ND		50.0	48.52		ug/L		97	60 - 140	3	30
1,1,1-Trichloroethane	ND		50.0	61.09		ug/L		122	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	54.66		ug/L		109	74 - 134	2	15
Trichloroethene	ND		50.0	52.32		ug/L		105	73 - 144	2	17
Vinyl chloride	ND		50.0	47.35		ug/L		95	56 - 129	1	17
Xylenes, Total	ND		100	103.8		ug/L		104	74 - 141	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: MB 490-165509/7
Matrix: Water
Analysis Batch: 165509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/29/14 13:37	1
Benzene	ND		0.500	0.200	ug/L			05/29/14 13:37	1
Bromoform	ND		0.500	0.290	ug/L			05/29/14 13:37	1
Bromomethane	ND		0.500	0.350	ug/L			05/29/14 13:37	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/29/14 13:37	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/29/14 13:37	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/29/14 13:37	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/29/14 13:37	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/29/14 13:37	1
Chloroethane	ND		0.500	0.360	ug/L			05/29/14 13:37	1
Chloroform	ND		0.500	0.230	ug/L			05/29/14 13:37	1
Chloromethane	ND		0.500	0.360	ug/L			05/29/14 13:37	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/29/14 13:37	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 13:37	1
Dibromomethane	ND		0.500	0.450	ug/L			05/29/14 13:37	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/29/14 13:37	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/29/14 13:37	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/29/14 13:37	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/29/14 13:37	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/29/14 13:37	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/29/14 13:37	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/29/14 13:37	1
2-Hexanone	ND		5.00	1.28	ug/L			05/29/14 13:37	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/29/14 13:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/29/14 13:37	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/29/14 13:37	1
o-Xylene	ND		0.500	0.200	ug/L			05/29/14 13:37	1
Styrene	ND		0.500	0.280	ug/L			05/29/14 13:37	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/29/14 13:37	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/29/14 13:37	1
Toluene	ND		0.500	0.170	ug/L			05/29/14 13:37	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/29/14 13:37	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 13:37	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/29/14 13:37	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 13:37	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 13:37	1
Trichloroethene	ND		0.500	0.200	ug/L			05/29/14 13:37	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/29/14 13:37	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/29/14 13:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*05/29/14 13:37*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*05/29/14 13:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*05/29/14 13:37*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/29/14 13:37*	*1*

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

Lab Sample ID: LCS 490-165509/3
Matrix: Water
Analysis Batch: 165509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	273.3		ug/L		109	54 - 145
Benzene	50.0	47.73		ug/L		95	80 - 121
Bromoform	50.0	58.42		ug/L		117	46 - 145
Bromomethane	50.0	38.53		ug/L		77	41 - 150
2-Butanone (MEK)	250	264.9		ug/L		106	62 - 133
Carbon disulfide	50.0	47.61		ug/L		95	77 - 126
Carbon tetrachloride	50.0	57.42		ug/L		115	64 - 147
Chlorobenzene	50.0	51.12		ug/L		102	80 - 120
Chlorodibromomethane	50.0	64.46		ug/L		129	69 - 133
Chloroethane	50.0	52.52		ug/L		105	72 - 120
Chloroform	50.0	51.77		ug/L		104	73 - 129
Chloromethane	50.0	41.52		ug/L		83	12 - 150
cis-1,2-Dichloroethene	50.0	49.56		ug/L		99	76 - 125
cis-1,3-Dichloropropene	50.0	55.45		ug/L		111	74 - 140
Dibromomethane	50.0	55.08		ug/L		110	71 - 125
Dichlorobromomethane	50.0	56.09		ug/L		112	75 - 129
1,1-Dichloroethane	50.0	49.87		ug/L		100	78 - 125
1,2-Dichloroethane	50.0	59.66		ug/L		119	77 - 121
1,1-Dichloroethene	50.0	48.62		ug/L		97	79 - 124
1,2-Dichloropropane	50.0	48.35		ug/L		97	75 - 120
1,1-Dichloropropene	50.0	51.19		ug/L		102	80 - 122
Ethylbenzene	50.0	47.54		ug/L		95	80 - 130
2-Hexanone	250	301.6		ug/L		121	60 - 142
Methylene Chloride	50.0	48.45		ug/L		97	79 - 123
4-Methyl-2-pentanone (MIBK)	250	277.1		ug/L		111	60 - 137
m-Xylene & p-Xylene	50.0	47.64		ug/L		95	80 - 141
o-Xylene	50.0	48.03		ug/L		96	80 - 127
Styrene	50.0	49.06		ug/L		98	80 - 127
1,1,1,2-Tetrachloroethane	50.0	53.54		ug/L		107	74 - 135
Tetrachloroethene	50.0	51.55		ug/L		103	80 - 126
Toluene	50.0	48.92		ug/L		98	80 - 126
trans-1,2-Dichloroethene	50.0	48.03		ug/L		96	79 - 126
trans-1,3-Dichloropropene	50.0	60.71		ug/L		121	63 - 134
1,3,5-Trichlorobenzene	50.0	45.59		ug/L		91	70 - 130
1,1,1-Trichloroethane	50.0	54.98		ug/L		110	78 - 135
1,1,2-Trichloroethane	50.0	52.78		ug/L		106	80 - 124
Trichloroethene	50.0	48.58		ug/L		97	80 - 123
Vinyl chloride	50.0	45.98		ug/L		92	68 - 120
Xylenes, Total	100	95.67		ug/L		96	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: LCSD 490-165509/4
Matrix: Water
Analysis Batch: 165509

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
Acetone	250	290.6		ug/L		116	54 - 145	6	21
Benzene	50.0	49.62		ug/L		99	80 - 121	4	17
Bromoform	50.0	62.69		ug/L		125	46 - 145	7	16
Bromomethane	50.0	40.65		ug/L		81	41 - 150	5	50
2-Butanone (MEK)	250	269.0		ug/L		108	62 - 133	2	19
Carbon disulfide	50.0	50.27		ug/L		101	77 - 126	5	21
Carbon tetrachloride	50.0	62.04		ug/L		124	64 - 147	8	19
Chlorobenzene	50.0	54.17		ug/L		108	80 - 120	6	14
Chlorodibromomethane	50.0	68.26	*	ug/L		137	69 - 133	6	15
Chloroethane	50.0	52.97		ug/L		106	72 - 120	1	20
Chloroform	50.0	55.51		ug/L		111	73 - 129	7	18
Chloromethane	50.0	43.38		ug/L		87	12 - 150	4	31
cis-1,2-Dichloroethene	50.0	52.27		ug/L		105	76 - 125	5	17
cis-1,3-Dichloropropene	50.0	62.14		ug/L		124	74 - 140	11	15
Dibromomethane	50.0	58.60		ug/L		117	71 - 125	6	16
Dichlorobromomethane	50.0	59.39		ug/L		119	75 - 129	6	18
1,1-Dichloroethane	50.0	53.05		ug/L		106	78 - 125	6	17
1,2-Dichloroethane	50.0	60.30		ug/L		121	77 - 121	1	17
1,1-Dichloroethene	50.0	49.27		ug/L		99	79 - 124	1	17
1,2-Dichloropropane	50.0	51.97		ug/L		104	75 - 120	7	17
1,1-Dichloropropene	50.0	54.17		ug/L		108	80 - 122	6	17
Ethylbenzene	50.0	51.18		ug/L		102	80 - 130	7	15
2-Hexanone	250	325.6		ug/L		130	60 - 142	8	15
Methylene Chloride	50.0	51.78		ug/L		104	79 - 123	7	17
4-Methyl-2-pentanone (MIBK)	250	304.7		ug/L		122	60 - 137	10	17
m-Xylene & p-Xylene	50.0	50.28		ug/L		101	80 - 141	5	16
o-Xylene	50.0	51.29		ug/L		103	80 - 127	7	14
Styrene	50.0	51.87		ug/L		104	80 - 127	6	24
1,1,1,2-Tetrachloroethane	50.0	56.82		ug/L		114	74 - 135	6	16
Tetrachloroethene	50.0	57.21		ug/L		114	80 - 126	10	16
Toluene	50.0	54.86		ug/L		110	80 - 126	11	15
trans-1,2-Dichloroethene	50.0	51.04		ug/L		102	79 - 126	6	16
trans-1,3-Dichloropropene	50.0	66.22		ug/L		132	63 - 134	9	14
1,3,5-Trichlorobenzene	50.0	49.11		ug/L		98	70 - 130	7	30
1,1,1-Trichloroethane	50.0	57.74		ug/L		115	78 - 135	5	17
1,1,2-Trichloroethane	50.0	58.72		ug/L		117	80 - 124	11	15
Trichloroethene	50.0	52.52		ug/L		105	80 - 123	8	17
Vinyl chloride	50.0	48.48		ug/L		97	68 - 120	5	17
Xylenes, Total	100	101.6		ug/L		102	80 - 132	6	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*111*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*119*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

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

Lab Sample ID: 490-53740-J-1 MS
Matrix: Water
Analysis Batch: 165509

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	245.8		ug/L		98	45 - 141
Benzene	ND		50.0	48.64		ug/L		97	75 - 133
Bromoform	ND		50.0	62.07		ug/L		124	42 - 147
Bromomethane	ND		50.0	30.62		ug/L		61	16 - 163
2-Butanone (MEK)	ND		250	256.2		ug/L		102	50 - 138
Carbon disulfide	ND		50.0	48.17		ug/L		96	48 - 152
Carbon tetrachloride	ND		50.0	67.05		ug/L		134	62 - 164
Chlorobenzene	ND		50.0	53.22		ug/L		106	80 - 129
Chlorodibromomethane	ND	*	50.0	68.34		ug/L		137	66 - 140
Chloroethane	ND		50.0	50.64		ug/L		101	58 - 137
Chloroform	ND		50.0	55.82		ug/L		112	66 - 138
Chloromethane	ND		50.0	37.49		ug/L		75	10 - 169
cis-1,2-Dichloroethene	ND		50.0	52.81		ug/L		106	68 - 138
cis-1,3-Dichloropropene	ND		50.0	59.84		ug/L		120	71 - 141
Dibromomethane	ND		50.0	54.67		ug/L		109	58 - 140
Dichlorobromomethane	ND		50.0	59.02		ug/L		118	70 - 140
1,1-Dichloroethane	ND		50.0	52.35		ug/L		105	71 - 139
1,2-Dichloroethane	ND		50.0	64.08		ug/L		128	64 - 136
1,1-Dichloroethene	ND		50.0	50.98		ug/L		102	70 - 142
1,2-Dichloropropane	ND		50.0	47.40		ug/L		95	67 - 131
1,1-Dichloropropene	ND		50.0	55.56		ug/L		111	76 - 139
Ethylbenzene	ND		50.0	52.49		ug/L		105	79 - 139
2-Hexanone	ND		250	285.8		ug/L		114	50 - 150
Methylene Chloride	ND		50.0	50.61		ug/L		101	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	272.0		ug/L		109	50 - 147
m-Xylene & p-Xylene	ND		50.0	50.84		ug/L		102	80 - 153
o-Xylene	ND		50.0	51.56		ug/L		103	74 - 138
Styrene	ND		50.0	51.85		ug/L		104	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	58.37		ug/L		117	73 - 141
Tetrachloroethene	ND		50.0	59.92		ug/L		120	72 - 145
Toluene	ND		50.0	56.41		ug/L		113	75 - 136
trans-1,2-Dichloroethene	ND		50.0	51.82		ug/L		104	66 - 143
trans-1,3-Dichloropropene	ND		50.0	66.30		ug/L		133	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	49.66		ug/L		99	60 - 140
1,1,1-Trichloroethane	ND		50.0	62.22		ug/L		124	76 - 149
1,1,2-Trichloroethane	ND		50.0	57.06		ug/L		114	74 - 134
Trichloroethene	ND		50.0	52.89		ug/L		106	73 - 144
Vinyl chloride	ND		50.0	44.52		ug/L		89	56 - 129
Xylenes, Total	ND		100	102.4		ug/L		102	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*124*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

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

Lab Sample ID: 490-53740-K-1 MSD
Matrix: Water
Analysis Batch: 165509

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	254.4		ug/L		102	45 - 141	3	21
Benzene	ND		50.0	47.77		ug/L		96	75 - 133	2	17
Bromoform	ND		50.0	60.46		ug/L		121	42 - 147	3	16
Bromomethane	ND		50.0	38.27		ug/L		77	16 - 163	22	50
2-Butanone (MEK)	ND		250	256.5		ug/L		103	50 - 138	0	19
Carbon disulfide	ND		50.0	50.34		ug/L		101	48 - 152	4	21
Carbon tetrachloride	ND		50.0	68.09		ug/L		136	62 - 164	2	19
Chlorobenzene	ND		50.0	54.55		ug/L		109	80 - 129	2	14
Chlorodibromomethane	ND	*	50.0	69.39		ug/L		139	66 - 140	2	15
Chloroethane	ND		50.0	53.10		ug/L		106	58 - 137	5	20
Chloroform	ND		50.0	57.33		ug/L		115	66 - 138	3	18
Chloromethane	ND		50.0	40.28		ug/L		81	10 - 169	7	31
cis-1,2-Dichloroethene	ND		50.0	52.51		ug/L		105	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	64.78		ug/L		130	71 - 141	8	15
Dibromomethane	ND		50.0	54.73		ug/L		109	58 - 140	0	16
Dichlorobromomethane	ND		50.0	58.01		ug/L		116	70 - 140	2	18
1,1-Dichloroethane	ND		50.0	53.32		ug/L		107	71 - 139	2	17
1,2-Dichloroethane	ND		50.0	62.84		ug/L		126	64 - 136	2	17
1,1-Dichloroethene	ND		50.0	52.35		ug/L		105	70 - 142	3	17
1,2-Dichloropropane	ND		50.0	48.31		ug/L		97	67 - 131	2	17
1,1-Dichloropropene	ND		50.0	56.34		ug/L		113	76 - 139	1	17
Ethylbenzene	ND		50.0	53.25		ug/L		107	79 - 139	1	15
2-Hexanone	ND		250	291.2		ug/L		116	50 - 150	2	15
Methylene Chloride	ND		50.0	51.79		ug/L		104	64 - 139	2	17
4-Methyl-2-pentanone (MIBK)	ND		250	294.3		ug/L		118	50 - 147	8	17
m-Xylene & p-Xylene	ND		50.0	52.04		ug/L		104	80 - 153	2	16
o-Xylene	ND		50.0	51.46		ug/L		103	74 - 138	0	14
Styrene	ND		50.0	51.19		ug/L		102	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	59.13		ug/L		118	73 - 141	1	16
Tetrachloroethene	ND		50.0	62.70		ug/L		125	72 - 145	5	16
Toluene	ND		50.0	58.30		ug/L		117	75 - 136	3	15
trans-1,2-Dichloroethene	ND		50.0	54.65		ug/L		109	66 - 143	5	16
trans-1,3-Dichloropropene	ND		50.0	67.92	F1	ug/L		136	59 - 135	2	14
1,3,5-Trichlorobenzene	ND		50.0	49.77		ug/L		100	60 - 140	0	30
1,1,1-Trichloroethane	ND		50.0	61.43		ug/L		123	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	57.17		ug/L		114	74 - 134	0	15
Trichloroethene	ND		50.0	50.83		ug/L		102	73 - 144	4	17
Vinyl chloride	ND		50.0	46.32		ug/L		93	56 - 129	4	17
Xylenes, Total	ND		100	103.5		ug/L		103	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*109*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-164339/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 165164 — **Prep Batch: 164339**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/22/14 11:26	05/27/14 19:18	1
Manganese	ND		0.0150	0.00500	mg/L		05/22/14 11:26	05/27/14 19:18	1

Lab Sample ID: LCS 490-164339/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 165164 — **Prep Batch: 164339**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.05570		mg/L		111	80 - 120
Manganese	0.500	0.5414		mg/L		108	80 - 120

Lab Sample ID: 490-53551-1 MS — **Client Sample ID: 204R**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 165164 — **Prep Batch: 164339**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0108		0.0500	0.06320		mg/L		105	75 - 125
Manganese	0.0647		0.500	0.6045		mg/L		108	75 - 125

Lab Sample ID: 490-53551-1 MSD — **Client Sample ID: 204R**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 165164 — **Prep Batch: 164339**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0108		0.0500	0.06520		mg/L		109	75 - 125	3	20
Manganese	0.0647		0.500	0.6019		mg/L		107	75 - 125	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

GC/MS VOA

Analysis Batch: 165226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53503-C-8 MS	Matrix Spike	Total/NA	Water	8260B	
490-53503-D-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-53551-2	37D	Total/NA	Water	8260B	
490-53551-3	69R	Total/NA	Water	8260B	
490-53551-4	202R	Total/NA	Water	8260B	
490-53551-5	EW-3S	Total/NA	Water	8260B	
490-53551-6	175D	Total/NA	Water	8260B	
490-53551-7	75D	Total/NA	Water	8260B	
490-53551-8	103R	Total/NA	Water	8260B	
490-53551-9	61R (75-90)	Total/NA	Water	8260B	
490-53551-10	61RC (183-198)	Total/NA	Water	8260B	
490-53551-11	67R (83-98)	Total/NA	Water	8260B	
490-53551-12	Trip Blank	Total/NA	Water	8260B	
490-53551-13	67R (149-164)	Total/NA	Water	8260B	
LCS 490-165226/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-165226/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-165226/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 165509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53551-1	204R	Total/NA	Water	8260B	
490-53740-J-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-53740-K-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-165509/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-165509/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-165509/7	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 164339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53551-1	204R	Total/NA	Water	3010A	
490-53551-1 MS	204R	Total/NA	Water	3010A	
490-53551-1 MSD	204R	Total/NA	Water	3010A	
490-53551-2	37D	Total/NA	Water	3010A	
490-53551-3	69R	Total/NA	Water	3010A	
490-53551-4	202R	Total/NA	Water	3010A	
490-53551-5	EW-3S	Total/NA	Water	3010A	
490-53551-6	175D	Total/NA	Water	3010A	
490-53551-7	75D	Total/NA	Water	3010A	
490-53551-8	103R	Total/NA	Water	3010A	
490-53551-9	61R (75-90)	Total/NA	Water	3010A	
490-53551-10	61RC (183-198)	Total/NA	Water	3010A	
490-53551-11	67R (83-98)	Total/NA	Water	3010A	
490-53551-13	67R (149-164)	Total/NA	Water	3010A	
LCS 490-164339/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-164339/1-A	Method Blank	Total/NA	Water	3010A	

Metals (Continued)

Analysis Batch: 165164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53551-1	204R	Total/NA	Water	6010B	164339
490-53551-1 MS	204R	Total/NA	Water	6010B	164339
490-53551-1 MSD	204R	Total/NA	Water	6010B	164339
490-53551-2	37D	Total/NA	Water	6010B	164339
490-53551-3	69R	Total/NA	Water	6010B	164339
490-53551-4	202R	Total/NA	Water	6010B	164339
490-53551-5	EW-3S	Total/NA	Water	6010B	164339
490-53551-6	175D	Total/NA	Water	6010B	164339
490-53551-7	75D	Total/NA	Water	6010B	164339
490-53551-8	103R	Total/NA	Water	6010B	164339
490-53551-9	61R (75-90)	Total/NA	Water	6010B	164339
490-53551-10	61RC (183-198)	Total/NA	Water	6010B	164339
490-53551-11	67R (83-98)	Total/NA	Water	6010B	164339
490-53551-13	67R (149-164)	Total/NA	Water	6010B	164339
LCS 490-164339/2-A	Lab Control Sample	Total/NA	Water	6010B	164339
MB 490-164339/1-A	Method Blank	Total/NA	Water	6010B	164339

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 204R — Lab Sample ID: 490-53551-1

Date Collected: 05/19/14 10:30 — **Matrix: Water**
Date Received: 05/20/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165509	05/29/14 14:03	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 19:38	LTB	TAL NSH

Client Sample ID: 37D — Lab Sample ID: 490-53551-2

Date Collected: 05/19/14 12:15 — **Matrix: Water**
Date Received: 05/20/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 17:49	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 19:48	LTB	TAL NSH

Client Sample ID: 69R — Lab Sample ID: 490-53551-3

Date Collected: 05/19/14 13:10 — **Matrix: Water**
Date Received: 05/20/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 18:14	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 19:52	LTB	TAL NSH

Client Sample ID: 202R — Lab Sample ID: 490-53551-4

Date Collected: 05/19/14 14:20 — **Matrix: Water**
Date Received: 05/20/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 18:40	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 19:55	LTB	TAL NSH

Client Sample ID: EW-3S — Lab Sample ID: 490-53551-5

Date Collected: 05/19/14 10:25 — **Matrix: Water**
Date Received: 05/20/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 19:06	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 19:59	LTB	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 175D — Lab Sample ID: 490-53551-6

Date Collected: 05/19/14 11:00
Date Received: 05/20/14 08:30
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 19:32	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 20:02	LTB	TAL NSH

Client Sample ID: 75D — Lab Sample ID: 490-53551-7

Date Collected: 05/19/14 11:25
Date Received: 05/20/14 08:30
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 19:58	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 20:06	LTB	TAL NSH

Client Sample ID: 103R — Lab Sample ID: 490-53551-8

Date Collected: 05/19/14 14:45
Date Received: 05/20/14 08:30
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 20:23	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 20:21	LTB	TAL NSH

Client Sample ID: 61R (75-90) — Lab Sample ID: 490-53551-9

Date Collected: 05/19/14 10:15
Date Received: 05/20/14 08:30
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 20:49	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 20:25	LTB	TAL NSH

Client Sample ID: 61RC (183-198) — Lab Sample ID: 490-53551-10

Date Collected: 05/19/14 11:40
Date Received: 05/20/14 08:30
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 21:15	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 20:29	LTB	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Client Sample ID: 67R (83-98)

Lab Sample ID: 490-53551-11

Date Collected: 05/19/14 14:45
Matrix: Water
Date Received: 05/20/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 21:41	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 20:32	LTB	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-53551-12

Date Collected: 04/30/14 00:01
Matrix: Water
Date Received: 05/20/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 15:13	EML	TAL NSH

Client Sample ID: 67R (149-164)

Lab Sample ID: 490-53551-13

Date Collected: 05/19/14 15:50
Matrix: Water
Date Received: 05/20/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165226	05/28/14 22:07	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164339	05/22/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165164	05/27/14 20:36	LTB	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53551-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-53551 Chain of Custody

Cooler Received/Opened On___5/20/2014 @ _0830_____

1. Tracking #_____0001_____(last 4 digits, FedEx)

Courier: ____Fedex_____ IR Gun ID_____17960358_____

2. Temperature of rep. sample or temp blank when opened:_4.7_ *Degrees Celsius*

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

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

If yes, how many and where:_____1 front_____

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information
Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone:
Email: chuck.castelluccio@arcadis-us.com
Project Name: Tibbetts Road Site E101274
Site:

Sampler: DC/BT/TZ
Phone:
Due Date Requested:
TAT Requested (days): Standard TAT
PO #: Purchase Order Requested
WO #:
Lab Project #: 49002494
Client Project #: MA0000725.2014.00105

Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Carrier Tracking No(s):

FORD Site E101274
Page: 1 of 2
Job #:

Analysis Requested

Loc: 490
53551

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List (A)	6010B As and Mn (D)	Total Number of containers	Special Instructions/Note:
1	204R	5-19-14	1030	G	W			X	X	4	
2	37D	5-19-14	1215	G	W			X	X	4	
3	69R	5-19-14	1310	G	W			X	X	4	
4	202R	5-19-14	1420	G	W			X	X	4	
5	EW-35	5-19-14	1025	G	W			X	X	4	
6	175D	5-19-14	1100	G	W			X	X	4	
7	75D	5-19-14	1125	G	W			X	X	4	
8	103R	5-19-14	1445	G	W			X	X	4	
9	61R (75-90)	5-19-14	1015	G	W			X	X	4	
10	61RC (183-198)	5-19-14	1140	G	W			X	X	4	
11	67R (83-98)	5-19-14	1445	G	W			X	X	4	

Preservation Code:

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

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

Special Instructions/QC Requirements:

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

Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Empty Kit Relinquished by:	Date:		Time:		
DC Clup	5/19/14 1015	Arcadis	Chkm Kaisley	5/20/14 8:30	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.7

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information
Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone:
Email: chuck.castelluccio@arcadis-us.com
Project Name: Tibbetts Road Site E101274
Site:

Sampler: DC/BT/TZ
Phone:
Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Carrier Tracking No(s):

FORD Site E101274
Page: 2 of 2
Job #:

Due Date Requested:
TAT Requested (days): Standard TAT
PO #: Purchase Order Requested
WO #:
Lab Project #: 49002494
Client Project #: MA000735.2014.00105

Analysis Requested

Loc: 490
53551

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List (A)	6010B As and Mn (D)	Total Number of containers	Special Instructions/Note:
Preservation Code										
12 TRIP BLANK	4-30-14	-	G	W			X		2	
13 67R (149-164)	5-19-14	1550	G	W			X	X	4	

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

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

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

Special Instructions/QC Requirements:

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

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
DC	5/19/14 1615	Arcadis	[illegible]	5/20/14 8:30	TAL

Custody Seals Intact: Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 4.7

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-53551-1

Login Number: 53551
List Number: 1
Creator: Huskey, Adam

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-53587-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
6/2/2014 2:03:59 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-53587-1	EW 10S	Water	05/20/14 11:30	05/21/14 08:45
490-53587-2	73S	Water	05/20/14 13:10	05/21/14 08:45
490-53587-3	63R (85-100)	Water	05/20/14 11:50	05/21/14 08:45
490-53587-4	63R (150-165)	Water	05/20/14 10:45	05/21/14 08:45
490-53587-5	65R (180-195)	Water	05/20/14 16:00	05/21/14 08:45
490-53587-6	65R (100-115)	Water	05/20/14 14:30	05/21/14 08:45
490-53587-7	57S	Water	05/20/14 15:00	05/21/14 08:45
490-53587-8	75R (180-195)	Water	05/20/14 16:10	05/21/14 08:45
490-53587-9	108R	Water	05/20/14 11:30	05/21/14 08:45
490-53587-10	201R	Water	05/20/14 10:00	05/21/14 08:45
490-53587-11	106R	Water	05/20/14 14:20	05/21/14 08:45
490-53587-12	203R	Water	05/20/14 16:00	05/21/14 08:45
490-53587-13	Trip Blank	Water	05/20/14 00:01	05/21/14 08:45

Job ID: 490-53587-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-53587-1

Comments
No additional comments.

Receipt
The samples were received on 5/21/2014 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 4.1º C.

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

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

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

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.

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: EW 10S

Date Collected: 05/20/14 11:30
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 23:18	1
Benzene	ND		0.500	0.200	ug/L			05/30/14 23:18	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 23:18	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 23:18	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 23:18	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 23:18	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 23:18	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 23:18	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 23:18	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 23:18	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 23:18	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 23:18	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/30/14 23:18	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 23:18	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 23:18	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 23:18	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 23:18	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 23:18	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 23:18	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 23:18	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 23:18	1
Ethylbenzene	**0.753**		0.500	0.190	ug/L			05/30/14 23:18	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 23:18	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 23:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 23:18	1
m-Xylene & p-Xylene	**2.53**		0.500	0.380	ug/L			05/30/14 23:18	1
o-Xylene	**3.16**		0.500	0.200	ug/L			05/30/14 23:18	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 23:18	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 23:18	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 23:18	1
Toluene	**3.35**		0.500	0.170	ug/L			05/30/14 23:18	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/30/14 23:18	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 23:18	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 23:18	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 23:18	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 23:18	1
Trichloroethene	ND		0.500	0.200	ug/L			05/30/14 23:18	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 23:18	1
Xylenes, Total	**5.69**		1.50	0.580	ug/L			05/30/14 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*05/30/14 23:18*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*05/30/14 23:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*05/30/14 23:18*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/30/14 23:18*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 17:41	1
Manganese	**0.313**		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 17:41	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 73S

Date Collected: 05/20/14 13:10
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 20:16	1
Benzene	ND		0.500	0.200	ug/L			05/30/14 20:16	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 20:16	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 20:16	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 20:16	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 20:16	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 20:16	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 20:16	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 20:16	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 20:16	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 20:16	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 20:16	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/30/14 20:16	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 20:16	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 20:16	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 20:16	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 20:16	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 20:16	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 20:16	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 20:16	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 20:16	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 20:16	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 20:16	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 20:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 20:16	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 20:16	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 20:16	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 20:16	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 20:16	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 20:16	1
Toluene	ND		0.500	0.170	ug/L			05/30/14 20:16	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/30/14 20:16	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 20:16	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 20:16	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 20:16	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 20:16	1
Trichloroethene	**0.210**	**J**	0.500	0.200	ug/L			05/30/14 20:16	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 20:16	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*05/30/14 20:16*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*05/30/14 20:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*05/30/14 20:16*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*05/30/14 20:16*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 16:05	1
Manganese	**0.0651**		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 16:05	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 63R (85-100)

Lab Sample ID: 490-53587-3

Date Collected: 05/20/14 11:50
Date Received: 05/21/14 08:45

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**42.3**		5.00	2.66	ug/L			05/30/14 23:44	1
Benzene	ND		0.500	0.200	ug/L			05/30/14 23:44	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 23:44	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 23:44	1
2-Butanone (MEK)	**7.47**	**J**	50.0	2.64	ug/L			05/30/14 23:44	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 23:44	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 23:44	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 23:44	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 23:44	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 23:44	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 23:44	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 23:44	1
cis-1,2-Dichloroethene	**0.834**		0.500	0.210	ug/L			05/30/14 23:44	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 23:44	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 23:44	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 23:44	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 23:44	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 23:44	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 23:44	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 23:44	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 23:44	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 23:44	1
2-Hexanone	**7.38**		5.00	1.28	ug/L			05/30/14 23:44	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 23:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 23:44	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 23:44	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 23:44	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 23:44	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 23:44	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 23:44	1
Toluene	**0.488**	**J**	0.500	0.170	ug/L			05/30/14 23:44	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/30/14 23:44	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 23:44	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 23:44	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 23:44	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 23:44	1
Trichloroethene	**0.229**	**J**	0.500	0.200	ug/L			05/30/14 23:44	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 23:44	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/30/14 23:44*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*05/30/14 23:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*05/30/14 23:44*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/30/14 23:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.100	0.0720	mg/L		05/23/14 10:09	05/30/14 16:15	1
Manganese	ND		0.150	0.0500	mg/L		05/23/14 10:09	05/30/14 16:15	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 63R (150-165)

Date Collected: 05/20/14 10:45
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/31/14 00:10	1
Benzene	**0.494**	**J**	0.500	0.200	ug/L			05/31/14 00:10	1
Bromoform	ND		0.500	0.290	ug/L			05/31/14 00:10	1
Bromomethane	ND		0.500	0.350	ug/L			05/31/14 00:10	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/31/14 00:10	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/31/14 00:10	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/31/14 00:10	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/31/14 00:10	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/31/14 00:10	1
Chloroethane	ND		0.500	0.360	ug/L			05/31/14 00:10	1
Chloroform	ND		0.500	0.230	ug/L			05/31/14 00:10	1
Chloromethane	ND		0.500	0.360	ug/L			05/31/14 00:10	1
cis-1,2-Dichloroethene	**17.6**		0.500	0.210	ug/L			05/31/14 00:10	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 00:10	1
Dibromomethane	ND		0.500	0.450	ug/L			05/31/14 00:10	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/31/14 00:10	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/31/14 00:10	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/31/14 00:10	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/31/14 00:10	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/31/14 00:10	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/31/14 00:10	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/31/14 00:10	1
2-Hexanone	ND		5.00	1.28	ug/L			05/31/14 00:10	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/31/14 00:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/31/14 00:10	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/31/14 00:10	1
o-Xylene	ND		0.500	0.200	ug/L			05/31/14 00:10	1
Styrene	ND		0.500	0.280	ug/L			05/31/14 00:10	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/31/14 00:10	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/31/14 00:10	1
Toluene	**0.288**	**J**	0.500	0.170	ug/L			05/31/14 00:10	1
trans-1,2-Dichloroethene	**4.05**		0.500	0.230	ug/L			05/31/14 00:10	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 00:10	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/31/14 00:10	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 00:10	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 00:10	1
Trichloroethene	**14.1**		0.500	0.200	ug/L			05/31/14 00:10	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/31/14 00:10	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/31/14 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*05/31/14 00:10*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*05/31/14 00:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*		*05/31/14 00:10*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*05/31/14 00:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0345**		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 16:19	1
Manganese	**0.215**		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 16:19	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 65R (180-195)

Date Collected: 05/20/14 16:00
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 21:34	1
Benzene	**25.6**		0.500	0.200	ug/L			05/30/14 21:34	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 21:34	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 21:34	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 21:34	1
Carbon disulfide	**3.58**		0.500	0.220	ug/L			05/30/14 21:34	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 21:34	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 21:34	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 21:34	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 21:34	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 21:34	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 21:34	1
cis-1,2-Dichloroethene	**223**		2.50	1.05	ug/L			05/30/14 22:00	5
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 21:34	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 21:34	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 21:34	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 21:34	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 21:34	1
1,1-Dichloroethene	**0.659**		0.500	0.250	ug/L			05/30/14 21:34	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 21:34	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 21:34	1
Ethylbenzene	**2.59**		0.500	0.190	ug/L			05/30/14 21:34	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 21:34	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 21:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 21:34	1
m-Xylene & p-Xylene	**1.25**		0.500	0.380	ug/L			05/30/14 21:34	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 21:34	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 21:34	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 21:34	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 21:34	1
Toluene	**0.334**	**J**	0.500	0.170	ug/L			05/30/14 21:34	1
trans-1,2-Dichloroethene	**9.07**		0.500	0.230	ug/L			05/30/14 21:34	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 21:34	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 21:34	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 21:34	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 21:34	1
Trichloroethene	**0.432**	**J**	0.500	0.200	ug/L			05/30/14 21:34	1
Vinyl chloride	**0.683**		0.500	0.180	ug/L			05/30/14 21:34	1
Xylenes, Total	**1.31**	**J**	1.50	0.580	ug/L			05/30/14 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*05/30/14 21:34*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/30/14 22:00*	*5*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*05/30/14 21:34*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*05/30/14 22:00*	*5*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*05/30/14 21:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*05/30/14 22:00*	*5*
Toluene-d8 (Surr)	*105*		*70 - 130*		*05/30/14 21:34*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/30/14 22:00*	*5*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 65R (180-195)

Lab Sample ID: 490-53587-5

Date Collected: 05/20/14 16:00

Matrix: Water

Date Received: 05/21/14 08:45

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 16:22	1
Manganese	**2.76**		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 16:22	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 65R (100-115)

Date Collected: 05/20/14 14:30
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/31/14 00:35	1
Benzene	**1.12**		0.500	0.200	ug/L			05/31/14 00:35	1
Bromoform	ND		0.500	0.290	ug/L			05/31/14 00:35	1
Bromomethane	ND		0.500	0.350	ug/L			05/31/14 00:35	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/31/14 00:35	1
Carbon disulfide	**1.73**		0.500	0.220	ug/L			05/31/14 00:35	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/31/14 00:35	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/31/14 00:35	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/31/14 00:35	1
Chloroethane	ND		0.500	0.360	ug/L			05/31/14 00:35	1
Chloroform	ND		0.500	0.230	ug/L			05/31/14 00:35	1
Chloromethane	ND		0.500	0.360	ug/L			05/31/14 00:35	1
cis-1,2-Dichloroethene	**16.4**		0.500	0.210	ug/L			05/31/14 00:35	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 00:35	1
Dibromomethane	ND		0.500	0.450	ug/L			05/31/14 00:35	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/31/14 00:35	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/31/14 00:35	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/31/14 00:35	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/31/14 00:35	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/31/14 00:35	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/31/14 00:35	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/31/14 00:35	1
2-Hexanone	ND		5.00	1.28	ug/L			05/31/14 00:35	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/31/14 00:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/31/14 00:35	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/31/14 00:35	1
o-Xylene	ND		0.500	0.200	ug/L			05/31/14 00:35	1
Styrene	ND		0.500	0.280	ug/L			05/31/14 00:35	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/31/14 00:35	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/31/14 00:35	1
Toluene	**0.281**	**J**	0.500	0.170	ug/L			05/31/14 00:35	1
trans-1,2-Dichloroethene	**7.23**		0.500	0.230	ug/L			05/31/14 00:35	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 00:35	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/31/14 00:35	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 00:35	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 00:35	1
Trichloroethene	**10.2**		0.500	0.200	ug/L			05/31/14 00:35	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/31/14 00:35	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/31/14 00:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*05/31/14 00:35*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*05/31/14 00:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*05/31/14 00:35*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*05/31/14 00:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0127**		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 16:26	1
Manganese	**0.00900**	**J**	0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 16:26	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 57S

Date Collected: 05/20/14 15:00
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/31/14 01:01	1
Benzene	ND		0.500	0.200	ug/L			05/31/14 01:01	1
Bromoform	ND		0.500	0.290	ug/L			05/31/14 01:01	1
Bromomethane	ND		0.500	0.350	ug/L			05/31/14 01:01	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/31/14 01:01	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/31/14 01:01	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/31/14 01:01	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/31/14 01:01	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/31/14 01:01	1
Chloroethane	ND		0.500	0.360	ug/L			05/31/14 01:01	1
Chloroform	ND		0.500	0.230	ug/L			05/31/14 01:01	1
Chloromethane	ND		0.500	0.360	ug/L			05/31/14 01:01	1
cis-1,2-Dichloroethene	**0.420**	**J**	0.500	0.210	ug/L			05/31/14 01:01	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 01:01	1
Dibromomethane	ND		0.500	0.450	ug/L			05/31/14 01:01	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/31/14 01:01	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/31/14 01:01	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/31/14 01:01	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/31/14 01:01	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/31/14 01:01	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/31/14 01:01	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/31/14 01:01	1
2-Hexanone	ND		5.00	1.28	ug/L			05/31/14 01:01	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/31/14 01:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/31/14 01:01	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/31/14 01:01	1
o-Xylene	ND		0.500	0.200	ug/L			05/31/14 01:01	1
Styrene	ND		0.500	0.280	ug/L			05/31/14 01:01	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/31/14 01:01	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/31/14 01:01	1
Toluene	ND		0.500	0.170	ug/L			05/31/14 01:01	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/31/14 01:01	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 01:01	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/31/14 01:01	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 01:01	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 01:01	1
Trichloroethene	**0.504**		0.500	0.200	ug/L			05/31/14 01:01	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/31/14 01:01	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/31/14 01:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/31/14 01:01*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*05/31/14 01:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*05/31/14 01:01*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/31/14 01:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 16:42	1
Manganese	**0.563**		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 16:42	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 75R (180-195)

Date Collected: 05/20/14 16:10
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 22:26	1
Benzene	**26.1**		0.500	0.200	ug/L			05/30/14 22:26	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 22:26	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 22:26	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 22:26	1
Carbon disulfide	**2.70**		0.500	0.220	ug/L			05/30/14 22:26	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 22:26	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 22:26	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 22:26	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 22:26	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 22:26	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 22:26	1
cis-1,2-Dichloroethene	**212**		2.50	1.05	ug/L			05/30/14 22:52	5
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 22:26	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 22:26	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 22:26	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 22:26	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 22:26	1
1,1-Dichloroethene	**0.682**		0.500	0.250	ug/L			05/30/14 22:26	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 22:26	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 22:26	1
Ethylbenzene	**2.52**		0.500	0.190	ug/L			05/30/14 22:26	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 22:26	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 22:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 22:26	1
m-Xylene & p-Xylene	**1.22**		0.500	0.380	ug/L			05/30/14 22:26	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 22:26	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 22:26	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 22:26	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 22:26	1
Toluene	**0.329**	**J**	0.500	0.170	ug/L			05/30/14 22:26	1
trans-1,2-Dichloroethene	**9.52**		0.500	0.230	ug/L			05/30/14 22:26	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 22:26	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 22:26	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 22:26	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 22:26	1
Trichloroethene	**0.414**	**J**	0.500	0.200	ug/L			05/30/14 22:26	1
Vinyl chloride	**0.688**		0.500	0.180	ug/L			05/30/14 22:26	1
Xylenes, Total	**1.29**	**J**	1.50	0.580	ug/L			05/30/14 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/30/14 22:26*	*1*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*05/30/14 22:52*	*5*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*05/30/14 22:26*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*05/30/14 22:52*	*5*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*05/30/14 22:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*05/30/14 22:52*	*5*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/30/14 22:26*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*05/30/14 22:52*	*5*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 75R (180-195)

Lab Sample ID: 490-53587-8

Date Collected: 05/20/14 16:10

Matrix: Water

Date Received: 05/21/14 08:45

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 16:45	1
Manganese	**2.76**		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 16:45	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 108R

Lab Sample ID: 490-53587-9

Date Collected: 05/20/14 11:30
Matrix: Water
Date Received: 05/21/14 08:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/31/14 01:27	1
Benzene	ND		0.500	0.200	ug/L			05/31/14 01:27	1
Bromoform	ND		0.500	0.290	ug/L			05/31/14 01:27	1
Bromomethane	ND		0.500	0.350	ug/L			05/31/14 01:27	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/31/14 01:27	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/31/14 01:27	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/31/14 01:27	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/31/14 01:27	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/31/14 01:27	1
Chloroethane	ND		0.500	0.360	ug/L			05/31/14 01:27	1
Chloroform	ND		0.500	0.230	ug/L			05/31/14 01:27	1
Chloromethane	ND		0.500	0.360	ug/L			05/31/14 01:27	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/31/14 01:27	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 01:27	1
Dibromomethane	ND		0.500	0.450	ug/L			05/31/14 01:27	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/31/14 01:27	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/31/14 01:27	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/31/14 01:27	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/31/14 01:27	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/31/14 01:27	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/31/14 01:27	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/31/14 01:27	1
2-Hexanone	ND		5.00	1.28	ug/L			05/31/14 01:27	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/31/14 01:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/31/14 01:27	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/31/14 01:27	1
o-Xylene	ND		0.500	0.200	ug/L			05/31/14 01:27	1
Styrene	ND		0.500	0.280	ug/L			05/31/14 01:27	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/31/14 01:27	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/31/14 01:27	1
Toluene	ND		0.500	0.170	ug/L			05/31/14 01:27	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/31/14 01:27	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 01:27	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/31/14 01:27	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 01:27	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 01:27	1
Trichloroethene	ND		0.500	0.200	ug/L			05/31/14 01:27	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/31/14 01:27	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/31/14 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/31/14 01:27*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*05/31/14 01:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*05/31/14 01:27*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/31/14 01:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0276**		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 16:49	1
Manganese	**0.316**		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 16:49	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 201R

Date Collected: 05/20/14 10:00
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.64**		5.00	2.66	ug/L			05/31/14 01:53	1
Benzene	**1.61**		0.500	0.200	ug/L			05/31/14 01:53	1
Bromoform	ND		0.500	0.290	ug/L			05/31/14 01:53	1
Bromomethane	ND		0.500	0.350	ug/L			05/31/14 01:53	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/31/14 01:53	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/31/14 01:53	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/31/14 01:53	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/31/14 01:53	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/31/14 01:53	1
Chloroethane	ND		0.500	0.360	ug/L			05/31/14 01:53	1
Chloroform	ND		0.500	0.230	ug/L			05/31/14 01:53	1
Chloromethane	ND		0.500	0.360	ug/L			05/31/14 01:53	1
cis-1,2-Dichloroethene	**28.2**		0.500	0.210	ug/L			05/31/14 01:53	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 01:53	1
Dibromomethane	ND		0.500	0.450	ug/L			05/31/14 01:53	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/31/14 01:53	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/31/14 01:53	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/31/14 01:53	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/31/14 01:53	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/31/14 01:53	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/31/14 01:53	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/31/14 01:53	1
2-Hexanone	ND		5.00	1.28	ug/L			05/31/14 01:53	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/31/14 01:53	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/31/14 01:53	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/31/14 01:53	1
o-Xylene	ND		0.500	0.200	ug/L			05/31/14 01:53	1
Styrene	ND		0.500	0.280	ug/L			05/31/14 01:53	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/31/14 01:53	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/31/14 01:53	1
Toluene	ND		0.500	0.170	ug/L			05/31/14 01:53	1
trans-1,2-Dichloroethene	**2.13**		0.500	0.230	ug/L			05/31/14 01:53	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 01:53	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/31/14 01:53	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 01:53	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 01:53	1
Trichloroethene	**1.19**		0.500	0.200	ug/L			05/31/14 01:53	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/31/14 01:53	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/31/14 01:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*05/31/14 01:53*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*05/31/14 01:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*05/31/14 01:53*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*05/31/14 01:53*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 16:52	1
Manganese	**0.880**		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 16:52	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 106R

Date Collected: 05/20/14 14:20
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/31/14 02:19	1
Benzene	**1.45**		0.500	0.200	ug/L			05/31/14 02:19	1
Bromoform	ND		0.500	0.290	ug/L			05/31/14 02:19	1
Bromomethane	ND		0.500	0.350	ug/L			05/31/14 02:19	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/31/14 02:19	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/31/14 02:19	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/31/14 02:19	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/31/14 02:19	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/31/14 02:19	1
Chloroethane	ND		0.500	0.360	ug/L			05/31/14 02:19	1
Chloroform	ND		0.500	0.230	ug/L			05/31/14 02:19	1
Chloromethane	ND		0.500	0.360	ug/L			05/31/14 02:19	1
cis-1,2-Dichloroethene	**0.553**		0.500	0.210	ug/L			05/31/14 02:19	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 02:19	1
Dibromomethane	ND		0.500	0.450	ug/L			05/31/14 02:19	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/31/14 02:19	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/31/14 02:19	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/31/14 02:19	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/31/14 02:19	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/31/14 02:19	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/31/14 02:19	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/31/14 02:19	1
2-Hexanone	ND		5.00	1.28	ug/L			05/31/14 02:19	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/31/14 02:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/31/14 02:19	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/31/14 02:19	1
o-Xylene	ND		0.500	0.200	ug/L			05/31/14 02:19	1
Styrene	ND		0.500	0.280	ug/L			05/31/14 02:19	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/31/14 02:19	1
Tetrachloroethene	**0.209**	**J**	0.500	0.140	ug/L			05/31/14 02:19	1
Toluene	ND		0.500	0.170	ug/L			05/31/14 02:19	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/31/14 02:19	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/31/14 02:19	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/31/14 02:19	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 02:19	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/31/14 02:19	1
Trichloroethene	**0.605**		0.500	0.200	ug/L			05/31/14 02:19	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/31/14 02:19	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/31/14 02:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*05/31/14 02:19*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*05/31/14 02:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*05/31/14 02:19*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/31/14 02:19*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00930**	**J**	0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 16:56	1
Manganese	**0.0776**		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 16:56	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 203R

Date Collected: 05/20/14 16:00
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.27**		5.00	2.66	ug/L			05/30/14 20:42	1
Benzene	**218**		2.50	1.00	ug/L			05/30/14 21:08	5
Bromoform	ND		0.500	0.290	ug/L			05/30/14 20:42	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 20:42	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 20:42	1
Carbon disulfide	**0.304**	**J**	0.500	0.220	ug/L			05/30/14 20:42	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 20:42	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 20:42	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 20:42	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 20:42	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 20:42	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 20:42	1
cis-1,2-Dichloroethene	**145**		0.500	0.210	ug/L			05/30/14 20:42	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 20:42	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 20:42	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 20:42	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 20:42	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 20:42	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 20:42	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 20:42	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 20:42	1
Ethylbenzene	**21.7**		0.500	0.190	ug/L			05/30/14 20:42	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 20:42	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 20:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 20:42	1
m-Xylene & p-Xylene	**15.8**		0.500	0.380	ug/L			05/30/14 20:42	1
o-Xylene	**0.274**	**J**	0.500	0.200	ug/L			05/30/14 20:42	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 20:42	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 20:42	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 20:42	1
Toluene	**0.482**	**J**	0.500	0.170	ug/L			05/30/14 20:42	1
trans-1,2-Dichloroethene	**0.679**		0.500	0.230	ug/L			05/30/14 20:42	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 20:42	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 20:42	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 20:42	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 20:42	1
Trichloroethene	**0.379**	**J**	0.500	0.200	ug/L			05/30/14 20:42	1
Vinyl chloride	**0.558**		0.500	0.180	ug/L			05/30/14 20:42	1
Xylenes, Total	**16.0**		1.50	0.580	ug/L			05/30/14 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*05/30/14 20:42*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*05/30/14 21:08*	*5*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*05/30/14 20:42*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*05/30/14 21:08*	*5*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*05/30/14 20:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*05/30/14 21:08*	*5*
Toluene-d8 (Surr)	*106*		*70 - 130*		*05/30/14 20:42*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/30/14 21:08*	*5*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 203R

Lab Sample ID: 490-53587-12

Date Collected: 05/20/14 16:00

Matrix: Water

Date Received: 05/21/14 08:45

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0225		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 17:00	1
Manganese	6.35		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 17:00	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: Trip Blank

Date Collected: 05/20/14 00:01
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53587-13

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 19:50	1
Benzene	ND		0.500	0.200	ug/L			05/30/14 19:50	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 19:50	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 19:50	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 19:50	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 19:50	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 19:50	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 19:50	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 19:50	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 19:50	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 19:50	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 19:50	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/30/14 19:50	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 19:50	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 19:50	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 19:50	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 19:50	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 19:50	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 19:50	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 19:50	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 19:50	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 19:50	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 19:50	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 19:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 19:50	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 19:50	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 19:50	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 19:50	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 19:50	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 19:50	1
Toluene	ND		0.500	0.170	ug/L			05/30/14 19:50	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/30/14 19:50	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 19:50	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 19:50	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 19:50	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 19:50	1
Trichloroethene	ND		0.500	0.200	ug/L			05/30/14 19:50	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 19:50	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*05/30/14 19:50*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*05/30/14 19:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*05/30/14 19:50*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/30/14 19:50*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-165972/6
Matrix: Water
Analysis Batch: 165972

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 19:25	1
Benzene	ND		0.500	0.200	ug/L			05/30/14 19:25	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 19:25	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 19:25	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 19:25	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 19:25	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 19:25	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 19:25	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 19:25	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 19:25	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 19:25	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 19:25	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/30/14 19:25	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 19:25	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 19:25	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 19:25	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 19:25	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 19:25	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 19:25	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 19:25	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 19:25	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 19:25	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 19:25	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 19:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 19:25	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 19:25	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 19:25	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 19:25	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 19:25	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 19:25	1
Toluene	ND		0.500	0.170	ug/L			05/30/14 19:25	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/30/14 19:25	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 19:25	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 19:25	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 19:25	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 19:25	1
Trichloroethene	ND		0.500	0.200	ug/L			05/30/14 19:25	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 19:25	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 19:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*05/30/14 19:25*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*05/30/14 19:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*70 - 130*		*05/30/14 19:25*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*05/30/14 19:25*	*1*

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

Lab Sample ID: LCS 490-165972/3
Matrix: Water
Analysis Batch: 165972

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	267.8		ug/L		107	54 - 145
Benzene	50.0	49.07		ug/L		98	80 - 121
Bromoform	50.0	53.78		ug/L		108	46 - 145
Bromomethane	50.0	53.49		ug/L		107	41 - 150
2-Butanone (MEK)	250	246.7		ug/L		99	62 - 133
Carbon disulfide	50.0	48.75		ug/L		98	77 - 126
Carbon tetrachloride	50.0	57.39		ug/L		115	64 - 147
Chlorobenzene	50.0	52.23		ug/L		104	80 - 120
Chlorodibromomethane	50.0	63.37		ug/L		127	69 - 133
Chloroethane	50.0	50.67		ug/L		101	72 - 120
Chloroform	50.0	53.37		ug/L		107	73 - 129
Chloromethane	50.0	47.01		ug/L		94	12 - 150
cis-1,2-Dichloroethene	50.0	49.18		ug/L		98	76 - 125
cis-1,3-Dichloropropene	50.0	55.65		ug/L		111	74 - 140
Dibromomethane	50.0	55.39		ug/L		111	71 - 125
Dichlorobromomethane	50.0	56.13		ug/L		112	75 - 129
1,1-Dichloroethane	50.0	51.83		ug/L		104	78 - 125
1,2-Dichloroethane	50.0	56.09		ug/L		112	77 - 121
1,1-Dichloroethene	50.0	50.80		ug/L		102	79 - 124
1,2-Dichloropropane	50.0	50.51		ug/L		101	75 - 120
1,1-Dichloropropene	50.0	53.17		ug/L		106	80 - 122
Ethylbenzene	50.0	50.59		ug/L		101	80 - 130
2-Hexanone	250	301.4		ug/L		121	60 - 142
Methylene Chloride	50.0	49.93		ug/L		100	79 - 123
4-Methyl-2-pentanone (MIBK)	250	266.0		ug/L		106	60 - 137
m-Xylene & p-Xylene	50.0	49.55		ug/L		99	80 - 141
o-Xylene	50.0	49.00		ug/L		98	80 - 127
Styrene	50.0	49.30		ug/L		99	80 - 127
1,1,1,2-Tetrachloroethane	50.0	53.54		ug/L		107	74 - 135
Tetrachloroethene	50.0	55.68		ug/L		111	80 - 126
Toluene	50.0	50.98		ug/L		102	80 - 126
trans-1,2-Dichloroethene	50.0	48.46		ug/L		97	79 - 126
trans-1,3-Dichloropropene	50.0	56.81		ug/L		114	63 - 134
1,3,5-Trichlorobenzene	50.0	48.28		ug/L		97	70 - 130
1,1,1-Trichloroethane	50.0	54.94		ug/L		110	78 - 135
1,1,2-Trichloroethane	50.0	54.24		ug/L		108	80 - 124
Trichloroethene	50.0	50.99		ug/L		102	80 - 123
Vinyl chloride	50.0	48.71		ug/L		97	68 - 120
Xylenes, Total	100	98.55		ug/L		99	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

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

Lab Sample ID: 490-53587-2 MS
Matrix: Water
Analysis Batch: 165972

Client Sample ID: 73S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	273.4		ug/L		109	45 - 141
Benzene	ND		50.0	49.60		ug/L		99	75 - 133
Bromoform	ND		50.0	58.68		ug/L		117	42 - 147
Bromomethane	ND		50.0	26.57		ug/L		53	16 - 163
2-Butanone (MEK)	ND		250	240.9		ug/L		96	50 - 138
Carbon disulfide	ND		50.0	50.26		ug/L		101	48 - 152
Carbon tetrachloride	ND		50.0	59.55		ug/L		119	62 - 164
Chlorobenzene	ND		50.0	53.56		ug/L		107	80 - 129
Chlorodibromomethane	ND		50.0	63.59		ug/L		127	66 - 140
Chloroethane	ND		50.0	48.88		ug/L		98	58 - 137
Chloroform	ND		50.0	55.92		ug/L		112	66 - 138
Chloromethane	ND		50.0	40.84		ug/L		82	10 - 169
cis-1,2-Dichloroethene	ND		50.0	49.04		ug/L		98	68 - 138
cis-1,3-Dichloropropene	ND		50.0	58.49		ug/L		117	71 - 141
Dibromomethane	ND		50.0	54.43		ug/L		109	58 - 140
Dichlorobromomethane	ND		50.0	55.83		ug/L		112	70 - 140
1,1-Dichloroethane	ND		50.0	52.65		ug/L		105	71 - 139
1,2-Dichloroethane	ND		50.0	55.75		ug/L		112	64 - 136
1,1-Dichloroethene	ND		50.0	52.54		ug/L		105	70 - 142
1,2-Dichloropropane	ND		50.0	49.22		ug/L		98	67 - 131
1,1-Dichloropropene	ND		50.0	53.66		ug/L		107	76 - 139
Ethylbenzene	ND		50.0	52.86		ug/L		106	79 - 139
2-Hexanone	ND		250	303.4		ug/L		121	50 - 150
Methylene Chloride	ND		50.0	51.79		ug/L		104	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	299.5		ug/L		120	50 - 147
m-Xylene & p-Xylene	ND		50.0	52.66		ug/L		105	80 - 153
o-Xylene	ND		50.0	53.66		ug/L		107	74 - 138
Styrene	ND		50.0	53.37		ug/L		107	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	55.10		ug/L		110	73 - 141
Tetrachloroethene	ND		50.0	59.97		ug/L		120	72 - 145
Toluene	ND		50.0	56.65		ug/L		113	75 - 136
trans-1,2-Dichloroethene	ND		50.0	51.89		ug/L		104	66 - 143
trans-1,3-Dichloropropene	ND		50.0	61.99		ug/L		124	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	48.53		ug/L		97	60 - 140
1,1,1-Trichloroethane	ND		50.0	58.30		ug/L		117	76 - 149
1,1,2-Trichloroethane	ND		50.0	56.36		ug/L		113	74 - 134
Trichloroethene	0.210	J	50.0	52.18		ug/L		104	73 - 144
Vinyl chloride	ND		50.0	46.37		ug/L		93	56 - 129
Xylenes, Total	ND		100	106.3		ug/L		106	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

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

Lab Sample ID: 490-53587-2 MSD
Matrix: Water
Analysis Batch: 165972

Client Sample ID: 73S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	271.7		ug/L		109	45 - 141	1	21
Benzene	ND		50.0	51.31		ug/L		103	75 - 133	3	17
Bromoform	ND		50.0	57.39		ug/L		115	42 - 147	2	16
Bromomethane	ND		50.0	38.48		ug/L		77	16 - 163	37	50
2-Butanone (MEK)	ND		250	248.5		ug/L		99	50 - 138	3	19
Carbon disulfide	ND		50.0	53.76		ug/L		108	48 - 152	7	21
Carbon tetrachloride	ND		50.0	62.52		ug/L		125	62 - 164	5	19
Chlorobenzene	ND		50.0	53.93		ug/L		108	80 - 129	1	14
Chlorodibromomethane	ND		50.0	64.40		ug/L		129	66 - 140	1	15
Chloroethane	ND		50.0	53.70		ug/L		107	58 - 137	9	20
Chloroform	ND		50.0	55.70		ug/L		111	66 - 138	0	18
Chloromethane	ND		50.0	44.22		ug/L		88	10 - 169	8	31
cis-1,2-Dichloroethene	ND		50.0	51.19		ug/L		102	68 - 138	4	17
cis-1,3-Dichloropropene	ND		50.0	57.42		ug/L		115	71 - 141	2	15
Dibromomethane	ND		50.0	53.70		ug/L		107	58 - 140	1	16
Dichlorobromomethane	ND		50.0	55.68		ug/L		111	70 - 140	0	18
1,1-Dichloroethane	ND		50.0	54.40		ug/L		109	71 - 139	3	17
1,2-Dichloroethane	ND		50.0	57.40		ug/L		115	64 - 136	3	17
1,1-Dichloroethene	ND		50.0	53.69		ug/L		107	70 - 142	2	17
1,2-Dichloropropane	ND		50.0	52.07		ug/L		104	67 - 131	6	17
1,1-Dichloropropene	ND		50.0	56.80		ug/L		114	76 - 139	6	17
Ethylbenzene	ND		50.0	53.41		ug/L		107	79 - 139	1	15
2-Hexanone	ND		250	297.9		ug/L		119	50 - 150	2	15
Methylene Chloride	ND		50.0	53.79		ug/L		108	64 - 139	4	17
4-Methyl-2-pentanone (MIBK)	ND		250	274.1		ug/L		110	50 - 147	9	17
m-Xylene & p-Xylene	ND		50.0	51.08		ug/L		102	80 - 153	3	16
o-Xylene	ND		50.0	52.23		ug/L		104	74 - 138	3	14
Styrene	ND		50.0	52.08		ug/L		104	61 - 148	2	24
1,1,1,2-Tetrachloroethane	ND		50.0	56.03		ug/L		112	73 - 141	2	16
Tetrachloroethene	ND		50.0	57.81		ug/L		116	72 - 145	4	16
Toluene	ND		50.0	56.49		ug/L		113	75 - 136	0	15
trans-1,2-Dichloroethene	ND		50.0	55.33		ug/L		111	66 - 143	6	16
trans-1,3-Dichloropropene	ND		50.0	59.78		ug/L		120	59 - 135	4	14
1,3,5-Trichlorobenzene	ND		50.0	48.96		ug/L		98	60 - 140	1	30
1,1,1-Trichloroethane	ND		50.0	58.52		ug/L		117	76 - 149	0	17
1,1,2-Trichloroethane	ND		50.0	55.69		ug/L		111	74 - 134	1	15
Trichloroethene	0.210	J	50.0	53.60		ug/L		107	73 - 144	3	17
Vinyl chloride	ND		50.0	49.55		ug/L		99	56 - 129	7	17
Xylenes, Total	ND		100	103.3		ug/L		103	74 - 141	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-164603/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 164603**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 15:54	1
Manganese	ND		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 15:54	1

Lab Sample ID: LCS 490-164603/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 164603**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.05500		mg/L		110	80 - 120
Manganese	0.500	0.5501		mg/L		110	80 - 120

Lab Sample ID: LCSD 490-164603/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 164603**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0500	0.05450		mg/L		109	80 - 120	1	20
Manganese	0.500	0.5461		mg/L		109	80 - 120	1	20

Lab Sample ID: 490-53587-2 MS — **Client Sample ID: 73S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 164603**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.0500	0.05820		mg/L		116	75 - 125
Manganese	0.0651		0.500	0.6124		mg/L		109	75 - 125

Lab Sample ID: 490-53587-2 MSD — **Client Sample ID: 73S**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 164603**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.0500	0.06070		mg/L		121	75 - 125	4	20
Manganese	0.0651		0.500	0.6122		mg/L		109	75 - 125	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

GC/MS VOA

Analysis Batch: 165972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53587-1	EW 10S	Total/NA	Water	8260B	
490-53587-2	73S	Total/NA	Water	8260B	
490-53587-2 MS	73S	Total/NA	Water	8260B	
490-53587-2 MSD	73S	Total/NA	Water	8260B	
490-53587-3	63R (85-100)	Total/NA	Water	8260B	
490-53587-4	63R (150-165)	Total/NA	Water	8260B	
490-53587-5	65R (180-195)	Total/NA	Water	8260B	
490-53587-5	65R (180-195)	Total/NA	Water	8260B	
490-53587-6	65R (100-115)	Total/NA	Water	8260B	
490-53587-7	57S	Total/NA	Water	8260B	
490-53587-8	75R (180-195)	Total/NA	Water	8260B	
490-53587-8	75R (180-195)	Total/NA	Water	8260B	
490-53587-9	108R	Total/NA	Water	8260B	
490-53587-10	201R	Total/NA	Water	8260B	
490-53587-11	106R	Total/NA	Water	8260B	
490-53587-12	203R	Total/NA	Water	8260B	
490-53587-12	203R	Total/NA	Water	8260B	
490-53587-13	Trip Blank	Total/NA	Water	8260B	
LCS 490-165972/3	Lab Control Sample	Total/NA	Water	8260B	
MB 490-165972/6	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 164603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53587-1	EW 10S	Total/NA	Water	3010A	
490-53587-2	73S	Total/NA	Water	3010A	
490-53587-2 MS	73S	Total/NA	Water	3010A	
490-53587-2 MSD	73S	Total/NA	Water	3010A	
490-53587-3	63R (85-100)	Total/NA	Water	3010A	
490-53587-4	63R (150-165)	Total/NA	Water	3010A	
490-53587-5	65R (180-195)	Total/NA	Water	3010A	
490-53587-6	65R (100-115)	Total/NA	Water	3010A	
490-53587-7	57S	Total/NA	Water	3010A	
490-53587-8	75R (180-195)	Total/NA	Water	3010A	
490-53587-9	108R	Total/NA	Water	3010A	
490-53587-10	201R	Total/NA	Water	3010A	
490-53587-11	106R	Total/NA	Water	3010A	
490-53587-12	203R	Total/NA	Water	3010A	
LCS 490-164603/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-164603/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-164603/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 166267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53587-1	EW 10S	Total/NA	Water	6010B	164603
490-53587-2	73S	Total/NA	Water	6010B	164603
490-53587-2 MS	73S	Total/NA	Water	6010B	164603
490-53587-2 MSD	73S	Total/NA	Water	6010B	164603
490-53587-3	63R (85-100)	Total/NA	Water	6010B	164603

Metals (Continued)

Analysis Batch: 166267 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53587-4	63R (150-165)	Total/NA	Water	6010B	164603
490-53587-5	65R (180-195)	Total/NA	Water	6010B	164603
490-53587-6	65R (100-115)	Total/NA	Water	6010B	164603
490-53587-7	57S	Total/NA	Water	6010B	164603
490-53587-8	75R (180-195)	Total/NA	Water	6010B	164603
490-53587-9	108R	Total/NA	Water	6010B	164603
490-53587-10	201R	Total/NA	Water	6010B	164603
490-53587-11	106R	Total/NA	Water	6010B	164603
490-53587-12	203R	Total/NA	Water	6010B	164603
LCS 490-164603/2-A	Lab Control Sample	Total/NA	Water	6010B	164603
LCSD 490-164603/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	164603
MB 490-164603/1-A	Method Blank	Total/NA	Water	6010B	164603

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: EW 10S — Lab Sample ID: 490-53587-1

Date Collected: 05/20/14 11:30 — **Matrix: Water**
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/30/14 23:18	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 17:41	DBK	TAL NSH

Client Sample ID: 73S — Lab Sample ID: 490-53587-2

Date Collected: 05/20/14 13:10 — **Matrix: Water**
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/30/14 20:16	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 16:05	DBK	TAL NSH

Client Sample ID: 63R (85-100) — Lab Sample ID: 490-53587-3

Date Collected: 05/20/14 11:50 — **Matrix: Water**
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/30/14 23:44	EML	TAL NSH
Total/NA	Prep	3010A			5 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	5 mL	50 mL	166267	05/30/14 16:15	DBK	TAL NSH

Client Sample ID: 63R (150-165) — Lab Sample ID: 490-53587-4

Date Collected: 05/20/14 10:45 — **Matrix: Water**
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/31/14 00:10	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 16:19	DBK	TAL NSH

Client Sample ID: 65R (180-195) — Lab Sample ID: 490-53587-5

Date Collected: 05/20/14 16:00 — **Matrix: Water**
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/30/14 21:34	EML	TAL NSH
Total/NA	Analysis	8260B		5	10 mL	10 mL	165972	05/30/14 22:00	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 16:22	DBK	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 65R (100-115)

Lab Sample ID: 490-53587-6

Date Collected: 05/20/14 14:30
Matrix: Water
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/31/14 00:35	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 16:26	DBK	TAL NSH

Client Sample ID: 57S

Lab Sample ID: 490-53587-7

Date Collected: 05/20/14 15:00
Matrix: Water
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/31/14 01:01	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 16:42	DBK	TAL NSH

Client Sample ID: 75R (180-195)

Lab Sample ID: 490-53587-8

Date Collected: 05/20/14 16:10
Matrix: Water
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/30/14 22:26	EML	TAL NSH
Total/NA	Analysis	8260B		5	10 mL	10 mL	165972	05/30/14 22:52	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 16:45	DBK	TAL NSH

Client Sample ID: 108R

Lab Sample ID: 490-53587-9

Date Collected: 05/20/14 11:30
Matrix: Water
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/31/14 01:27	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 16:49	DBK	TAL NSH

Client Sample ID: 201R

Lab Sample ID: 490-53587-10

Date Collected: 05/20/14 10:00
Matrix: Water
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/31/14 01:53	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 16:52	DBK	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Client Sample ID: 106R

Lab Sample ID: 490-53587-11

Date Collected: 05/20/14 14:20
Matrix: Water
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/31/14 02:19	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 16:56	DBK	TAL NSH

Client Sample ID: 203R

Lab Sample ID: 490-53587-12

Date Collected: 05/20/14 16:00
Matrix: Water
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/30/14 20:42	EML	TAL NSH
Total/NA	Analysis	8260B		5	10 mL	10 mL	165972	05/30/14 21:08	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 17:00	DBK	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-53587-13

Date Collected: 05/20/14 00:01
Matrix: Water
Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165972	05/30/14 19:50	EML	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53587-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-53587 Chain of Custody

Cooler Received/Opened On 5/21/2014 @ 0845

1. Tracking # 3912 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 4.1 *Degrees Celsius*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: DC/TZ/TM	Lab PM: Brown, Shali	Carrier Tracking No(s):	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone:	E-Mail: shali.brown@testamericainc.com		Page: Page 1 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days):			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn									Total Number of containers	Special Instructions/Note:
				Preservation Code				A	D										
	EW-10S	5/20/14	1130	G	W			K	K									4	
	73S	5/20/14	1310	G	W		Y	K	K			MS/MSD		INCLUDED				12	
	63R(85-100)	5/20/14	1150	G	W			K	K									4	
	63R(150-165)	5/20/14	1045	G	W			K	K									4	Loc: 490
5	65R(180-195)	5/20/14	1600	G	W			K	K									4	53587
6	65R(100-115)	5/20/14	1436	G	W			K	K									4	
7	57S	5/20/14	1500	G	W			K	K									4	
8	75R(180-195)	5/20/14	1610	G	W			K	K									4	
9	108R	5/20/14	1130	G	W			K	K									4	
10	201R	5/20/14	1000	G	W			K	K									4	
11	106R	5/20/14	1420	G	W			K	K									4	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	5/21/14 845	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

6/2/2014

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: DC/TZ/TM	Lab PM: Brown, Shali	Carrier Tracking No(s):	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone:	E-Mail: shali.brown@testamericainc.com		Page: page 2 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days):			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #: M4000725.2014.00105			

Analysis Requested

Loc: 490
53587

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
203R	5-20-14	1600	G	W			X	X	4	
TRIP BLANK										

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 5/20/14 1630	Company ARCADIS	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-53587-1

Login Number: 53587
List Number: 1
Creator: Huskey, Adam

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-53596-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
6/2/2014 2:53:33 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53596-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-53596-1	169R	Water	05/19/14 15:35	05/21/14 08:45
490-53596-2	51S	Water	05/20/14 10:25	05/21/14 08:45

Job ID: 490-53596-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: FORD Tibbetts Road Site E101274

Report Number: 490-53596-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to 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.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 05/21/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.1 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples 169R (490-53596-1) and 51S (490-53596-2) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 05/29/2014.

Sample 51S (490-53596-2)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No difficulties were encountered during the VOCs analysis. All quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)

Samples 169R (490-53596-1) and 51S (490-53596-2) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 05/23/2014 and analyzed on 05/30/2014.

Sample 51S (490-53596-2)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Job ID: 490-53596-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

No difficulties were encountered during the metals analysis. All quality control parameters were within the acceptance limits.

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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53596-1

Client Sample ID: 169R

Date Collected: 05/19/14 15:35
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53596-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/29/14 09:40	1
Benzene	**88.7**		0.500	0.200	ug/L			05/29/14 09:40	1
Bromoform	ND		0.500	0.290	ug/L			05/29/14 09:40	1
Bromomethane	ND		0.500	0.350	ug/L			05/29/14 09:40	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/29/14 09:40	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/29/14 09:40	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/29/14 09:40	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/29/14 09:40	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/29/14 09:40	1
Chloroethane	ND		0.500	0.360	ug/L			05/29/14 09:40	1
Chloroform	ND		0.500	0.230	ug/L			05/29/14 09:40	1
Chloromethane	ND		0.500	0.360	ug/L			05/29/14 09:40	1
cis-1,2-Dichloroethene	**65.6**		0.500	0.210	ug/L			05/29/14 09:40	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 09:40	1
Dibromomethane	ND		0.500	0.450	ug/L			05/29/14 09:40	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/29/14 09:40	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/29/14 09:40	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/29/14 09:40	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/29/14 09:40	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/29/14 09:40	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/29/14 09:40	1
Ethylbenzene	**27.4**		0.500	0.190	ug/L			05/29/14 09:40	1
2-Hexanone	ND		5.00	1.28	ug/L			05/29/14 09:40	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/29/14 09:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/29/14 09:40	1
m-Xylene & p-Xylene	**19.6**		0.500	0.380	ug/L			05/29/14 09:40	1
o-Xylene	**0.310**	**J**	0.500	0.200	ug/L			05/29/14 09:40	1
Styrene	ND		0.500	0.280	ug/L			05/29/14 09:40	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/29/14 09:40	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/29/14 09:40	1
Toluene	**10.8**		0.500	0.170	ug/L			05/29/14 09:40	1
trans-1,2-Dichloroethene	**0.943**		0.500	0.230	ug/L			05/29/14 09:40	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 09:40	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/29/14 09:40	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 09:40	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 09:40	1
Trichloroethene	**0.505**		0.500	0.200	ug/L			05/29/14 09:40	1
Vinyl chloride	**0.251**	**J**	0.500	0.180	ug/L			05/29/14 09:40	1
Xylenes, Total	**19.9**		1.50	0.580	ug/L			05/29/14 09:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*05/29/14 09:40*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*05/29/14 09:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*05/29/14 09:40*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*05/29/14 09:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0477**		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 17:03	1
Manganese	**3.91**		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 17:03	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53596-1

Client Sample ID: 51S

Date Collected: 05/20/14 10:25
Date Received: 05/21/14 08:45

Lab Sample ID: 490-53596-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**38.6**		5.00	2.66	ug/L			05/29/14 10:08	1
Benzene	**0.222**	**J**	0.500	0.200	ug/L			05/29/14 10:08	1
Bromoform	ND		0.500	0.290	ug/L			05/29/14 10:08	1
Bromomethane	ND		0.500	0.350	ug/L			05/29/14 10:08	1
2-Butanone (MEK)	**65.5**		50.0	2.64	ug/L			05/29/14 10:08	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/29/14 10:08	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/29/14 10:08	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/29/14 10:08	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/29/14 10:08	1
Chloroethane	ND		0.500	0.360	ug/L			05/29/14 10:08	1
Chloroform	ND		0.500	0.230	ug/L			05/29/14 10:08	1
Chloromethane	ND		0.500	0.360	ug/L			05/29/14 10:08	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/29/14 10:08	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 10:08	1
Dibromomethane	ND		0.500	0.450	ug/L			05/29/14 10:08	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/29/14 10:08	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/29/14 10:08	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/29/14 10:08	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/29/14 10:08	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/29/14 10:08	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/29/14 10:08	1
Ethylbenzene	**351**		10.0	3.80	ug/L			05/29/14 19:17	20
2-Hexanone	ND		5.00	1.28	ug/L			05/29/14 10:08	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/29/14 10:08	1
4-Methyl-2-pentanone (MIBK)	**1.75**	**J**	5.00	0.810	ug/L			05/29/14 10:08	1
m-Xylene & p-Xylene	**1170**		10.0	7.60	ug/L			05/29/14 19:17	20
o-Xylene	**559**		10.0	4.00	ug/L			05/29/14 19:17	20
Styrene	ND		0.500	0.280	ug/L			05/29/14 10:08	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/29/14 10:08	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/29/14 10:08	1
Toluene	**600**		10.0	3.40	ug/L			05/29/14 19:17	20
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/29/14 10:08	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 10:08	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/29/14 10:08	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 10:08	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 10:08	1
Trichloroethene	ND		0.500	0.200	ug/L			05/29/14 10:08	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/29/14 10:08	1
Xylenes, Total	**1730**		30.0	11.6	ug/L			05/29/14 19:17	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*05/29/14 10:08*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*05/29/14 19:17*	*20*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*05/29/14 10:08*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*05/29/14 19:17*	*20*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*05/29/14 10:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*05/29/14 19:17*	*20*
Toluene-d8 (Surr)	*91*		*70 - 130*		*05/29/14 10:08*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*05/29/14 19:17*	*20*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53596-1

Client Sample ID: 51S

Lab Sample ID: 490-53596-2

Date Collected: 05/20/14 10:25

Matrix: Water

Date Received: 05/21/14 08:45

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.258		0.0500	0.0360	mg/L		05/23/14 10:09	05/30/14 17:07	5
Manganese	10.4		0.0750	0.0250	mg/L		05/23/14 10:09	05/30/14 17:07	5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-165386/5
Matrix: Water
Analysis Batch: 165386

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/29/14 02:08	1
Benzene	ND		0.500	0.200	ug/L			05/29/14 02:08	1
Bromoform	ND		0.500	0.290	ug/L			05/29/14 02:08	1
Bromomethane	ND		0.500	0.350	ug/L			05/29/14 02:08	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/29/14 02:08	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/29/14 02:08	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/29/14 02:08	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/29/14 02:08	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/29/14 02:08	1
Chloroethane	ND		0.500	0.360	ug/L			05/29/14 02:08	1
Chloroform	ND		0.500	0.230	ug/L			05/29/14 02:08	1
Chloromethane	ND		0.500	0.360	ug/L			05/29/14 02:08	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/29/14 02:08	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 02:08	1
Dibromomethane	ND		0.500	0.450	ug/L			05/29/14 02:08	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/29/14 02:08	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/29/14 02:08	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/29/14 02:08	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/29/14 02:08	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/29/14 02:08	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/29/14 02:08	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/29/14 02:08	1
2-Hexanone	ND		5.00	1.28	ug/L			05/29/14 02:08	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/29/14 02:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/29/14 02:08	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/29/14 02:08	1
o-Xylene	ND		0.500	0.200	ug/L			05/29/14 02:08	1
Styrene	ND		0.500	0.280	ug/L			05/29/14 02:08	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/29/14 02:08	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/29/14 02:08	1
Toluene	ND		0.500	0.170	ug/L			05/29/14 02:08	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/29/14 02:08	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 02:08	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/29/14 02:08	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 02:08	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 02:08	1
Trichloroethene	ND		0.500	0.200	ug/L			05/29/14 02:08	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/29/14 02:08	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/29/14 02:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*05/29/14 02:08*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*05/29/14 02:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*05/29/14 02:08*	*1*
Toluene-d8 (Surr)	*93*		*70 - 130*		*05/29/14 02:08*	*1*

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

Lab Sample ID: LCS 490-165386/3
Matrix: Water
Analysis Batch: 165386

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	315.9		ug/L		126	54 - 145
Benzene	50.0	54.02		ug/L		108	80 - 121
Bromoform	50.0	58.16		ug/L		116	46 - 145
Bromomethane	50.0	51.01		ug/L		102	41 - 150
2-Butanone (MEK)	250	303.5		ug/L		121	62 - 133
Carbon disulfide	50.0	57.56		ug/L		115	77 - 126
Carbon tetrachloride	50.0	53.82		ug/L		108	64 - 147
Chlorobenzene	50.0	53.64		ug/L		107	80 - 120
Chlorodibromomethane	50.0	56.81		ug/L		114	69 - 133
Chloroethane	50.0	54.37		ug/L		109	72 - 120
Chloroform	50.0	50.71		ug/L		101	73 - 129
Chloromethane	50.0	56.81		ug/L		114	12 - 150
cis-1,2-Dichloroethene	50.0	57.62		ug/L		115	76 - 125
cis-1,3-Dichloropropene	50.0	56.61		ug/L		113	74 - 140
Dibromomethane	50.0	56.00		ug/L		112	71 - 125
Dichlorobromomethane	50.0	56.00		ug/L		112	75 - 129
1,1-Dichloroethane	50.0	60.71		ug/L		121	78 - 125
1,2-Dichloroethane	50.0	54.95		ug/L		110	77 - 121
1,1-Dichloroethene	50.0	60.64		ug/L		121	79 - 124
1,2-Dichloropropane	50.0	56.83		ug/L		114	75 - 120
1,1-Dichloropropene	50.0	53.54		ug/L		107	80 - 122
Ethylbenzene	50.0	53.18		ug/L		106	80 - 130
2-Hexanone	250	287.9		ug/L		115	60 - 142
Methylene Chloride	50.0	56.08		ug/L		112	79 - 123
4-Methyl-2-pentanone (MIBK)	250	296.2		ug/L		118	60 - 137
m-Xylene & p-Xylene	50.0	52.98		ug/L		106	80 - 141
o-Xylene	50.0	54.33		ug/L		109	80 - 127
Styrene	50.0	55.28		ug/L		111	80 - 127
1,1,1,2-Tetrachloroethane	50.0	55.92		ug/L		112	74 - 135
Tetrachloroethene	50.0	49.90		ug/L		100	80 - 126
Toluene	50.0	52.79		ug/L		106	80 - 126
trans-1,2-Dichloroethene	50.0	60.25		ug/L		121	79 - 126
trans-1,3-Dichloropropene	50.0	57.68		ug/L		115	63 - 134
1,3,5-Trichlorobenzene	50.0	50.77		ug/L		102	70 - 130
1,1,1-Trichloroethane	50.0	51.45		ug/L		103	78 - 135
1,1,2-Trichloroethane	50.0	56.56		ug/L		113	80 - 124
Trichloroethene	50.0	51.67		ug/L		103	80 - 123
Vinyl chloride	50.0	58.27		ug/L		117	68 - 120
Xylenes, Total	100	107.3		ug/L		107	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

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

Lab Sample ID: 490-53254-B-1 MS
Matrix: Water
Analysis Batch: 165386

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	276.1		ug/L		110	45 - 141
Benzene	ND		50.0	51.70		ug/L		103	75 - 133
Bromoform	ND		50.0	53.90		ug/L		108	42 - 147
Bromomethane	ND		50.0	40.24		ug/L		80	16 - 163
2-Butanone (MEK)	ND		250	283.6		ug/L		113	50 - 138
Carbon disulfide	ND		50.0	52.07		ug/L		104	48 - 152
Carbon tetrachloride	ND		50.0	51.81		ug/L		104	62 - 164
Chlorobenzene	ND		50.0	51.24		ug/L		102	80 - 129
Chlorodibromomethane	ND		50.0	53.31		ug/L		107	66 - 140
Chloroethane	ND		50.0	50.81		ug/L		102	58 - 137
Chloroform	ND		50.0	47.45		ug/L		95	66 - 138
Chloromethane	ND		50.0	47.19		ug/L		94	10 - 169
cis-1,2-Dichloroethene	ND		50.0	55.88		ug/L		112	68 - 138
cis-1,3-Dichloropropene	ND		50.0	57.04		ug/L		114	71 - 141
Dibromomethane	ND		50.0	51.77		ug/L		104	58 - 140
Dichlorobromomethane	ND		50.0	52.84		ug/L		106	70 - 140
1,1-Dichloroethane	ND		50.0	57.46		ug/L		115	71 - 139
1,2-Dichloroethane	ND		50.0	49.85		ug/L		100	64 - 136
1,1-Dichloroethene	ND		50.0	57.76		ug/L		116	70 - 142
1,2-Dichloropropane	ND		50.0	53.77		ug/L		108	67 - 131
1,1-Dichloropropene	ND		50.0	53.24		ug/L		106	76 - 139
Ethylbenzene	ND		50.0	52.00		ug/L		104	79 - 139
2-Hexanone	ND		250	302.5		ug/L		121	50 - 150
Methylene Chloride	ND		50.0	51.00		ug/L		102	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	303.2		ug/L		121	50 - 147
m-Xylene & p-Xylene	ND		50.0	52.19		ug/L		104	80 - 153
o-Xylene	ND		50.0	53.12		ug/L		106	74 - 138
Styrene	ND		50.0	52.38		ug/L		105	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	51.91		ug/L		104	73 - 141
Tetrachloroethene	ND		50.0	50.33		ug/L		101	72 - 145
Toluene	ND		50.0	51.41		ug/L		103	75 - 136
trans-1,2-Dichloroethene	ND		50.0	56.87		ug/L		114	66 - 143
trans-1,3-Dichloropropene	ND		50.0	57.14		ug/L		114	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	47.70		ug/L		95	60 - 140
1,1,1-Trichloroethane	ND		50.0	49.66		ug/L		99	76 - 149
1,1,2-Trichloroethane	ND		50.0	54.59		ug/L		109	74 - 134
Trichloroethene	ND		50.0	50.23		ug/L		100	73 - 144
Vinyl chloride	ND		50.0	54.65		ug/L		109	56 - 129
Xylenes, Total	ND		100	105.3		ug/L		105	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

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

Lab Sample ID: 490-53254-C-1 MSD
Matrix: Water
Analysis Batch: 165386

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	301.5		ug/L		121	45 - 141	9	21
Benzene	ND		50.0	53.03		ug/L		106	75 - 133	3	17
Bromoform	ND		50.0	55.93		ug/L		112	42 - 147	4	16
Bromomethane	ND		50.0	48.17		ug/L		96	16 - 163	18	50
2-Butanone (MEK)	ND		250	306.7		ug/L		123	50 - 138	8	19
Carbon disulfide	ND		50.0	53.63		ug/L		107	48 - 152	3	21
Carbon tetrachloride	ND		50.0	53.33		ug/L		107	62 - 164	3	19
Chlorobenzene	ND		50.0	52.28		ug/L		105	80 - 129	2	14
Chlorodibromomethane	ND		50.0	55.25		ug/L		110	66 - 140	4	15
Chloroethane	ND		50.0	52.38		ug/L		105	58 - 137	3	20
Chloroform	ND		50.0	49.25		ug/L		98	66 - 138	4	18
Chloromethane	ND		50.0	50.13		ug/L		100	10 - 169	6	31
cis-1,2-Dichloroethene	ND		50.0	58.33		ug/L		117	68 - 138	4	17
cis-1,3-Dichloropropene	ND		50.0	58.03		ug/L		116	71 - 141	2	15
Dibromomethane	ND		50.0	54.44		ug/L		109	58 - 140	5	16
Dichlorobromomethane	ND		50.0	54.94		ug/L		110	70 - 140	4	18
1,1-Dichloroethane	ND		50.0	59.63		ug/L		119	71 - 139	4	17
1,2-Dichloroethane	ND		50.0	51.96		ug/L		104	64 - 136	4	17
1,1-Dichloroethene	ND		50.0	58.42		ug/L		117	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	56.25		ug/L		113	67 - 131	5	17
1,1-Dichloropropene	ND		50.0	54.61		ug/L		109	76 - 139	3	17
Ethylbenzene	ND		50.0	53.24		ug/L		106	79 - 139	2	15
2-Hexanone	ND		250	326.1		ug/L		130	50 - 150	8	15
Methylene Chloride	ND		50.0	52.01		ug/L		104	64 - 139	2	17
4-Methyl-2-pentanone (MIBK)	ND		250	320.9		ug/L		128	50 - 147	6	17
m-Xylene & p-Xylene	ND		50.0	53.30		ug/L		107	80 - 153	2	16
o-Xylene	ND		50.0	54.15		ug/L		108	74 - 138	2	14
Styrene	ND		50.0	53.79		ug/L		108	61 - 148	3	24
1,1,1,2-Tetrachloroethane	ND		50.0	53.33		ug/L		107	73 - 141	3	16
Tetrachloroethene	ND		50.0	51.13		ug/L		102	72 - 145	2	16
Toluene	ND		50.0	51.97		ug/L		104	75 - 136	1	15
trans-1,2-Dichloroethene	ND		50.0	58.98		ug/L		118	66 - 143	4	16
trans-1,3-Dichloropropene	ND		50.0	58.67		ug/L		117	59 - 135	3	14
1,3,5-Trichlorobenzene	ND		50.0	51.02		ug/L		102	60 - 140	7	30
1,1,1-Trichloroethane	ND		50.0	51.40		ug/L		103	76 - 149	3	17
1,1,2-Trichloroethane	ND		50.0	55.87		ug/L		112	74 - 134	2	15
Trichloroethene	ND		50.0	51.34		ug/L		103	73 - 144	2	17
Vinyl chloride	ND		50.0	56.07		ug/L		112	56 - 129	3	17
Xylenes, Total	ND		100	107.5		ug/L		107	74 - 141	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

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

Lab Sample ID: MB 490-165463/9
Matrix: Water
Analysis Batch: 165463

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/29/14 15:58	1
Benzene	ND		0.500	0.200	ug/L			05/29/14 15:58	1
Bromoform	ND		0.500	0.290	ug/L			05/29/14 15:58	1
Bromomethane	ND		0.500	0.350	ug/L			05/29/14 15:58	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/29/14 15:58	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/29/14 15:58	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/29/14 15:58	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/29/14 15:58	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/29/14 15:58	1
Chloroethane	ND		0.500	0.360	ug/L			05/29/14 15:58	1
Chloroform	ND		0.500	0.230	ug/L			05/29/14 15:58	1
Chloromethane	ND		0.500	0.360	ug/L			05/29/14 15:58	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/29/14 15:58	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 15:58	1
Dibromomethane	ND		0.500	0.450	ug/L			05/29/14 15:58	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/29/14 15:58	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/29/14 15:58	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/29/14 15:58	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/29/14 15:58	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/29/14 15:58	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/29/14 15:58	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/29/14 15:58	1
2-Hexanone	ND		5.00	1.28	ug/L			05/29/14 15:58	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/29/14 15:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/29/14 15:58	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/29/14 15:58	1
o-Xylene	ND		0.500	0.200	ug/L			05/29/14 15:58	1
Styrene	ND		0.500	0.280	ug/L			05/29/14 15:58	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/29/14 15:58	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/29/14 15:58	1
Toluene	ND		0.500	0.170	ug/L			05/29/14 15:58	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/29/14 15:58	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 15:58	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/29/14 15:58	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 15:58	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 15:58	1
Trichloroethene	ND		0.500	0.200	ug/L			05/29/14 15:58	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/29/14 15:58	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/29/14 15:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*05/29/14 15:58*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*05/29/14 15:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*05/29/14 15:58*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*05/29/14 15:58*	*1*

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

Lab Sample ID: LCS 490-165463/7
Matrix: Water
Analysis Batch: 165463

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	326.8		ug/L		131	54 - 145
Benzene	50.0	52.05		ug/L		104	80 - 121
Bromoform	50.0	58.74		ug/L		117	46 - 145
Bromomethane	50.0	44.27		ug/L		89	41 - 150
2-Butanone (MEK)	250	316.2		ug/L		126	62 - 133
Carbon disulfide	50.0	54.19		ug/L		108	77 - 126
Carbon tetrachloride	50.0	49.69		ug/L		99	64 - 147
Chlorobenzene	50.0	52.02		ug/L		104	80 - 120
Chlorodibromomethane	50.0	56.89		ug/L		114	69 - 133
Chloroethane	50.0	47.82		ug/L		96	72 - 120
Chloroform	50.0	48.52		ug/L		97	73 - 129
Chloromethane	50.0	45.06		ug/L		90	12 - 150
cis-1,2-Dichloroethene	50.0	56.97		ug/L		114	76 - 125
cis-1,3-Dichloropropene	50.0	58.88		ug/L		118	74 - 140
Dibromomethane	50.0	55.02		ug/L		110	71 - 125
Dichlorobromomethane	50.0	54.72		ug/L		109	75 - 129
1,1-Dichloroethane	50.0	58.21		ug/L		116	78 - 125
1,2-Dichloroethane	50.0	52.99		ug/L		106	77 - 121
1,1-Dichloroethene	50.0	55.45		ug/L		111	79 - 124
1,2-Dichloropropane	50.0	55.77		ug/L		112	75 - 120
1,1-Dichloropropene	50.0	51.71		ug/L		103	80 - 122
Ethylbenzene	50.0	51.65		ug/L		103	80 - 130
2-Hexanone	250	332.3		ug/L		133	60 - 142
Methylene Chloride	50.0	52.96		ug/L		106	79 - 123
4-Methyl-2-pentanone (MIBK)	250	331.5		ug/L		133	60 - 137
m-Xylene & p-Xylene	50.0	51.94		ug/L		104	80 - 141
o-Xylene	50.0	53.55		ug/L		107	80 - 127
Styrene	50.0	53.86		ug/L		108	80 - 127
1,1,1,2-Tetrachloroethane	50.0	53.58		ug/L		107	74 - 135
Tetrachloroethene	50.0	48.65		ug/L		97	80 - 126
Toluene	50.0	51.29		ug/L		103	80 - 126
trans-1,2-Dichloroethene	50.0	57.75		ug/L		116	79 - 126
trans-1,3-Dichloropropene	50.0	60.55		ug/L		121	63 - 134
1,3,5-Trichlorobenzene	50.0	50.43		ug/L		101	70 - 130
1,1,1-Trichloroethane	50.0	48.40		ug/L		97	78 - 135
1,1,2-Trichloroethane	50.0	57.90		ug/L		116	80 - 124
Trichloroethene	50.0	48.87		ug/L		98	80 - 123
Vinyl chloride	50.0	50.13		ug/L		100	68 - 120
Xylenes, Total	100	105.5		ug/L		105	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

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

Lab Sample ID: 490-53681-B-1 MS
Matrix: Water
Analysis Batch: 165463

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	293.7		ug/L		117	45 - 141
Benzene	ND		50.0	54.15		ug/L		108	75 - 133
Bromoform	ND		50.0	57.15		ug/L		114	42 - 147
Bromomethane	ND		50.0	47.06		ug/L		94	16 - 163
2-Butanone (MEK)	ND		250	293.3		ug/L		117	50 - 138
Carbon disulfide	ND		50.0	56.76		ug/L		114	48 - 152
Carbon tetrachloride	ND		50.0	56.54		ug/L		113	62 - 164
Chlorobenzene	ND		50.0	53.00		ug/L		106	80 - 129
Chlorodibromomethane	ND		50.0	55.54		ug/L		111	66 - 140
Chloroethane	ND		50.0	54.35		ug/L		109	58 - 137
Chloroform	ND		50.0	51.50		ug/L		103	66 - 138
Chloromethane	ND		50.0	53.99		ug/L		108	10 - 169
cis-1,2-Dichloroethene	ND		50.0	58.14		ug/L		116	68 - 138
cis-1,3-Dichloropropene	ND		50.0	56.04		ug/L		112	71 - 141
Dibromomethane	ND		50.0	55.43		ug/L		111	58 - 140
Dichlorobromomethane	ND		50.0	55.96		ug/L		112	70 - 140
1,1-Dichloroethane	ND		50.0	61.35		ug/L		123	71 - 139
1,2-Dichloroethane	ND		50.0	54.58		ug/L		109	64 - 136
1,1-Dichloroethene	ND		50.0	60.23		ug/L		120	70 - 142
1,2-Dichloropropane	ND		50.0	56.12		ug/L		112	67 - 131
1,1-Dichloropropene	ND		50.0	55.08		ug/L		110	76 - 139
Ethylbenzene	ND		50.0	53.45		ug/L		107	79 - 139
2-Hexanone	ND		250	293.5		ug/L		117	50 - 150
Methylene Chloride	ND		50.0	54.22		ug/L		108	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	297.2		ug/L		119	50 - 147
m-Xylene & p-Xylene	ND		50.0	53.12		ug/L		106	80 - 153
o-Xylene	ND		50.0	54.05		ug/L		108	74 - 138
Styrene	ND		50.0	53.98		ug/L		108	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	55.18		ug/L		110	73 - 141
Tetrachloroethene	0.153	J	50.0	52.42		ug/L		105	72 - 145
Toluene	ND		50.0	52.57		ug/L		105	75 - 136
trans-1,2-Dichloroethene	ND		50.0	61.34		ug/L		123	66 - 143
trans-1,3-Dichloropropene	ND		50.0	57.86		ug/L		116	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	49.87		ug/L		100	60 - 140
1,1,1-Trichloroethane	ND		50.0	53.62		ug/L		107	76 - 149
1,1,2-Trichloroethane	ND		50.0	55.52		ug/L		111	74 - 134
Trichloroethene	ND		50.0	52.46		ug/L		105	73 - 144
Vinyl chloride	ND		50.0	58.89		ug/L		118	56 - 129
Xylenes, Total	ND		100	107.2		ug/L		107	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

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

Lab Sample ID: 490-53681-C-1 MSD
Matrix: Water
Analysis Batch: 165463

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	309.3		ug/L		124	45 - 141	5	21
Benzene	ND		50.0	54.37		ug/L		109	75 - 133	0	17
Bromoform	ND		50.0	57.67		ug/L		115	42 - 147	1	16
Bromomethane	ND		50.0	50.70		ug/L		101	16 - 163	7	50
2-Butanone (MEK)	ND		250	296.8		ug/L		119	50 - 138	1	19
Carbon disulfide	ND		50.0	57.43		ug/L		115	48 - 152	1	21
Carbon tetrachloride	ND		50.0	55.94		ug/L		112	62 - 164	1	19
Chlorobenzene	ND		50.0	53.42		ug/L		107	80 - 129	1	14
Chlorodibromomethane	ND		50.0	56.19		ug/L		112	66 - 140	1	15
Chloroethane	ND		50.0	55.20		ug/L		110	58 - 137	2	20
Chloroform	ND		50.0	51.63		ug/L		103	66 - 138	0	18
Chloromethane	ND		50.0	54.60		ug/L		109	10 - 169	1	31
cis-1,2-Dichloroethene	ND		50.0	58.92		ug/L		118	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	56.51		ug/L		113	71 - 141	1	15
Dibromomethane	ND		50.0	54.53		ug/L		109	58 - 140	2	16
Dichlorobromomethane	ND		50.0	56.00		ug/L		112	70 - 140	0	18
1,1-Dichloroethane	ND		50.0	61.82		ug/L		124	71 - 139	1	17
1,2-Dichloroethane	ND		50.0	54.54		ug/L		109	64 - 136	0	17
1,1-Dichloroethene	ND		50.0	62.25		ug/L		124	70 - 142	3	17
1,2-Dichloropropane	ND		50.0	56.47		ug/L		113	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	56.00		ug/L		112	76 - 139	2	17
Ethylbenzene	ND		50.0	54.07		ug/L		108	79 - 139	1	15
2-Hexanone	ND		250	296.8		ug/L		119	50 - 150	1	15
Methylene Chloride	ND		50.0	54.63		ug/L		109	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	295.9		ug/L		118	50 - 147	0	17
m-Xylene & p-Xylene	ND		50.0	53.89		ug/L		108	80 - 153	1	16
o-Xylene	ND		50.0	54.86		ug/L		110	74 - 138	1	14
Styrene	ND		50.0	54.38		ug/L		109	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	55.45		ug/L		111	73 - 141	0	16
Tetrachloroethene	0.153	J	50.0	52.64		ug/L		105	72 - 145	0	16
Toluene	ND		50.0	52.67		ug/L		105	75 - 136	0	15
trans-1,2-Dichloroethene	ND		50.0	62.23		ug/L		124	66 - 143	1	16
trans-1,3-Dichloropropene	ND		50.0	58.10		ug/L		116	59 - 135	0	14
1,3,5-Trichlorobenzene	ND		50.0	51.44		ug/L		103	60 - 140	3	30
1,1,1-Trichloroethane	ND		50.0	53.53		ug/L		107	76 - 149	0	17
1,1,2-Trichloroethane	ND		50.0	56.02		ug/L		112	74 - 134	1	15
Trichloroethene	ND		50.0	53.00		ug/L		106	73 - 144	1	17
Vinyl chloride	ND		50.0	59.99		ug/L		120	56 - 129	2	17
Xylenes, Total	ND		100	108.7		ug/L		109	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53596-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-164603/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 164603**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/23/14 10:09	05/30/14 15:54	1
Manganese	ND		0.0150	0.00500	mg/L		05/23/14 10:09	05/30/14 15:54	1

Lab Sample ID: LCS 490-164603/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 164603**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.05500		mg/L		110	80 - 120
Manganese	0.500	0.5501		mg/L		110	80 - 120

Lab Sample ID: LCSD 490-164603/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 164603**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0500	0.05450		mg/L		109	80 - 120	1	20
Manganese	0.500	0.5461		mg/L		109	80 - 120	1	20

Lab Sample ID: 490-53587-D-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 164603**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.0500	0.05820		mg/L		116	75 - 125
Manganese	0.0651		0.500	0.6124		mg/L		109	75 - 125

Lab Sample ID: 490-53587-D-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 164603**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.0500	0.06070		mg/L		121	75 - 125	4	20
Manganese	0.0651		0.500	0.6122		mg/L		109	75 - 125	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53596-1

GC/MS VOA

Analysis Batch: 165386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53254-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-53254-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-53596-1	169R	Total/NA	Water	8260B	
490-53596-2	51S	Total/NA	Water	8260B	
LCS 490-165386/3	Lab Control Sample	Total/NA	Water	8260B	
MB 490-165386/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 165463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53596-2	51S	Total/NA	Water	8260B	
490-53681-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-53681-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-165463/7	Lab Control Sample	Total/NA	Water	8260B	
MB 490-165463/9	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 164603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53587-D-2-B MS	Matrix Spike	Total/NA	Water	3010A	
490-53587-D-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-53596-1	169R	Total/NA	Water	3010A	
490-53596-2	51S	Total/NA	Water	3010A	
LCS 490-164603/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-164603/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-164603/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 166267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53587-D-2-B MS	Matrix Spike	Total/NA	Water	6010B	164603
490-53587-D-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	164603
490-53596-1	169R	Total/NA	Water	6010B	164603
490-53596-2	51S	Total/NA	Water	6010B	164603
LCS 490-164603/2-A	Lab Control Sample	Total/NA	Water	6010B	164603
LCSD 490-164603/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	164603
MB 490-164603/1-A	Method Blank	Total/NA	Water	6010B	164603

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53596-1

Client Sample ID: 169R

Lab Sample ID: 490-53596-1

Date Collected: 05/19/14 15:35

Matrix: Water

Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165386	05/29/14 09:40	JMG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/30/14 17:03	DBK	TAL NSH

Client Sample ID: 51S

Lab Sample ID: 490-53596-2

Date Collected: 05/20/14 10:25

Matrix: Water

Date Received: 05/21/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165386	05/29/14 10:08	JMG	TAL NSH
Total/NA	Analysis	8260B		20	10 mL	10 mL	165463	05/29/14 19:17	JMG	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	164603	05/23/14 10:09	JBD	TAL NSH
Total/NA	Analysis	6010B		5	50 mL	50 mL	166267	05/30/14 17:07	DBK	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53596-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53596-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-53596 Chain of Custody

Cooler Received/Opened On 5/21/2014 @ 0845

1. Tracking # 3912 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 4.1 *Degrees Celsius*

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment

End of Form

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
53596

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/2/2014

Client Information	Sampler: DC/TZ/TM	Lab PM: Brown, Shali	Carr	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone:	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days):			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #: MA000725201400105			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
169R	5-19-14	1535	G	W			X	X	4	
515	5-20-14	1025	G	W			X	X	4	

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Drew Clupp	Date/Time: 5/20/14 1630	Company: Arcadis	Received by: [illegible]	Date/Time: 5-21-14 @ 0845	Company: TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 4.1c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-53596-1

Login Number: 53596

List Number: 1

Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-53708-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
6/3/2014 3:15:05 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-53708-1	35R	Water	05/21/14 11:10	05/22/14 08:30
490-53708-2	EW-100	Water	05/21/14 12:50	05/22/14 08:30
490-53708-3	EW-101	Water	05/21/14 14:15	05/22/14 08:30
490-53708-4	MW-302 (60-70)	Water	05/21/14 12:10	05/22/14 08:30
490-53708-5	MW-302 (100-110)	Water	05/21/14 10:50	05/22/14 08:30
490-53708-6	MW-300 (20-30)	Water	05/21/14 10:10	05/22/14 08:30
490-53708-7	MW-300 (40-50)	Water	05/21/14 11:10	05/22/14 08:30
490-53708-8	MW-300 (80-90)	Water	05/21/14 14:10	05/22/14 08:30
490-53708-9	MW-300 (120-130)	Water	05/21/14 14:25	05/22/14 08:30
490-53708-10	Trip Blank	Water	04/30/14 00:01	05/22/14 08:30
490-53708-11	MW-303 (55-65)	Water	05/21/14 14:55	05/22/14 08:30
490-53708-12	MW-303 (115-125)	Water	05/21/14 16:30	05/22/14 08:30

Job ID: 490-53708-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-53708-1

Comments
No additional comments.

Receipt
The samples were received on 5/22/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 4.5º C.

Except:

The following sample(s) was received outside of holding time: Trip Blank (490-53708-10).

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

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

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

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.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: 35R

Date Collected: 05/21/14 11:10
Date Received: 05/22/14 08:30

Lab Sample ID: 490-53708-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/29/14 23:26	1
Benzene	**10.6**		0.500	0.200	ug/L			05/29/14 23:26	1
Bromoform	ND		0.500	0.290	ug/L			05/29/14 23:26	1
Bromomethane	ND		0.500	0.350	ug/L			05/29/14 23:26	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/29/14 23:26	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/29/14 23:26	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/29/14 23:26	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/29/14 23:26	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/29/14 23:26	1
Chloroethane	ND		0.500	0.360	ug/L			05/29/14 23:26	1
Chloroform	ND		0.500	0.230	ug/L			05/29/14 23:26	1
Chloromethane	ND		0.500	0.360	ug/L			05/29/14 23:26	1
cis-1,2-Dichloroethene	**4.72**		0.500	0.210	ug/L			05/29/14 23:26	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 23:26	1
Dibromomethane	ND		0.500	0.450	ug/L			05/29/14 23:26	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/29/14 23:26	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/29/14 23:26	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/29/14 23:26	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/29/14 23:26	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/29/14 23:26	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/29/14 23:26	1
Ethylbenzene	**2.44**		0.500	0.190	ug/L			05/29/14 23:26	1
2-Hexanone	ND		5.00	1.28	ug/L			05/29/14 23:26	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/29/14 23:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/29/14 23:26	1
m-Xylene & p-Xylene	**0.889**		0.500	0.380	ug/L			05/29/14 23:26	1
o-Xylene	ND		0.500	0.200	ug/L			05/29/14 23:26	1
Styrene	ND		0.500	0.280	ug/L			05/29/14 23:26	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/29/14 23:26	1
Tetrachloroethene	**0.740**		0.500	0.140	ug/L			05/29/14 23:26	1
Toluene	ND		0.500	0.170	ug/L			05/29/14 23:26	1
trans-1,2-Dichloroethene	**0.470**	**J**	0.500	0.230	ug/L			05/29/14 23:26	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 23:26	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/29/14 23:26	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 23:26	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 23:26	1
Trichloroethene	**1.32**		0.500	0.200	ug/L			05/29/14 23:26	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/29/14 23:26	1
Xylenes, Total	**0.889**	**J**	1.50	0.580	ug/L			05/29/14 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*05/29/14 23:26*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*		*05/29/14 23:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 130*		*05/29/14 23:26*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/29/14 23:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0104**		0.0100	0.00720	mg/L		05/27/14 11:14	06/02/14 22:51	1
Manganese	**1.37**		0.0150	0.00500	mg/L		05/27/14 11:14	06/02/14 22:51	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: EW-100

Date Collected: 05/21/14 12:50
Date Received: 05/22/14 08:30

Lab Sample ID: 490-53708-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/29/14 23:52	1
Benzene	**112**		0.500	0.200	ug/L			05/29/14 23:52	1
Bromoform	ND		0.500	0.290	ug/L			05/29/14 23:52	1
Bromomethane	ND		0.500	0.350	ug/L			05/29/14 23:52	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/29/14 23:52	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/29/14 23:52	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/29/14 23:52	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/29/14 23:52	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/29/14 23:52	1
Chloroethane	ND		0.500	0.360	ug/L			05/29/14 23:52	1
Chloroform	ND		0.500	0.230	ug/L			05/29/14 23:52	1
Chloromethane	ND		0.500	0.360	ug/L			05/29/14 23:52	1
cis-1,2-Dichloroethene	**46.3**		0.500	0.210	ug/L			05/29/14 23:52	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 23:52	1
Dibromomethane	ND		0.500	0.450	ug/L			05/29/14 23:52	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/29/14 23:52	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/29/14 23:52	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/29/14 23:52	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/29/14 23:52	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/29/14 23:52	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/29/14 23:52	1
Ethylbenzene	**55.3**		0.500	0.190	ug/L			05/29/14 23:52	1
2-Hexanone	ND		5.00	1.28	ug/L			05/29/14 23:52	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/29/14 23:52	1
4-Methyl-2-pentanone (MIBK)	**5.46**		5.00	0.810	ug/L			05/29/14 23:52	1
m-Xylene & p-Xylene	**42.6**		0.500	0.380	ug/L			05/29/14 23:52	1
o-Xylene	**5.12**		0.500	0.200	ug/L			05/29/14 23:52	1
Styrene	ND		0.500	0.280	ug/L			05/29/14 23:52	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/29/14 23:52	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/29/14 23:52	1
Toluene	**1.33**		0.500	0.170	ug/L			05/29/14 23:52	1
trans-1,2-Dichloroethene	**3.07**		0.500	0.230	ug/L			05/29/14 23:52	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 23:52	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/29/14 23:52	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 23:52	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 23:52	1
Trichloroethene	**1.10**		0.500	0.200	ug/L			05/29/14 23:52	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/29/14 23:52	1
Xylenes, Total	**47.7**		1.50	0.580	ug/L			05/29/14 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*05/29/14 23:52*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*		*05/29/14 23:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 130*		*05/29/14 23:52*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/29/14 23:52*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: EW-101

Date Collected: 05/21/14 14:15
Date Received: 05/22/14 08:30

Lab Sample ID: 490-53708-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 00:18	1
Benzene	ND		0.500	0.200	ug/L			05/30/14 00:18	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 00:18	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 00:18	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 00:18	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 00:18	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 00:18	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 00:18	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 00:18	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 00:18	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 00:18	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 00:18	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/30/14 00:18	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 00:18	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 00:18	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 00:18	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 00:18	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 00:18	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 00:18	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 00:18	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 00:18	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 00:18	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 00:18	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 00:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 00:18	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 00:18	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 00:18	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 00:18	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 00:18	1
Tetrachloroethene	**0.390**	**J**	0.500	0.140	ug/L			05/30/14 00:18	1
Toluene	**9.11**		0.500	0.170	ug/L			05/30/14 00:18	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/30/14 00:18	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 00:18	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 00:18	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 00:18	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 00:18	1
Trichloroethene	**0.267**	**J**	0.500	0.200	ug/L			05/30/14 00:18	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 00:18	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/30/14 00:18*	*1*
Dibromofluoromethane (Surr)	*85*		*70 - 130*		*05/30/14 00:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*76*		*70 - 130*		*05/30/14 00:18*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*05/30/14 00:18*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: MW-302 (60-70)

Lab Sample ID: 490-53708-4

Date Collected: 05/21/14 12:10
Date Received: 05/22/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 00:44	1
Benzene	ND		0.500	0.200	ug/L			05/30/14 00:44	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 00:44	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 00:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 00:44	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 00:44	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 00:44	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 00:44	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 00:44	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 00:44	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 00:44	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 00:44	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/30/14 00:44	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 00:44	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 00:44	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 00:44	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 00:44	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 00:44	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 00:44	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 00:44	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 00:44	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 00:44	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 00:44	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 00:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 00:44	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 00:44	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 00:44	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 00:44	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 00:44	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 00:44	1
Toluene	ND		0.500	0.170	ug/L			05/30/14 00:44	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/30/14 00:44	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 00:44	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 00:44	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 00:44	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 00:44	1
Trichloroethene	ND		0.500	0.200	ug/L			05/30/14 00:44	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 00:44	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*05/30/14 00:44*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*05/30/14 00:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*70 - 130*		*05/30/14 00:44*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/30/14 00:44*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0306**		0.0100	0.00720	mg/L		05/27/14 11:26	05/28/14 14:49	1
Manganese	**0.109**		0.0150	0.00500	mg/L		05/27/14 11:26	05/28/14 14:49	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: MW-302 (100-110)

Lab Sample ID: 490-53708-5

Date Collected: 05/21/14 10:50
Date Received: 05/22/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 01:10	1
Benzene	ND		0.500	0.200	ug/L			05/30/14 01:10	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 01:10	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 01:10	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 01:10	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 01:10	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 01:10	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 01:10	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 01:10	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 01:10	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 01:10	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 01:10	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/30/14 01:10	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 01:10	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 01:10	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 01:10	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 01:10	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 01:10	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 01:10	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 01:10	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 01:10	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 01:10	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 01:10	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 01:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 01:10	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 01:10	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 01:10	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 01:10	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 01:10	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 01:10	1
Toluene	ND		0.500	0.170	ug/L			05/30/14 01:10	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/30/14 01:10	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 01:10	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 01:10	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 01:10	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 01:10	1
Trichloroethene	ND		0.500	0.200	ug/L			05/30/14 01:10	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 01:10	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*05/30/14 01:10*	*1*
Dibromofluoromethane (Surr)	*86*		*70 - 130*		*05/30/14 01:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 130*		*05/30/14 01:10*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*05/30/14 01:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0243**		0.0100	0.00720	mg/L		05/27/14 11:26	05/28/14 15:00	1
Manganese	**0.235**		0.0150	0.00500	mg/L		05/27/14 11:26	05/28/14 15:00	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: MW-300 (20-30)

Lab Sample ID: 490-53708-6

Date Collected: 05/21/14 10:10
Date Received: 05/22/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 01:35	1
Benzene	**5.44**		0.500	0.200	ug/L			05/30/14 01:35	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 01:35	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 01:35	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 01:35	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 01:35	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 01:35	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 01:35	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 01:35	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 01:35	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 01:35	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 01:35	1
cis-1,2-Dichloroethene	**10.1**		0.500	0.210	ug/L			05/30/14 01:35	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 01:35	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 01:35	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 01:35	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 01:35	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 01:35	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 01:35	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 01:35	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 01:35	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 01:35	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 01:35	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 01:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 01:35	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 01:35	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 01:35	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 01:35	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 01:35	1
Tetrachloroethene	**0.407**	**J**	0.500	0.140	ug/L			05/30/14 01:35	1
Toluene	**0.329**	**J**	0.500	0.170	ug/L			05/30/14 01:35	1
trans-1,2-Dichloroethene	**2.83**		0.500	0.230	ug/L			05/30/14 01:35	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 01:35	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 01:35	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 01:35	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 01:35	1
Trichloroethene	**3.27**		0.500	0.200	ug/L			05/30/14 01:35	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 01:35	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*05/30/14 01:35*	*1*
Dibromofluoromethane (Surr)	*86*		*70 - 130*		*05/30/14 01:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*77*		*70 - 130*		*05/30/14 01:35*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*05/30/14 01:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0285**		0.0100	0.00720	mg/L		05/27/14 11:26	05/28/14 15:03	1
Manganese	**0.451**		0.0150	0.00500	mg/L		05/27/14 11:26	05/28/14 15:03	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: MW-300 (40-50)

Lab Sample ID: 490-53708-7

Date Collected: 05/21/14 11:10
Matrix: Water
Date Received: 05/22/14 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 02:01	1
Benzene	**2.08**		0.500	0.200	ug/L			05/30/14 02:01	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 02:01	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 02:01	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 02:01	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 02:01	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 02:01	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 02:01	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 02:01	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 02:01	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 02:01	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 02:01	1
cis-1,2-Dichloroethene	**31.0**		0.500	0.210	ug/L			05/30/14 02:01	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 02:01	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 02:01	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 02:01	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 02:01	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 02:01	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 02:01	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 02:01	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 02:01	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 02:01	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 02:01	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 02:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 02:01	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 02:01	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 02:01	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 02:01	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 02:01	1
Tetrachloroethene	**0.692**		0.500	0.140	ug/L			05/30/14 02:01	1
Toluene	**0.735**		0.500	0.170	ug/L			05/30/14 02:01	1
trans-1,2-Dichloroethene	**5.72**		0.500	0.230	ug/L			05/30/14 02:01	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 02:01	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 02:01	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 02:01	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 02:01	1
Trichloroethene	**7.76**		0.500	0.200	ug/L			05/30/14 02:01	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 02:01	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/30/14 02:01*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*05/30/14 02:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*70 - 130*		*05/30/14 02:01*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*05/30/14 02:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00790**	**J**	0.0100	0.00720	mg/L		05/27/14 11:26	05/28/14 15:06	1
Manganese	**0.163**		0.0150	0.00500	mg/L		05/27/14 11:26	05/28/14 15:06	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: MW-300 (80-90)

Date Collected: 05/21/14 14:10
Date Received: 05/22/14 08:30

Lab Sample ID: 490-53708-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 12:20	1
Benzene	**27.1**		0.500	0.200	ug/L			05/30/14 12:20	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 12:20	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 12:20	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 12:20	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 12:20	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 12:20	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 12:20	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 12:20	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 12:20	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 12:20	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 12:20	1
cis-1,2-Dichloroethene	**8.54**		0.500	0.210	ug/L			05/30/14 12:20	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 12:20	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 12:20	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 12:20	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 12:20	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 12:20	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 12:20	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 12:20	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 12:20	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 12:20	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 12:20	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 12:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 12:20	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 12:20	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 12:20	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 12:20	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 12:20	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 12:20	1
Toluene	**2.39**		0.500	0.170	ug/L			05/30/14 12:20	1
trans-1,2-Dichloroethene	**0.990**		0.500	0.230	ug/L			05/30/14 12:20	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 12:20	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 12:20	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 12:20	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 12:20	1
Trichloroethene	**4.05**		0.500	0.200	ug/L			05/30/14 12:20	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 12:20	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/30/14 12:20*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*05/30/14 12:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 130*		*05/30/14 12:20*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/30/14 12:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/27/14 11:26	05/28/14 15:10	1
Manganese	**0.728**		0.0150	0.00500	mg/L		05/27/14 11:26	05/28/14 15:10	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: MW-300 (120-130)

Lab Sample ID: 490-53708-9

Date Collected: 05/21/14 14:25
Date Received: 05/22/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 12:46	1
Benzene	**4.97**		0.500	0.200	ug/L			05/30/14 12:46	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 12:46	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 12:46	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 12:46	1
Carbon disulfide	**0.385**	**J**	0.500	0.220	ug/L			05/30/14 12:46	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 12:46	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 12:46	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 12:46	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 12:46	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 12:46	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 12:46	1
cis-1,2-Dichloroethene	**6.12**		0.500	0.210	ug/L			05/30/14 12:46	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 12:46	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 12:46	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 12:46	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 12:46	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 12:46	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 12:46	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 12:46	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 12:46	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 12:46	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 12:46	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 12:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 12:46	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 12:46	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 12:46	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 12:46	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 12:46	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 12:46	1
Toluene	**4.05**		0.500	0.170	ug/L			05/30/14 12:46	1
trans-1,2-Dichloroethene	**0.596**		0.500	0.230	ug/L			05/30/14 12:46	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 12:46	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 12:46	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 12:46	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 12:46	1
Trichloroethene	**0.761**		0.500	0.200	ug/L			05/30/14 12:46	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 12:46	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/30/14 12:46*	*1*
Dibromofluoromethane (Surr)	*87*		*70 - 130*		*05/30/14 12:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 130*		*05/30/14 12:46*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*05/30/14 12:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/27/14 11:26	05/28/14 15:13	1
Manganese	**0.121**		0.0150	0.00500	mg/L		05/27/14 11:26	05/28/14 15:13	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: Trip Blank

Date Collected: 04/30/14 00:01
Date Received: 05/22/14 08:30

Lab Sample ID: 490-53708-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/02/14 18:05	1
Benzene	ND		0.500	0.200	ug/L			06/02/14 18:05	1
Bromoform	ND		0.500	0.290	ug/L			06/02/14 18:05	1
Bromomethane	ND		0.500	0.350	ug/L			06/02/14 18:05	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/02/14 18:05	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/02/14 18:05	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/02/14 18:05	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/02/14 18:05	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/02/14 18:05	1
Chloroethane	ND		0.500	0.360	ug/L			06/02/14 18:05	1
Chloroform	ND		0.500	0.230	ug/L			06/02/14 18:05	1
Chloromethane	ND		0.500	0.360	ug/L			06/02/14 18:05	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			06/02/14 18:05	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/02/14 18:05	1
Dibromomethane	ND		0.500	0.450	ug/L			06/02/14 18:05	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/02/14 18:05	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/02/14 18:05	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/02/14 18:05	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/02/14 18:05	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/02/14 18:05	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/02/14 18:05	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/02/14 18:05	1
2-Hexanone	ND		5.00	1.28	ug/L			06/02/14 18:05	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/02/14 18:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/02/14 18:05	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/02/14 18:05	1
o-Xylene	ND		0.500	0.200	ug/L			06/02/14 18:05	1
Styrene	ND		0.500	0.280	ug/L			06/02/14 18:05	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/02/14 18:05	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/02/14 18:05	1
Toluene	ND		0.500	0.170	ug/L			06/02/14 18:05	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/02/14 18:05	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/02/14 18:05	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/02/14 18:05	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/02/14 18:05	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/02/14 18:05	1
Trichloroethene	ND		0.500	0.200	ug/L			06/02/14 18:05	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/02/14 18:05	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/02/14 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*06/02/14 18:05*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*06/02/14 18:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*77*		*70 - 130*		*06/02/14 18:05*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/02/14 18:05*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: MW-303 (55-65)

Lab Sample ID: 490-53708-11

Date Collected: 05/21/14 14:55
Date Received: 05/22/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/02/14 18:31	1
Benzene	**3.53**		0.500	0.200	ug/L			06/02/14 18:31	1
Bromoform	ND		0.500	0.290	ug/L			06/02/14 18:31	1
Bromomethane	ND		0.500	0.350	ug/L			06/02/14 18:31	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/02/14 18:31	1
Carbon disulfide	**2.91**		0.500	0.220	ug/L			06/02/14 18:31	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/02/14 18:31	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/02/14 18:31	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/02/14 18:31	1
Chloroethane	ND		0.500	0.360	ug/L			06/02/14 18:31	1
Chloroform	ND		0.500	0.230	ug/L			06/02/14 18:31	1
Chloromethane	ND		0.500	0.360	ug/L			06/02/14 18:31	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			06/02/14 18:31	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/02/14 18:31	1
Dibromomethane	ND		0.500	0.450	ug/L			06/02/14 18:31	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/02/14 18:31	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/02/14 18:31	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/02/14 18:31	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/02/14 18:31	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/02/14 18:31	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/02/14 18:31	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/02/14 18:31	1
2-Hexanone	ND		5.00	1.28	ug/L			06/02/14 18:31	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/02/14 18:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/02/14 18:31	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/02/14 18:31	1
o-Xylene	ND		0.500	0.200	ug/L			06/02/14 18:31	1
Styrene	ND		0.500	0.280	ug/L			06/02/14 18:31	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/02/14 18:31	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/02/14 18:31	1
Toluene	**0.235**	**J**	0.500	0.170	ug/L			06/02/14 18:31	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/02/14 18:31	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/02/14 18:31	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/02/14 18:31	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/02/14 18:31	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/02/14 18:31	1
Trichloroethene	ND		0.500	0.200	ug/L			06/02/14 18:31	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/02/14 18:31	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/02/14 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*06/02/14 18:31*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*06/02/14 18:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*70 - 130*		*06/02/14 18:31*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*06/02/14 18:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0221**		0.0100	0.00720	mg/L		05/27/14 11:26	05/28/14 15:29	1
Manganese	**0.0797**		0.0150	0.00500	mg/L		05/27/14 11:26	05/28/14 15:29	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: MW-303 (115-125)

Lab Sample ID: 490-53708-12

Date Collected: 05/21/14 16:30
Date Received: 05/22/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/02/14 18:57	1
Benzene	**4.53**		0.500	0.200	ug/L			06/02/14 18:57	1
Bromoform	ND		0.500	0.290	ug/L			06/02/14 18:57	1
Bromomethane	ND		0.500	0.350	ug/L			06/02/14 18:57	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/02/14 18:57	1
Carbon disulfide	**0.504**		0.500	0.220	ug/L			06/02/14 18:57	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/02/14 18:57	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/02/14 18:57	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/02/14 18:57	1
Chloroethane	ND		0.500	0.360	ug/L			06/02/14 18:57	1
Chloroform	ND		0.500	0.230	ug/L			06/02/14 18:57	1
Chloromethane	ND		0.500	0.360	ug/L			06/02/14 18:57	1
cis-1,2-Dichloroethene	**0.432**	**J**	0.500	0.210	ug/L			06/02/14 18:57	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/02/14 18:57	1
Dibromomethane	ND		0.500	0.450	ug/L			06/02/14 18:57	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/02/14 18:57	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/02/14 18:57	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/02/14 18:57	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/02/14 18:57	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/02/14 18:57	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/02/14 18:57	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/02/14 18:57	1
2-Hexanone	ND		5.00	1.28	ug/L			06/02/14 18:57	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/02/14 18:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/02/14 18:57	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/02/14 18:57	1
o-Xylene	ND		0.500	0.200	ug/L			06/02/14 18:57	1
Styrene	ND		0.500	0.280	ug/L			06/02/14 18:57	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/02/14 18:57	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/02/14 18:57	1
Toluene	ND		0.500	0.170	ug/L			06/02/14 18:57	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/02/14 18:57	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/02/14 18:57	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/02/14 18:57	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/02/14 18:57	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/02/14 18:57	1
Trichloroethene	ND		0.500	0.200	ug/L			06/02/14 18:57	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/02/14 18:57	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/02/14 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*06/02/14 18:57*	*1*
Dibromofluoromethane (Surr)	*88*		*70 - 130*		*06/02/14 18:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 130*		*06/02/14 18:57*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/02/14 18:57*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0221**		0.0100	0.00720	mg/L		05/27/14 11:26	05/28/14 15:32	1
Manganese	**0.126**		0.0150	0.00500	mg/L		05/27/14 11:26	05/28/14 15:32	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-165743/7
Matrix: Water
Analysis Batch: 165743

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/29/14 17:51	1
Benzene	ND		0.500	0.200	ug/L			05/29/14 17:51	1
Bromoform	ND		0.500	0.290	ug/L			05/29/14 17:51	1
Bromomethane	ND		0.500	0.350	ug/L			05/29/14 17:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/29/14 17:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/29/14 17:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/29/14 17:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/29/14 17:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/29/14 17:51	1
Chloroethane	ND		0.500	0.360	ug/L			05/29/14 17:51	1
Chloroform	ND		0.500	0.230	ug/L			05/29/14 17:51	1
Chloromethane	ND		0.500	0.360	ug/L			05/29/14 17:51	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/29/14 17:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 17:51	1
Dibromomethane	ND		0.500	0.450	ug/L			05/29/14 17:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/29/14 17:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/29/14 17:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/29/14 17:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/29/14 17:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/29/14 17:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/29/14 17:51	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/29/14 17:51	1
2-Hexanone	ND		5.00	1.28	ug/L			05/29/14 17:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/29/14 17:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/29/14 17:51	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/29/14 17:51	1
o-Xylene	ND		0.500	0.200	ug/L			05/29/14 17:51	1
Styrene	ND		0.500	0.280	ug/L			05/29/14 17:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/29/14 17:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/29/14 17:51	1
Toluene	ND		0.500	0.170	ug/L			05/29/14 17:51	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/29/14 17:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/29/14 17:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/29/14 17:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 17:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/29/14 17:51	1
Trichloroethene	ND		0.500	0.200	ug/L			05/29/14 17:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/29/14 17:51	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/29/14 17:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/29/14 17:51*	*1*
Dibromofluoromethane (Surr)	*86*		*70 - 130*		*05/29/14 17:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*78*		*70 - 130*		*05/29/14 17:51*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*05/29/14 17:51*	*1*

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

Lab Sample ID: LCS 490-165743/3
Matrix: Water
Analysis Batch: 165743

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	259.0		ug/L		104	54 - 145
Benzene	50.0	56.80		ug/L		114	80 - 121
Bromoform	50.0	46.76		ug/L		94	46 - 145
Bromomethane	50.0	54.13		ug/L		108	41 - 150
2-Butanone (MEK)	250	269.7		ug/L		108	62 - 133
Carbon disulfide	50.0	55.79		ug/L		112	77 - 126
Carbon tetrachloride	50.0	46.55		ug/L		93	64 - 147
Chlorobenzene	50.0	56.09		ug/L		112	80 - 120
Chlorodibromomethane	50.0	50.65		ug/L		101	69 - 133
Chloroethane	50.0	51.77		ug/L		104	72 - 120
Chloroform	50.0	53.55		ug/L		107	73 - 129
Chloromethane	50.0	42.09		ug/L		84	12 - 150
cis-1,2-Dichloroethene	50.0	55.87		ug/L		112	76 - 125
cis-1,3-Dichloropropene	50.0	50.39		ug/L		101	74 - 140
Dibromomethane	50.0	47.64		ug/L		95	71 - 125
Dichlorobromomethane	50.0	49.10		ug/L		98	75 - 129
1,1-Dichloroethane	50.0	56.06		ug/L		112	78 - 125
1,2-Dichloroethane	50.0	45.48		ug/L		91	77 - 121
1,1-Dichloroethene	50.0	56.95		ug/L		114	79 - 124
1,2-Dichloropropane	50.0	53.65		ug/L		107	75 - 120
1,1-Dichloropropene	50.0	54.35		ug/L		109	80 - 122
Ethylbenzene	50.0	56.54		ug/L		113	80 - 130
2-Hexanone	250	280.4		ug/L		112	60 - 142
Methylene Chloride	50.0	57.89		ug/L		116	79 - 123
4-Methyl-2-pentanone (MIBK)	250	284.4		ug/L		114	60 - 137
m-Xylene & p-Xylene	50.0	56.78		ug/L		114	80 - 141
o-Xylene	50.0	55.56		ug/L		111	80 - 127
Styrene	50.0	58.72		ug/L		117	80 - 127
1,1,1,2-Tetrachloroethane	50.0	50.47		ug/L		101	74 - 135
Tetrachloroethene	50.0	50.64		ug/L		101	80 - 126
Toluene	50.0	57.82		ug/L		116	80 - 126
trans-1,2-Dichloroethene	50.0	57.33		ug/L		115	79 - 126
trans-1,3-Dichloropropene	50.0	45.87		ug/L		92	63 - 134
1,3,5-Trichlorobenzene	50.0	54.71		ug/L		109	70 - 130
1,1,1-Trichloroethane	50.0	49.17		ug/L		98	78 - 135
1,1,2-Trichloroethane	50.0	55.85		ug/L		112	80 - 124
Trichloroethene	50.0	51.99		ug/L		104	80 - 123
Vinyl chloride	50.0	51.09		ug/L		102	68 - 120
Xylenes, Total	100	112.3		ug/L		112	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: LCSD 490-165743/4
Matrix: Water
Analysis Batch: 165743

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
Acetone	250	254.9		ug/L		102	54 - 145	2	21
Benzene	50.0	57.20		ug/L		114	80 - 121	1	17
Bromoform	50.0	46.85		ug/L		94	46 - 145	0	16
Bromomethane	50.0	56.05		ug/L		112	41 - 150	3	50
2-Butanone (MEK)	250	277.7		ug/L		111	62 - 133	3	19
Carbon disulfide	50.0	55.38		ug/L		111	77 - 126	1	21
Carbon tetrachloride	50.0	46.34		ug/L		93	64 - 147	0	19
Chlorobenzene	50.0	56.70		ug/L		113	80 - 120	1	14
Chlorodibromomethane	50.0	50.97		ug/L		102	69 - 133	1	15
Chloroethane	50.0	52.32		ug/L		105	72 - 120	1	20
Chloroform	50.0	53.61		ug/L		107	73 - 129	0	18
Chloromethane	50.0	42.30		ug/L		85	12 - 150	1	31
cis-1,2-Dichloroethene	50.0	55.55		ug/L		111	76 - 125	1	17
cis-1,3-Dichloropropene	50.0	51.44		ug/L		103	74 - 140	2	15
Dibromomethane	50.0	47.54		ug/L		95	71 - 125	0	16
Dichlorobromomethane	50.0	48.73		ug/L		97	75 - 129	1	18
1,1-Dichloroethane	50.0	56.42		ug/L		113	78 - 125	1	17
1,2-Dichloroethane	50.0	46.02		ug/L		92	77 - 121	1	17
1,1-Dichloroethene	50.0	59.47		ug/L		119	79 - 124	4	17
1,2-Dichloropropane	50.0	53.50		ug/L		107	75 - 120	0	17
1,1-Dichloropropene	50.0	54.50		ug/L		109	80 - 122	0	17
Ethylbenzene	50.0	57.01		ug/L		114	80 - 130	1	15
2-Hexanone	250	285.3		ug/L		114	60 - 142	2	15
Methylene Chloride	50.0	57.88		ug/L		116	79 - 123	0	17
4-Methyl-2-pentanone (MIBK)	250	282.7		ug/L		113	60 - 137	1	17
m-Xylene & p-Xylene	50.0	56.84		ug/L		114	80 - 141	0	16
o-Xylene	50.0	56.42		ug/L		113	80 - 127	2	14
Styrene	50.0	59.24		ug/L		118	80 - 127	1	24
1,1,1,2-Tetrachloroethane	50.0	51.18		ug/L		102	74 - 135	1	16
Tetrachloroethene	50.0	51.68		ug/L		103	80 - 126	2	16
Toluene	50.0	57.98		ug/L		116	80 - 126	0	15
trans-1,2-Dichloroethene	50.0	56.98		ug/L		114	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	46.38		ug/L		93	63 - 134	1	14
1,3,5-Trichlorobenzene	50.0	54.70		ug/L		109	70 - 130	0	30
1,1,1-Trichloroethane	50.0	49.61		ug/L		99	78 - 135	1	17
1,1,2-Trichloroethane	50.0	55.84		ug/L		112	80 - 124	0	15
Trichloroethene	50.0	51.82		ug/L		104	80 - 123	0	17
Vinyl chloride	50.0	50.50		ug/L		101	68 - 120	1	17
Xylenes, Total	100	113.3		ug/L		113	80 - 132	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: 490-53651-A-7 MS
Matrix: Water
Analysis Batch: 165743

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	245.2		ug/L		98	45 - 141
Benzene	ND		50.0	60.69		ug/L		121	75 - 133
Bromoform	ND		50.0	44.87		ug/L		90	42 - 147
Bromomethane	ND		50.0	42.38		ug/L		85	16 - 163
2-Butanone (MEK)	ND		250	273.8		ug/L		110	50 - 138
Carbon disulfide	ND		50.0	57.13		ug/L		114	48 - 152
Carbon tetrachloride	ND		50.0	49.50		ug/L		99	62 - 164
Chlorobenzene	ND		50.0	59.27		ug/L		119	80 - 129
Chlorodibromomethane	ND		50.0	51.61		ug/L		103	66 - 140
Chloroethane	ND		50.0	51.97		ug/L		104	58 - 137
Chloroform	ND		50.0	56.28		ug/L		113	66 - 138
Chloromethane	ND		50.0	35.73		ug/L		71	10 - 169
cis-1,2-Dichloroethene	ND		50.0	58.33		ug/L		117	68 - 138
cis-1,3-Dichloropropene	ND		50.0	51.23		ug/L		102	71 - 141
Dibromomethane	ND		50.0	48.99		ug/L		98	58 - 140
Dichlorobromomethane	ND		50.0	51.48		ug/L		103	70 - 140
1,1-Dichloroethane	ND		50.0	59.66		ug/L		119	71 - 139
1,2-Dichloroethane	ND		50.0	47.58		ug/L		95	64 - 136
1,1-Dichloroethene	ND		50.0	62.94		ug/L		126	70 - 142
1,2-Dichloropropane	ND		50.0	56.16		ug/L		112	67 - 131
1,1-Dichloropropene	ND		50.0	57.47		ug/L		115	76 - 139
Ethylbenzene	ND		50.0	59.30		ug/L		119	79 - 139
2-Hexanone	ND		250	270.1		ug/L		108	50 - 150
Methylene Chloride	ND		50.0	61.26		ug/L		123	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	278.2		ug/L		111	50 - 147
m-Xylene & p-Xylene	ND		50.0	59.34		ug/L		119	80 - 153
o-Xylene	ND		50.0	58.18		ug/L		116	74 - 138
Styrene	ND		50.0	61.36		ug/L		123	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	52.33		ug/L		105	73 - 141
Tetrachloroethene	ND		50.0	54.92		ug/L		110	72 - 145
Toluene	ND		50.0	60.20		ug/L		120	75 - 136
trans-1,2-Dichloroethene	ND		50.0	59.65		ug/L		119	66 - 143
trans-1,3-Dichloropropene	ND		50.0	45.59		ug/L		91	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	52.41		ug/L		105	60 - 140
1,1,1-Trichloroethane	ND		50.0	52.94		ug/L		106	76 - 149
1,1,2-Trichloroethane	ND		50.0	56.78		ug/L		114	74 - 134
Trichloroethene	ND		50.0	55.27		ug/L		111	73 - 144
Vinyl chloride	ND		50.0	46.50		ug/L		93	56 - 129
Xylenes, Total	ND		100	117.5		ug/L		118	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*88*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

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

Lab Sample ID: 490-53651-A-7 MSD
Matrix: Water
Analysis Batch: 165743

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	241.7		ug/L		97	45 - 141	1	21
Benzene	ND		50.0	58.27		ug/L		117	75 - 133	4	17
Bromoform	ND		50.0	44.90		ug/L		90	42 - 147	0	16
Bromomethane	ND		50.0	48.23		ug/L		96	16 - 163	13	50
2-Butanone (MEK)	ND		250	268.5		ug/L		107	50 - 138	2	19
Carbon disulfide	ND		50.0	56.15		ug/L		112	48 - 152	2	21
Carbon tetrachloride	ND		50.0	47.79		ug/L		96	62 - 164	4	19
Chlorobenzene	ND		50.0	57.13		ug/L		114	80 - 129	4	14
Chlorodibromomethane	ND		50.0	50.90		ug/L		102	66 - 140	1	15
Chloroethane	ND		50.0	50.68		ug/L		101	58 - 137	3	20
Chloroform	ND		50.0	54.59		ug/L		109	66 - 138	3	18
Chloromethane	ND		50.0	35.62		ug/L		71	10 - 169	0	31
cis-1,2-Dichloroethene	ND		50.0	56.48		ug/L		113	68 - 138	3	17
cis-1,3-Dichloropropene	ND		50.0	50.32		ug/L		101	71 - 141	2	15
Dibromomethane	ND		50.0	46.56		ug/L		93	58 - 140	5	16
Dichlorobromomethane	ND		50.0	49.45		ug/L		99	70 - 140	4	18
1,1-Dichloroethane	ND		50.0	57.47		ug/L		115	71 - 139	4	17
1,2-Dichloroethane	ND		50.0	46.45		ug/L		93	64 - 136	2	17
1,1-Dichloroethene	ND		50.0	59.40		ug/L		119	70 - 142	6	17
1,2-Dichloropropane	ND		50.0	54.83		ug/L		110	67 - 131	2	17
1,1-Dichloropropene	ND		50.0	55.85		ug/L		112	76 - 139	3	17
Ethylbenzene	ND		50.0	58.06		ug/L		116	79 - 139	2	15
2-Hexanone	ND		250	270.6		ug/L		108	50 - 150	0	15
Methylene Chloride	ND		50.0	58.24		ug/L		116	64 - 139	5	17
4-Methyl-2-pentanone (MIBK)	ND		250	275.3		ug/L		110	50 - 147	1	17
m-Xylene & p-Xylene	ND		50.0	57.55		ug/L		115	80 - 153	3	16
o-Xylene	ND		50.0	56.69		ug/L		113	74 - 138	3	14
Styrene	ND		50.0	59.44		ug/L		119	61 - 148	3	24
1,1,1,2-Tetrachloroethane	ND		50.0	51.29		ug/L		103	73 - 141	2	16
Tetrachloroethene	ND		50.0	52.77		ug/L		106	72 - 145	4	16
Toluene	ND		50.0	58.86		ug/L		118	75 - 136	2	15
trans-1,2-Dichloroethene	ND		50.0	58.48		ug/L		117	66 - 143	2	16
trans-1,3-Dichloropropene	ND		50.0	45.06		ug/L		90	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	52.56		ug/L		105	60 - 140	0	30
1,1,1-Trichloroethane	ND		50.0	51.51		ug/L		103	76 - 149	3	17
1,1,2-Trichloroethane	ND		50.0	55.83		ug/L		112	74 - 134	2	15
Trichloroethene	ND		50.0	53.20		ug/L		106	73 - 144	4	17
Vinyl chloride	ND		50.0	44.81		ug/L		90	56 - 129	4	17
Xylenes, Total	ND		100	114.2		ug/L		114	74 - 141	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 490-165756/7
Matrix: Water
Analysis Batch: 165756

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			05/30/14 06:45	1
Benzene	ND		0.500	0.200	ug/L			05/30/14 06:45	1
Bromoform	ND		0.500	0.290	ug/L			05/30/14 06:45	1
Bromomethane	ND		0.500	0.350	ug/L			05/30/14 06:45	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			05/30/14 06:45	1
Carbon disulfide	ND		0.500	0.220	ug/L			05/30/14 06:45	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			05/30/14 06:45	1
Chlorobenzene	ND		0.500	0.180	ug/L			05/30/14 06:45	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			05/30/14 06:45	1
Chloroethane	ND		0.500	0.360	ug/L			05/30/14 06:45	1
Chloroform	ND		0.500	0.230	ug/L			05/30/14 06:45	1
Chloromethane	ND		0.500	0.360	ug/L			05/30/14 06:45	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			05/30/14 06:45	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 06:45	1
Dibromomethane	ND		0.500	0.450	ug/L			05/30/14 06:45	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			05/30/14 06:45	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			05/30/14 06:45	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			05/30/14 06:45	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			05/30/14 06:45	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			05/30/14 06:45	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			05/30/14 06:45	1
Ethylbenzene	ND		0.500	0.190	ug/L			05/30/14 06:45	1
2-Hexanone	ND		5.00	1.28	ug/L			05/30/14 06:45	1
Methylene Chloride	ND		5.00	0.220	ug/L			05/30/14 06:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			05/30/14 06:45	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			05/30/14 06:45	1
o-Xylene	ND		0.500	0.200	ug/L			05/30/14 06:45	1
Styrene	ND		0.500	0.280	ug/L			05/30/14 06:45	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			05/30/14 06:45	1
Tetrachloroethene	ND		0.500	0.140	ug/L			05/30/14 06:45	1
Toluene	ND		0.500	0.170	ug/L			05/30/14 06:45	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			05/30/14 06:45	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			05/30/14 06:45	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			05/30/14 06:45	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 06:45	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			05/30/14 06:45	1
Trichloroethene	ND		0.500	0.200	ug/L			05/30/14 06:45	1
Vinyl chloride	ND		0.500	0.180	ug/L			05/30/14 06:45	1
Xylenes, Total	ND		1.50	0.580	ug/L			05/30/14 06:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*05/30/14 06:45*	*1*
Dibromofluoromethane (Surr)	*86*		*70 - 130*		*05/30/14 06:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*77*		*70 - 130*		*05/30/14 06:45*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*05/30/14 06:45*	*1*

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

Lab Sample ID: LCS 490-165756/3
Matrix: Water
Analysis Batch: 165756

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	264.7		ug/L		106	54 - 145
Benzene	50.0	56.79		ug/L		114	80 - 121
Bromoform	50.0	43.64		ug/L		87	46 - 145
Bromomethane	50.0	52.47		ug/L		105	41 - 150
2-Butanone (MEK)	250	262.0		ug/L		105	62 - 133
Carbon disulfide	50.0	56.09		ug/L		112	77 - 126
Carbon tetrachloride	50.0	46.03		ug/L		92	64 - 147
Chlorobenzene	50.0	55.35		ug/L		111	80 - 120
Chlorodibromomethane	50.0	49.88		ug/L		100	69 - 133
Chloroethane	50.0	51.45		ug/L		103	72 - 120
Chloroform	50.0	53.59		ug/L		107	73 - 129
Chloromethane	50.0	41.67		ug/L		83	12 - 150
cis-1,2-Dichloroethene	50.0	54.37		ug/L		109	76 - 125
cis-1,3-Dichloropropene	50.0	50.15		ug/L		100	74 - 140
Dibromomethane	50.0	46.56		ug/L		93	71 - 125
Dichlorobromomethane	50.0	49.46		ug/L		99	75 - 129
1,1-Dichloroethane	50.0	56.43		ug/L		113	78 - 125
1,2-Dichloroethane	50.0	45.39		ug/L		91	77 - 121
1,1-Dichloroethene	50.0	60.76		ug/L		122	79 - 124
1,2-Dichloropropane	50.0	53.18		ug/L		106	75 - 120
1,1-Dichloropropene	50.0	53.53		ug/L		107	80 - 122
Ethylbenzene	50.0	55.93		ug/L		112	80 - 130
2-Hexanone	250	274.6		ug/L		110	60 - 142
Methylene Chloride	50.0	57.89		ug/L		116	79 - 123
4-Methyl-2-pentanone (MIBK)	250	279.7		ug/L		112	60 - 137
m-Xylene & p-Xylene	50.0	55.53		ug/L		111	80 - 141
o-Xylene	50.0	54.89		ug/L		110	80 - 127
Styrene	50.0	58.18		ug/L		116	80 - 127
1,1,1,2-Tetrachloroethane	50.0	50.39		ug/L		101	74 - 135
Tetrachloroethene	50.0	50.47		ug/L		101	80 - 126
Toluene	50.0	57.09		ug/L		114	80 - 126
trans-1,2-Dichloroethene	50.0	57.10		ug/L		114	79 - 126
trans-1,3-Dichloropropene	50.0	44.05		ug/L		88	63 - 134
1,3,5-Trichlorobenzene	50.0	51.07		ug/L		102	70 - 130
1,1,1-Trichloroethane	50.0	49.31		ug/L		99	78 - 135
1,1,2-Trichloroethane	50.0	54.05		ug/L		108	80 - 124
Trichloroethene	50.0	52.19		ug/L		104	80 - 123
Vinyl chloride	50.0	50.63		ug/L		101	68 - 120
Xylenes, Total	100	110.4		ug/L		110	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: LCSD 490-165756/4
Matrix: Water
Analysis Batch: 165756

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
Acetone	250	260.5		ug/L		104	54 - 145	2	21
Benzene	50.0	57.21		ug/L		114	80 - 121	1	17
Bromoform	50.0	44.60		ug/L		89	46 - 145	2	16
Bromomethane	50.0	53.75		ug/L		107	41 - 150	2	50
2-Butanone (MEK)	250	270.2		ug/L		108	62 - 133	3	19
Carbon disulfide	50.0	53.76		ug/L		108	77 - 126	4	21
Carbon tetrachloride	50.0	46.02		ug/L		92	64 - 147	0	19
Chlorobenzene	50.0	56.02		ug/L		112	80 - 120	1	14
Chlorodibromomethane	50.0	49.14		ug/L		98	69 - 133	2	15
Chloroethane	50.0	51.88		ug/L		104	72 - 120	1	20
Chloroform	50.0	53.17		ug/L		106	73 - 129	1	18
Chloromethane	50.0	40.28		ug/L		81	12 - 150	3	31
cis-1,2-Dichloroethene	50.0	54.63		ug/L		109	76 - 125	0	17
cis-1,3-Dichloropropene	50.0	49.54		ug/L		99	74 - 140	1	15
Dibromomethane	50.0	46.74		ug/L		93	71 - 125	0	16
Dichlorobromomethane	50.0	47.76		ug/L		96	75 - 129	4	18
1,1-Dichloroethane	50.0	56.09		ug/L		112	78 - 125	1	17
1,2-Dichloroethane	50.0	45.41		ug/L		91	77 - 121	0	17
1,1-Dichloroethene	50.0	59.26		ug/L		119	79 - 124	2	17
1,2-Dichloropropane	50.0	53.66		ug/L		107	75 - 120	1	17
1,1-Dichloropropene	50.0	53.46		ug/L		107	80 - 122	0	17
Ethylbenzene	50.0	56.14		ug/L		112	80 - 130	0	15
2-Hexanone	250	270.8		ug/L		108	60 - 142	1	15
Methylene Chloride	50.0	57.48		ug/L		115	79 - 123	1	17
4-Methyl-2-pentanone (MIBK)	250	274.0		ug/L		110	60 - 137	2	17
m-Xylene & p-Xylene	50.0	55.74		ug/L		111	80 - 141	0	16
o-Xylene	50.0	55.23		ug/L		110	80 - 127	1	14
Styrene	50.0	57.78		ug/L		116	80 - 127	1	24
1,1,1,2-Tetrachloroethane	50.0	49.72		ug/L		99	74 - 135	1	16
Tetrachloroethene	50.0	50.78		ug/L		102	80 - 126	1	16
Toluene	50.0	57.08		ug/L		114	80 - 126	0	15
trans-1,2-Dichloroethene	50.0	56.60		ug/L		113	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	44.49		ug/L		89	63 - 134	1	14
1,3,5-Trichlorobenzene	50.0	52.15		ug/L		104	70 - 130	2	30
1,1,1-Trichloroethane	50.0	49.10		ug/L		98	78 - 135	0	17
1,1,2-Trichloroethane	50.0	53.96		ug/L		108	80 - 124	0	15
Trichloroethene	50.0	51.96		ug/L		104	80 - 123	0	17
Vinyl chloride	50.0	49.88		ug/L		100	68 - 120	1	17
Xylenes, Total	100	111.0		ug/L		111	80 - 132	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: 490-53829-B-1 MS
Matrix: Water
Analysis Batch: 165756

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	264.3		ug/L		106	45 - 141
Benzene	ND		50.0	58.73		ug/L		117	75 - 133
Bromoform	ND		50.0	47.72		ug/L		95	42 - 147
Bromomethane	ND		50.0	45.91		ug/L		92	16 - 163
2-Butanone (MEK)	ND		250	279.0		ug/L		112	50 - 138
Carbon disulfide	ND		50.0	52.85		ug/L		106	48 - 152
Carbon tetrachloride	ND		50.0	48.13		ug/L		96	62 - 164
Chlorobenzene	ND		50.0	57.98		ug/L		116	80 - 129
Chlorodibromomethane	ND		50.0	52.44		ug/L		105	66 - 140
Chloroethane	ND		50.0	55.66		ug/L		111	58 - 137
Chloroform	ND		50.0	55.05		ug/L		110	66 - 138
Chloromethane	ND		50.0	43.10		ug/L		86	10 - 169
cis-1,2-Dichloroethene	ND		50.0	56.17		ug/L		112	68 - 138
cis-1,3-Dichloropropene	ND		50.0	49.90		ug/L		100	71 - 141
Dibromomethane	ND		50.0	48.08		ug/L		96	58 - 140
Dichlorobromomethane	ND		50.0	50.07		ug/L		100	70 - 140
1,1-Dichloroethane	ND		50.0	58.50		ug/L		117	71 - 139
1,2-Dichloroethane	ND		50.0	46.66		ug/L		93	64 - 136
1,1-Dichloroethene	ND		50.0	61.80		ug/L		124	70 - 142
1,2-Dichloropropane	ND		50.0	55.32		ug/L		111	67 - 131
1,1-Dichloropropene	ND		50.0	55.24		ug/L		110	76 - 139
Ethylbenzene	ND		50.0	58.07		ug/L		116	79 - 139
2-Hexanone	ND		250	285.9		ug/L		114	50 - 150
Methylene Chloride	ND		50.0	58.94		ug/L		118	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	290.7		ug/L		116	50 - 147
m-Xylene & p-Xylene	ND		50.0	57.51		ug/L		115	80 - 153
o-Xylene	ND		50.0	56.63		ug/L		113	74 - 138
Styrene	ND		50.0	60.07		ug/L		120	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	52.79		ug/L		106	73 - 141
Tetrachloroethene	ND		50.0	52.72		ug/L		105	72 - 145
Toluene	ND		50.0	59.07		ug/L		118	75 - 136
trans-1,2-Dichloroethene	ND		50.0	57.43		ug/L		115	66 - 143
trans-1,3-Dichloropropene	ND		50.0	45.69		ug/L		91	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	48.33		ug/L		97	60 - 140
1,1,1-Trichloroethane	ND		50.0	51.18		ug/L		102	76 - 149
1,1,2-Trichloroethane	ND		50.0	58.40		ug/L		117	74 - 134
Trichloroethene	ND		50.0	54.18		ug/L		108	73 - 144
Vinyl chloride	ND		50.0	53.64		ug/L		107	56 - 129
Xylenes, Total	ND		100	114.1		ug/L		114	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*90*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: 490-53829-C-1 MSD
Matrix: Water
Analysis Batch: 165756

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	279.9		ug/L		112	45 - 141	6	21
Benzene	ND		50.0	58.60		ug/L		117	75 - 133	0	17
Bromoform	ND		50.0	49.01		ug/L		98	42 - 147	3	16
Bromomethane	ND		50.0	53.92		ug/L		108	16 - 163	16	50
2-Butanone (MEK)	ND		250	297.4		ug/L		119	50 - 138	6	19
Carbon disulfide	ND		50.0	51.45		ug/L		103	48 - 152	3	21
Carbon tetrachloride	ND		50.0	45.76		ug/L		92	62 - 164	5	19
Chlorobenzene	ND		50.0	55.97		ug/L		112	80 - 129	4	14
Chlorodibromomethane	ND		50.0	53.21		ug/L		106	66 - 140	1	15
Chloroethane	ND		50.0	55.50		ug/L		111	58 - 137	0	20
Chloroform	ND		50.0	56.23		ug/L		112	66 - 138	2	18
Chloromethane	ND		50.0	43.87		ug/L		88	10 - 169	2	31
cis-1,2-Dichloroethene	ND		50.0	55.98		ug/L		112	68 - 138	0	17
cis-1,3-Dichloropropene	ND		50.0	50.34		ug/L		101	71 - 141	1	15
Dibromomethane	ND		50.0	49.46		ug/L		99	58 - 140	3	16
Dichlorobromomethane	ND		50.0	51.28		ug/L		103	70 - 140	2	18
1,1-Dichloroethane	ND		50.0	59.06		ug/L		118	71 - 139	1	17
1,2-Dichloroethane	ND		50.0	47.91		ug/L		96	64 - 136	3	17
1,1-Dichloroethene	ND		50.0	60.09		ug/L		120	70 - 142	3	17
1,2-Dichloropropane	ND		50.0	56.22		ug/L		112	67 - 131	2	17
1,1-Dichloropropene	ND		50.0	52.89		ug/L		106	76 - 139	4	17
Ethylbenzene	ND		50.0	54.25		ug/L		109	79 - 139	7	15
2-Hexanone	ND		250	295.8		ug/L		118	50 - 150	3	15
Methylene Chloride	ND		50.0	61.06		ug/L		122	64 - 139	4	17
4-Methyl-2-pentanone (MIBK)	ND		250	298.9		ug/L		120	50 - 147	3	17
m-Xylene & p-Xylene	ND		50.0	53.87		ug/L		108	80 - 153	7	16
o-Xylene	ND		50.0	54.52		ug/L		109	74 - 138	4	14
Styrene	ND		50.0	58.13		ug/L		116	61 - 148	3	24
1,1,1,2-Tetrachloroethane	ND		50.0	51.98		ug/L		104	73 - 141	2	16
Tetrachloroethene	ND		50.0	47.07		ug/L		94	72 - 145	11	16
Toluene	ND		50.0	56.60		ug/L		113	75 - 136	4	15
trans-1,2-Dichloroethene	ND		50.0	57.98		ug/L		116	66 - 143	1	16
trans-1,3-Dichloropropene	ND		50.0	45.85		ug/L		92	59 - 135	0	14
1,3,5-Trichlorobenzene	ND		50.0	48.53		ug/L		97	60 - 140	0	30
1,1,1-Trichloroethane	ND		50.0	50.44		ug/L		101	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	58.92		ug/L		118	74 - 134	1	15
Trichloroethene	ND		50.0	51.96		ug/L		104	73 - 144	4	17
Vinyl chloride	ND		50.0	54.72		ug/L		109	56 - 129	2	17
Xylenes, Total	ND		100	108.4		ug/L		108	74 - 141	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: MB 490-166417/7
Matrix: Water
Analysis Batch: 166417

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/02/14 16:45	1
Benzene	ND		0.500	0.200	ug/L			06/02/14 16:45	1
Bromoform	ND		0.500	0.290	ug/L			06/02/14 16:45	1
Bromomethane	ND		0.500	0.350	ug/L			06/02/14 16:45	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/02/14 16:45	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/02/14 16:45	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/02/14 16:45	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/02/14 16:45	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/02/14 16:45	1
Chloroethane	ND		0.500	0.360	ug/L			06/02/14 16:45	1
Chloroform	ND		0.500	0.230	ug/L			06/02/14 16:45	1
Chloromethane	ND		0.500	0.360	ug/L			06/02/14 16:45	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			06/02/14 16:45	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/02/14 16:45	1
Dibromomethane	ND		0.500	0.450	ug/L			06/02/14 16:45	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/02/14 16:45	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/02/14 16:45	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/02/14 16:45	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/02/14 16:45	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/02/14 16:45	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/02/14 16:45	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/02/14 16:45	1
2-Hexanone	ND		5.00	1.28	ug/L			06/02/14 16:45	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/02/14 16:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/02/14 16:45	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/02/14 16:45	1
o-Xylene	ND		0.500	0.200	ug/L			06/02/14 16:45	1
Styrene	ND		0.500	0.280	ug/L			06/02/14 16:45	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/02/14 16:45	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/02/14 16:45	1
Toluene	ND		0.500	0.170	ug/L			06/02/14 16:45	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/02/14 16:45	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/02/14 16:45	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/02/14 16:45	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/02/14 16:45	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/02/14 16:45	1
Trichloroethene	ND		0.500	0.200	ug/L			06/02/14 16:45	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/02/14 16:45	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/02/14 16:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*06/02/14 16:45*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*06/02/14 16:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*80*		*70 - 130*		*06/02/14 16:45*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*06/02/14 16:45*	*1*

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

Lab Sample ID: LCS 490-166417/3
Matrix: Water
Analysis Batch: 166417

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	266.6		ug/L		107	54 - 145
Benzene	50.0	55.91		ug/L		112	80 - 121
Bromoform	50.0	47.65		ug/L		95	46 - 145
Bromomethane	50.0	49.79		ug/L		100	41 - 150
2-Butanone (MEK)	250	288.3		ug/L		115	62 - 133
Carbon disulfide	50.0	54.32		ug/L		109	77 - 126
Carbon tetrachloride	50.0	45.82		ug/L		92	64 - 147
Chlorobenzene	50.0	55.54		ug/L		111	80 - 120
Chlorodibromomethane	50.0	51.07		ug/L		102	69 - 133
Chloroethane	50.0	50.77		ug/L		102	72 - 120
Chloroform	50.0	52.59		ug/L		105	73 - 129
Chloromethane	50.0	36.42		ug/L		73	12 - 150
cis-1,2-Dichloroethene	50.0	54.93		ug/L		110	76 - 125
cis-1,3-Dichloropropene	50.0	50.50		ug/L		101	74 - 140
Dibromomethane	50.0	44.96		ug/L		90	71 - 125
Dichlorobromomethane	50.0	48.55		ug/L		97	75 - 129
1,1-Dichloroethane	50.0	56.24		ug/L		112	78 - 125
1,2-Dichloroethane	50.0	45.56		ug/L		91	77 - 121
1,1-Dichloroethene	50.0	57.95		ug/L		116	79 - 124
1,2-Dichloropropane	50.0	53.13		ug/L		106	75 - 120
1,1-Dichloropropene	50.0	53.58		ug/L		107	80 - 122
Ethylbenzene	50.0	55.41		ug/L		111	80 - 130
2-Hexanone	250	292.5		ug/L		117	60 - 142
Methylene Chloride	50.0	56.92		ug/L		114	79 - 123
4-Methyl-2-pentanone (MIBK)	250	294.6		ug/L		118	60 - 137
m-Xylene & p-Xylene	50.0	55.44		ug/L		111	80 - 141
o-Xylene	50.0	54.59		ug/L		109	80 - 127
Styrene	50.0	57.65		ug/L		115	80 - 127
1,1,1,2-Tetrachloroethane	50.0	50.21		ug/L		100	74 - 135
Tetrachloroethene	50.0	50.49		ug/L		101	80 - 126
Toluene	50.0	56.37		ug/L		113	80 - 126
trans-1,2-Dichloroethene	50.0	56.87		ug/L		114	79 - 126
trans-1,3-Dichloropropene	50.0	46.47		ug/L		93	63 - 134
1,3,5-Trichlorobenzene	50.0	52.58		ug/L		105	70 - 130
1,1,1-Trichloroethane	50.0	48.51		ug/L		97	78 - 135
1,1,2-Trichloroethane	50.0	55.91		ug/L		112	80 - 124
Trichloroethene	50.0	51.86		ug/L		104	80 - 123
Vinyl chloride	50.0	47.62		ug/L		95	68 - 120
Xylenes, Total	100	110.0		ug/L		110	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

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

Lab Sample ID: LCSD 490-166417/4
Matrix: Water
Analysis Batch: 166417

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
Acetone	250	277.8		ug/L		111	54 - 145	4	21
Benzene	50.0	56.52		ug/L		113	80 - 121	1	17
Bromoform	50.0	47.44		ug/L		95	46 - 145	0	16
Bromomethane	50.0	49.02		ug/L		98	41 - 150	2	50
2-Butanone (MEK)	250	290.3		ug/L		116	62 - 133	1	19
Carbon disulfide	50.0	55.64		ug/L		111	77 - 126	2	21
Carbon tetrachloride	50.0	45.53		ug/L		91	64 - 147	1	19
Chlorobenzene	50.0	54.85		ug/L		110	80 - 120	1	14
Chlorodibromomethane	50.0	51.25		ug/L		103	69 - 133	0	15
Chloroethane	50.0	50.32		ug/L		101	72 - 120	1	20
Chloroform	50.0	52.47		ug/L		105	73 - 129	0	18
Chloromethane	50.0	36.13		ug/L		72	12 - 150	1	31
cis-1,2-Dichloroethene	50.0	54.79		ug/L		110	76 - 125	0	17
cis-1,3-Dichloropropene	50.0	50.74		ug/L		101	74 - 140	0	15
Dibromomethane	50.0	45.05		ug/L		90	71 - 125	0	16
Dichlorobromomethane	50.0	48.03		ug/L		96	75 - 129	1	18
1,1-Dichloroethane	50.0	55.52		ug/L		111	78 - 125	1	17
1,2-Dichloroethane	50.0	46.11		ug/L		92	77 - 121	1	17
1,1-Dichloroethene	50.0	57.38		ug/L		115	79 - 124	1	17
1,2-Dichloropropane	50.0	52.33		ug/L		105	75 - 120	2	17
1,1-Dichloropropene	50.0	53.23		ug/L		106	80 - 122	1	17
Ethylbenzene	50.0	54.98		ug/L		110	80 - 130	1	15
2-Hexanone	250	292.9		ug/L		117	60 - 142	0	15
Methylene Chloride	50.0	57.35		ug/L		115	79 - 123	1	17
4-Methyl-2-pentanone (MIBK)	250	294.2		ug/L		118	60 - 137	0	17
m-Xylene & p-Xylene	50.0	55.17		ug/L		110	80 - 141	0	16
o-Xylene	50.0	54.12		ug/L		108	80 - 127	1	14
Styrene	50.0	57.25		ug/L		115	80 - 127	1	24
1,1,1,2-Tetrachloroethane	50.0	49.62		ug/L		99	74 - 135	1	16
Tetrachloroethene	50.0	50.04		ug/L		100	80 - 126	1	16
Toluene	50.0	55.77		ug/L		112	80 - 126	1	15
trans-1,2-Dichloroethene	50.0	56.06		ug/L		112	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	46.21		ug/L		92	63 - 134	1	14
1,3,5-Trichlorobenzene	50.0	53.11		ug/L		106	70 - 130	1	30
1,1,1-Trichloroethane	50.0	48.73		ug/L		97	78 - 135	0	17
1,1,2-Trichloroethane	50.0	55.13		ug/L		110	80 - 124	1	15
Trichloroethene	50.0	51.17		ug/L		102	80 - 123	1	17
Vinyl chloride	50.0	48.18		ug/L		96	68 - 120	1	17
Xylenes, Total	100	109.3		ug/L		109	80 - 132	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: 490-53663-B-1 MS
Matrix: Water
Analysis Batch: 166417

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	273.9		ug/L		110	45 - 141
Benzene	ND		50.0	60.66		ug/L		121	75 - 133
Bromoform	ND		50.0	48.82		ug/L		98	42 - 147
Bromomethane	ND		50.0	40.38		ug/L		81	16 - 163
2-Butanone (MEK)	ND		250	288.9		ug/L		116	50 - 138
Carbon disulfide	ND		50.0	58.44		ug/L		117	48 - 152
Carbon tetrachloride	ND		50.0	48.25		ug/L		96	62 - 164
Chlorobenzene	ND		50.0	59.06		ug/L		118	80 - 129
Chlorodibromomethane	ND		50.0	54.48		ug/L		109	66 - 140
Chloroethane	ND		50.0	56.09		ug/L		112	58 - 137
Chloroform	ND		50.0	57.34		ug/L		115	66 - 138
Chloromethane	ND		50.0	39.03		ug/L		78	10 - 169
cis-1,2-Dichloroethene	ND		50.0	60.04		ug/L		120	68 - 138
cis-1,3-Dichloropropene	ND		50.0	52.42		ug/L		105	71 - 141
Dibromomethane	ND		50.0	47.99		ug/L		96	58 - 140
Dichlorobromomethane	ND		50.0	52.62		ug/L		105	70 - 140
1,1-Dichloroethane	ND		50.0	60.89		ug/L		122	71 - 139
1,2-Dichloroethane	ND		50.0	48.67		ug/L		97	64 - 136
1,1-Dichloroethene	ND		50.0	60.12		ug/L		120	70 - 142
1,2-Dichloropropane	ND		50.0	57.85		ug/L		116	67 - 131
1,1-Dichloropropene	ND		50.0	57.96		ug/L		116	76 - 139
Ethylbenzene	ND		50.0	59.76		ug/L		120	79 - 139
2-Hexanone	ND		250	291.4		ug/L		117	50 - 150
Methylene Chloride	ND		50.0	61.60		ug/L		123	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	299.7		ug/L		120	50 - 147
m-Xylene & p-Xylene	ND		50.0	59.38		ug/L		119	80 - 153
o-Xylene	ND		50.0	58.64		ug/L		117	74 - 138
Styrene	ND		50.0	62.21		ug/L		124	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	53.56		ug/L		107	73 - 141
Tetrachloroethene	ND		50.0	55.30		ug/L		111	72 - 145
Toluene	ND		50.0	60.65		ug/L		121	75 - 136
trans-1,2-Dichloroethene	ND		50.0	60.80		ug/L		122	66 - 143
trans-1,3-Dichloropropene	ND		50.0	47.32		ug/L		95	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	52.46		ug/L		105	60 - 140
1,1,1-Trichloroethane	ND		50.0	52.28		ug/L		105	76 - 149
1,1,2-Trichloroethane	ND		50.0	58.98		ug/L		118	74 - 134
Trichloroethene	ND		50.0	56.22		ug/L		112	73 - 144
Vinyl chloride	ND		50.0	53.18		ug/L		106	56 - 129
Xylenes, Total	ND		100	118.0		ug/L		118	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*88*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

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

Lab Sample ID: 490-53663-C-1 MSD
Matrix: Water
Analysis Batch: 166417

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	281.0		ug/L		112	45 - 141	3	21
Benzene	ND		50.0	61.75		ug/L		124	75 - 133	2	17
Bromoform	ND		50.0	49.48		ug/L		99	42 - 147	1	16
Bromomethane	ND		50.0	52.03		ug/L		104	16 - 163	25	50
2-Butanone (MEK)	ND		250	302.4		ug/L		121	50 - 138	5	19
Carbon disulfide	ND		50.0	60.16		ug/L		120	48 - 152	3	21
Carbon tetrachloride	ND		50.0	50.66		ug/L		101	62 - 164	5	19
Chlorobenzene	ND		50.0	59.03		ug/L		118	80 - 129	0	14
Chlorodibromomethane	ND		50.0	53.22		ug/L		106	66 - 140	2	15
Chloroethane	ND		50.0	56.89		ug/L		114	58 - 137	1	20
Chloroform	ND		50.0	59.62		ug/L		119	66 - 138	4	18
Chloromethane	ND		50.0	40.03		ug/L		80	10 - 169	3	31
cis-1,2-Dichloroethene	ND		50.0	60.96		ug/L		122	68 - 138	2	17
cis-1,3-Dichloropropene	ND		50.0	52.93		ug/L		106	71 - 141	1	15
Dibromomethane	ND		50.0	49.41		ug/L		99	58 - 140	3	16
Dichlorobromomethane	ND		50.0	52.89		ug/L		106	70 - 140	1	18
1,1-Dichloroethane	ND		50.0	62.69		ug/L		125	71 - 139	3	17
1,2-Dichloroethane	ND		50.0	50.13		ug/L		100	64 - 136	3	17
1,1-Dichloroethene	ND		50.0	63.60		ug/L		127	70 - 142	6	17
1,2-Dichloropropane	ND		50.0	59.32		ug/L		119	67 - 131	3	17
1,1-Dichloropropene	ND		50.0	59.93		ug/L		120	76 - 139	3	17
Ethylbenzene	ND		50.0	58.88		ug/L		118	79 - 139	1	15
2-Hexanone	ND		250	293.2		ug/L		117	50 - 150	1	15
Methylene Chloride	ND		50.0	62.26		ug/L		125	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	291.2		ug/L		116	50 - 147	3	17
m-Xylene & p-Xylene	ND		50.0	58.35		ug/L		117	80 - 153	2	16
o-Xylene	ND		50.0	57.95		ug/L		116	74 - 138	1	14
Styrene	ND		50.0	60.90		ug/L		122	61 - 148	2	24
1,1,1,2-Tetrachloroethane	ND		50.0	53.61		ug/L		107	73 - 141	0	16
Tetrachloroethene	ND		50.0	53.69		ug/L		107	72 - 145	3	16
Toluene	ND		50.0	60.30		ug/L		121	75 - 136	1	15
trans-1,2-Dichloroethene	ND		50.0	62.56		ug/L		125	66 - 143	3	16
trans-1,3-Dichloropropene	ND		50.0	47.56		ug/L		95	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	53.66		ug/L		107	60 - 140	2	30
1,1,1-Trichloroethane	ND		50.0	54.05		ug/L		108	76 - 149	3	17
1,1,2-Trichloroethane	ND		50.0	58.30		ug/L		117	74 - 134	1	15
Trichloroethene	ND		50.0	56.83		ug/L		114	73 - 144	1	17
Vinyl chloride	ND		50.0	54.61		ug/L		109	56 - 129	3	17
Xylenes, Total	ND		100	116.3		ug/L		116	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*92*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-165012/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166439 — **Prep Batch: 165012**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/27/14 11:14	06/02/14 20:48	1
Manganese	ND		0.0150	0.00500	mg/L		05/27/14 11:14	06/02/14 20:48	1

Lab Sample ID: LCS 490-165012/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166439 — **Prep Batch: 165012**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.05410		mg/L		108	80 - 120
Manganese	0.500	0.5280		mg/L		106	80 - 120

Lab Sample ID: LCSD 490-165012/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166439 — **Prep Batch: 165012**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0500	0.05310		mg/L		106	80 - 120	2	20
Manganese	0.500	0.5365		mg/L		107	80 - 120	2	20

Lab Sample ID: 490-53339-J-3-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166439 — **Prep Batch: 165012**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0876		0.0500	0.1457		mg/L		116	75 - 125
Manganese	0.226		0.500	0.7019		mg/L		95	75 - 125

Lab Sample ID: 490-53339-J-3-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166439 — **Prep Batch: 165012**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0876		0.0500	0.1597	F1	mg/L		144	75 - 125	9	20
Manganese	0.226		0.500	0.7602		mg/L		107	75 - 125	8	20

Lab Sample ID: MB 490-165023/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 165485 — **Prep Batch: 165023**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/27/14 11:26	05/28/14 14:43	1
Manganese	ND		0.0150	0.00500	mg/L		05/27/14 11:26	05/28/14 14:43	1

Lab Sample ID: LCS 490-165023/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 165485 — **Prep Batch: 165023**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.05120		mg/L		102	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 490-165023/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 165485 — **Prep Batch: 165023**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Manganese			0.500	0.5191		mg/L		104	80 - 120		

Lab Sample ID: 490-53708-4 MS — **Client Sample ID: MW-302 (60-70)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 165485 — **Prep Batch: 165023**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	0.0306		0.0500	0.08280		mg/L		104	75 - 125		
Manganese	0.109		0.500	0.6306		mg/L		104	75 - 125		

Lab Sample ID: 490-53708-4 MSD — **Client Sample ID: MW-302 (60-70)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 165485 — **Prep Batch: 165023**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0306		0.0500	0.07990		mg/L		99	75 - 125	4	20
Manganese	0.109		0.500	0.6346		mg/L		105	75 - 125	1	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

GC/MS VOA

Analysis Batch: 165743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53651-A-7 MS	Matrix Spike	Total/NA	Water	8260B	
490-53651-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-53708-1	35R	Total/NA	Water	8260B	
490-53708-2	EW-100	Total/NA	Water	8260B	
490-53708-3	EW-101	Total/NA	Water	8260B	
490-53708-4	MW-302 (60-70)	Total/NA	Water	8260B	
490-53708-5	MW-302 (100-110)	Total/NA	Water	8260B	
490-53708-6	MW-300 (20-30)	Total/NA	Water	8260B	
490-53708-7	MW-300 (40-50)	Total/NA	Water	8260B	
LCS 490-165743/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-165743/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-165743/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 165756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53708-8	MW-300 (80-90)	Total/NA	Water	8260B	
490-53708-9	MW-300 (120-130)	Total/NA	Water	8260B	
490-53829-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-53829-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-165756/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-165756/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-165756/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 166417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53663-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-53663-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-53708-10	Trip Blank	Total/NA	Water	8260B	
490-53708-11	MW-303 (55-65)	Total/NA	Water	8260B	
490-53708-12	MW-303 (115-125)	Total/NA	Water	8260B	
LCS 490-166417/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-166417/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-166417/7	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 165012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53339-J-3-B MS	Matrix Spike	Total/NA	Water	3010A	
490-53339-J-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-53708-1	35R	Total/NA	Water	3010A	
LCS 490-165012/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-165012/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-165012/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 165023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53708-4	MW-302 (60-70)	Total/NA	Water	3010A	
490-53708-4 MS	MW-302 (60-70)	Total/NA	Water	3010A	
490-53708-4 MSD	MW-302 (60-70)	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 165023 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53708-5	MW-302 (100-110)	Total/NA	Water	3010A	
490-53708-6	MW-300 (20-30)	Total/NA	Water	3010A	
490-53708-7	MW-300 (40-50)	Total/NA	Water	3010A	
490-53708-8	MW-300 (80-90)	Total/NA	Water	3010A	
490-53708-9	MW-300 (120-130)	Total/NA	Water	3010A	
490-53708-11	MW-303 (55-65)	Total/NA	Water	3010A	
490-53708-12	MW-303 (115-125)	Total/NA	Water	3010A	
LCS 490-165023/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-165023/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 165485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53708-4	MW-302 (60-70)	Total/NA	Water	6010B	165023
490-53708-4 MS	MW-302 (60-70)	Total/NA	Water	6010B	165023
490-53708-4 MSD	MW-302 (60-70)	Total/NA	Water	6010B	165023
490-53708-5	MW-302 (100-110)	Total/NA	Water	6010B	165023
490-53708-6	MW-300 (20-30)	Total/NA	Water	6010B	165023
490-53708-7	MW-300 (40-50)	Total/NA	Water	6010B	165023
490-53708-8	MW-300 (80-90)	Total/NA	Water	6010B	165023
490-53708-9	MW-300 (120-130)	Total/NA	Water	6010B	165023
490-53708-11	MW-303 (55-65)	Total/NA	Water	6010B	165023
490-53708-12	MW-303 (115-125)	Total/NA	Water	6010B	165023
LCS 490-165023/2-A	Lab Control Sample	Total/NA	Water	6010B	165023
MB 490-165023/1-A	Method Blank	Total/NA	Water	6010B	165023

Analysis Batch: 166439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53339-J-3-B MS	Matrix Spike	Total/NA	Water	6010B	165012
490-53339-J-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	165012
490-53708-1	35R	Total/NA	Water	6010B	165012
LCS 490-165012/2-A	Lab Control Sample	Total/NA	Water	6010B	165012
LCSD 490-165012/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	165012
MB 490-165012/1-A	Method Blank	Total/NA	Water	6010B	165012

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: 35R — Lab Sample ID: 490-53708-1

Date Collected: 05/21/14 11:10 — **Matrix: Water**
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165743	05/29/14 23:26	BJM	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165012	05/27/14 11:14	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166439	06/02/14 22:51	DBK	TAL NSH

Client Sample ID: EW-100 — Lab Sample ID: 490-53708-2

Date Collected: 05/21/14 12:50 — **Matrix: Water**
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165743	05/29/14 23:52	BJM	TAL NSH

Client Sample ID: EW-101 — Lab Sample ID: 490-53708-3

Date Collected: 05/21/14 14:15 — **Matrix: Water**
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165743	05/30/14 00:18	BJM	TAL NSH

Client Sample ID: MW-302 (60-70) — Lab Sample ID: 490-53708-4

Date Collected: 05/21/14 12:10 — **Matrix: Water**
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165743	05/30/14 00:44	BJM	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165023	05/27/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165485	05/28/14 14:49	LTB	TAL NSH

Client Sample ID: MW-302 (100-110) — Lab Sample ID: 490-53708-5

Date Collected: 05/21/14 10:50 — **Matrix: Water**
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165743	05/30/14 01:10	BJM	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165023	05/27/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165485	05/28/14 15:00	LTB	TAL NSH

Client Sample ID: MW-300 (20-30) — Lab Sample ID: 490-53708-6

Date Collected: 05/21/14 10:10 — **Matrix: Water**
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165743	05/30/14 01:35	BJM	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: MW-300 (20-30)

Lab Sample ID: 490-53708-6

Date Collected: 05/21/14 10:10
Matrix: Water
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	165023	05/27/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165485	05/28/14 15:03	LTB	TAL NSH

Client Sample ID: MW-300 (40-50)

Lab Sample ID: 490-53708-7

Date Collected: 05/21/14 11:10
Matrix: Water
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165743	05/30/14 02:01	BJM	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165023	05/27/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165485	05/28/14 15:06	LTB	TAL NSH

Client Sample ID: MW-300 (80-90)

Lab Sample ID: 490-53708-8

Date Collected: 05/21/14 14:10
Matrix: Water
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165756	05/30/14 12:20	BJM	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165023	05/27/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165485	05/28/14 15:10	LTB	TAL NSH

Client Sample ID: MW-300 (120-130)

Lab Sample ID: 490-53708-9

Date Collected: 05/21/14 14:25
Matrix: Water
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	165756	05/30/14 12:46	BJM	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165023	05/27/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165485	05/28/14 15:13	LTB	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-53708-10

Date Collected: 04/30/14 00:01
Matrix: Water
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166417	06/02/14 18:05	BJM	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Client Sample ID: MW-303 (55-65)

Lab Sample ID: 490-53708-11

Date Collected: 05/21/14 14:55
Matrix: Water
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166417	06/02/14 18:31	BJM	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165023	05/27/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165485	05/28/14 15:29	LTB	TAL NSH

Client Sample ID: MW-303 (115-125)

Lab Sample ID: 490-53708-12

Date Collected: 05/21/14 16:30
Matrix: Water
Date Received: 05/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166417	06/02/14 18:57	BJM	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165023	05/27/14 11:26	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	165485	05/28/14 15:32	LTB	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53708-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-53708 Chain of Custody

Cooler Received/Opened On 5/22/2014 @ 8:30

1. Tracking # 9990 (last 4 digits, FedEx)

Courier: ____FedEx____ IR Gun ID___17610176___

2. Temperature of rep. sample or temp blank when opened: 4.5 *Degrees Celsius*

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

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

If yes, how many and where: 1 Front

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
53708

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/3/2014

Client Information	Sampler: DC/TZ/TM	Lab PM: Brown, Shali	Car	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone:	E-Mail: shali.brown@testamericainc.com		Page: Page 1 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Standard			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #: MA0007252014 00105			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:
				Preservation Code:				A	D		
1	35R	5-21-14	1110	G	W			X	X	4	
2	EW-100	5-21-14	1250	G	W			X		3	
3	EW-101	5-21-14	1415	G	W			X		3	
4	MW-302 (60-70)	5-21-14	1210	G	W			X	X	4	
5	MW-302 (100-110)	5-21-14	1050	G	W			X	X	4	
6	MW-300 (20-30)	5-21-14	1010	G	W			X	X	4	
7	MW-300 (40-50)	5-21-14	1110	G	W			X	X	4	
8	MW-300 (80-90)	5-21-14	1410	G	W			X	X	4	
9	MW-300 (120-130)	5-21-14	1425	G	W			X	X	4	
10	Trip Blank	4-30-14	—	—	W			X		2	
11	MW-303 (55-65)	5-21-14	1455	G	W			X	X	4	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Dave Champagne	5/21/14 1630	Arcadis	[illegible]	5-22-14 @ 0830	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 4.5c

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
53708
#1
A

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/3/2014

Client Information	Sampler: DC/TZ/TM	Lab PM: Brown, Shali	Carrier	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone:	E-Mail: shali.brown@testamericainc.com		Page: Page 2 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Standard			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #: MA0007252014 00105			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:
				Preservation Code:				A	D		
12	MW-303(115-125)	5-21-14	1630	G	W			X	X	4	

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 5/21/14 1630	Company: Arcadis	Received by: [signature]	Date/Time: 5-22-14 @ 0830	Company: TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 4.5c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-53708-1

Login Number: 53708

List Source: TestAmerica Nashville

List Number: 1

Creator: McBride, Mike

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-53821-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
6/4/2014 2:18:46 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-53821-1	Trip Blank	Water	04/30/14 00:01	05/23/14 08:15
490-53821-2	IW-103	Water	05/22/14 10:20	05/23/14 08:15
490-53821-3	IW-102	Water	05/22/14 11:25	05/23/14 08:15
490-53821-4	MW-306S (85-100)	Water	05/22/14 11:45	05/23/14 08:15
490-53821-5	MW-306S (130-140)	Water	05/22/14 10:20	05/23/14 08:15
490-53821-6	MW-306D (185-195)	Water	05/22/14 14:15	05/23/14 08:15
490-53821-7	MW-306D (280-300)	Water	05/22/14 15:30	05/23/14 08:15
490-53821-8	MW-305 (35-45)	Water	05/22/14 10:00	05/23/14 08:15
490-53821-9	MW-305 (62-72)	Water	05/22/14 10:05	05/23/14 08:15
490-53821-10	MW-305 (145-155)	Water	05/22/14 11:30	05/23/14 08:15
490-53821-11	MW-305 (233-243)	Water	05/22/14 10:15	05/23/14 08:15
490-53821-12	MW-305 (265-275)	Water	05/22/14 10:20	05/23/14 08:15
490-53821-13	MW-305 (285-300)	Water	05/22/14 10:30	05/23/14 08:15
490-53821-14	IW-101	Water	05/22/14 12:35	05/23/14 08:15
490-53821-15	IW-100	Water	05/22/14 13:55	05/23/14 08:15
490-53821-16	205R	Water	05/22/14 13:55	05/23/14 08:15
490-53821-17	405R	Water	05/22/14 14:55	05/23/14 08:15
490-53821-18	MW-301 (35-45)	Water	05/22/14 14:20	05/23/14 08:15
490-53821-19	MW-301 (115-125)	Water	05/22/14 14:30	05/23/14 08:15
490-53821-20	MW-301 (145-155)	Water	05/22/14 14:35	05/23/14 08:15
490-53821-21	MW-301 (240-250)	Water	05/22/14 14:45	05/23/14 08:15
490-53821-22	MW-301 (290-300)	Water	05/22/14 14:50	05/23/14 08:15

Job ID: 490-53821-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-53821-1

Comments
No additional comments.

Receipt
The samples were received on 5/23/2014 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 4.1º C.

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

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

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

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.

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-53821-1

Date Collected: 04/30/14 00:01

Matrix: Water

Date Received: 05/23/14 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/03/14 00:10	1
Benzene	ND		0.500	0.200	ug/L			06/03/14 00:10	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 00:10	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 00:10	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 00:10	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 00:10	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 00:10	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 00:10	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 00:10	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 00:10	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 00:10	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 00:10	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			06/03/14 00:10	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 00:10	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 00:10	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 00:10	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 00:10	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 00:10	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 00:10	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 00:10	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 00:10	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 00:10	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 00:10	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 00:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 00:10	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 00:10	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 00:10	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 00:10	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 00:10	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 00:10	1
Toluene	ND		0.500	0.170	ug/L			06/03/14 00:10	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/03/14 00:10	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 00:10	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 00:10	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 00:10	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 00:10	1
Trichloroethene	ND		0.500	0.200	ug/L			06/03/14 00:10	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 00:10	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*06/03/14 00:10*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*06/03/14 00:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*06/03/14 00:10*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/03/14 00:10*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: IW-103

Date Collected: 05/22/14 10:20
Date Received: 05/23/14 08:15

Lab Sample ID: 490-53821-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.46**		5.00	2.66	ug/L			06/03/14 00:36	1
Benzene	**47.7**		0.500	0.200	ug/L			06/03/14 00:36	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 00:36	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 00:36	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 00:36	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 00:36	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 00:36	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 00:36	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 00:36	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 00:36	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 00:36	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 00:36	1
cis-1,2-Dichloroethene	**45.3**		0.500	0.210	ug/L			06/03/14 00:36	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 00:36	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 00:36	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 00:36	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 00:36	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 00:36	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 00:36	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 00:36	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 00:36	1
Ethylbenzene	**17.3**		0.500	0.190	ug/L			06/03/14 00:36	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 00:36	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 00:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 00:36	1
m-Xylene & p-Xylene	**13.5**		0.500	0.380	ug/L			06/03/14 00:36	1
o-Xylene	**0.323**	**J**	0.500	0.200	ug/L			06/03/14 00:36	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 00:36	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 00:36	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 00:36	1
Toluene	**0.386**	**J**	0.500	0.170	ug/L			06/03/14 00:36	1
trans-1,2-Dichloroethene	**0.535**		0.500	0.230	ug/L			06/03/14 00:36	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 00:36	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 00:36	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 00:36	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 00:36	1
Trichloroethene	**0.780**		0.500	0.200	ug/L			06/03/14 00:36	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 00:36	1
Xylenes, Total	**13.8**		1.50	0.580	ug/L			06/03/14 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*06/03/14 00:36*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*06/03/14 00:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*06/03/14 00:36*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/03/14 00:36*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: IW-102

Date Collected: 05/22/14 11:25
Date Received: 05/23/14 08:15

Lab Sample ID: 490-53821-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**66.8**		5.00	2.66	ug/L			06/03/14 01:02	1
Benzene	**12.4**		0.500	0.200	ug/L			06/03/14 01:02	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 01:02	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 01:02	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 01:02	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 01:02	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 01:02	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 01:02	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 01:02	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 01:02	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 01:02	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 01:02	1
cis-1,2-Dichloroethene	**21.7**		0.500	0.210	ug/L			06/03/14 01:02	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 01:02	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 01:02	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 01:02	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 01:02	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 01:02	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 01:02	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 01:02	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 01:02	1
Ethylbenzene	**4.23**		0.500	0.190	ug/L			06/03/14 01:02	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 01:02	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 01:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 01:02	1
m-Xylene & p-Xylene	**4.17**		0.500	0.380	ug/L			06/03/14 01:02	1
o-Xylene	**0.550**		0.500	0.200	ug/L			06/03/14 01:02	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 01:02	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 01:02	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 01:02	1
Toluene	**4.49**		0.500	0.170	ug/L			06/03/14 01:02	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/03/14 01:02	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 01:02	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 01:02	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 01:02	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 01:02	1
Trichloroethene	**0.244**	**J**	0.500	0.200	ug/L			06/03/14 01:02	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 01:02	1
Xylenes, Total	**4.72**		1.50	0.580	ug/L			06/03/14 01:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*06/03/14 01:02*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*06/03/14 01:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*06/03/14 01:02*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/03/14 01:02*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-306S (85-100)

Lab Sample ID: 490-53821-4

Date Collected: 05/22/14 11:45
Date Received: 05/23/14 08:15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/03/14 01:28	1
Benzene	**0.737**		0.500	0.200	ug/L			06/03/14 01:28	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 01:28	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 01:28	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 01:28	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 01:28	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 01:28	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 01:28	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 01:28	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 01:28	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 01:28	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 01:28	1
cis-1,2-Dichloroethene	**23.9**		0.500	0.210	ug/L			06/03/14 01:28	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 01:28	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 01:28	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 01:28	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 01:28	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 01:28	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 01:28	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 01:28	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 01:28	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 01:28	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 01:28	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 01:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 01:28	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 01:28	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 01:28	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 01:28	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 01:28	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 01:28	1
Toluene	ND		0.500	0.170	ug/L			06/03/14 01:28	1
trans-1,2-Dichloroethene	**0.968**		0.500	0.230	ug/L			06/03/14 01:28	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 01:28	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 01:28	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 01:28	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 01:28	1
Trichloroethene	**0.391**	**J**	0.500	0.200	ug/L			06/03/14 01:28	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 01:28	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*06/03/14 01:28*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*06/03/14 01:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*06/03/14 01:28*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*06/03/14 01:28*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 01:30	1
Manganese	**0.0166**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 01:30	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-306S (130-140)

Lab Sample ID: 490-53821-5

Date Collected: 05/22/14 10:20
Date Received: 05/23/14 08:15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/03/14 01:54	1
Benzene	ND		0.500	0.200	ug/L			06/03/14 01:54	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 01:54	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 01:54	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 01:54	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 01:54	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 01:54	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 01:54	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 01:54	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 01:54	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 01:54	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 01:54	1
cis-1,2-Dichloroethene	**5.30**		0.500	0.210	ug/L			06/03/14 01:54	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 01:54	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 01:54	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 01:54	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 01:54	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 01:54	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 01:54	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 01:54	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 01:54	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 01:54	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 01:54	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 01:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 01:54	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 01:54	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 01:54	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 01:54	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 01:54	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 01:54	1
Toluene	ND		0.500	0.170	ug/L			06/03/14 01:54	1
trans-1,2-Dichloroethene	**0.233**	**J**	0.500	0.230	ug/L			06/03/14 01:54	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 01:54	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 01:54	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 01:54	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 01:54	1
Trichloroethene	ND		0.500	0.200	ug/L			06/03/14 01:54	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 01:54	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*06/03/14 01:54*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*06/03/14 01:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*06/03/14 01:54*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*06/03/14 01:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0122**		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 01:53	1
Manganese	**0.0204**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 01:53	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-306D (185-195)

Lab Sample ID: 490-53821-6

Date Collected: 05/22/14 14:15
Date Received: 05/23/14 08:15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/03/14 02:20	1
Benzene	**41.2**		0.500	0.200	ug/L			06/03/14 02:20	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 02:20	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 02:20	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 02:20	1
Carbon disulfide	**0.747**		0.500	0.220	ug/L			06/03/14 02:20	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 02:20	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 02:20	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 02:20	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 02:20	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 02:20	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 02:20	1
cis-1,2-Dichloroethene	**242**		2.50	1.05	ug/L			06/03/14 14:46	5
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 02:20	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 02:20	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 02:20	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 02:20	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 02:20	1
1,1-Dichloroethene	**0.704**		0.500	0.250	ug/L			06/03/14 02:20	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 02:20	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 02:20	1
Ethylbenzene	**1.62**		0.500	0.190	ug/L			06/03/14 02:20	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 02:20	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 02:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 02:20	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 02:20	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 02:20	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 02:20	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 02:20	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 02:20	1
Toluene	**0.358**	**J**	0.500	0.170	ug/L			06/03/14 02:20	1
trans-1,2-Dichloroethene	**7.62**		0.500	0.230	ug/L			06/03/14 02:20	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 02:20	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 02:20	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 02:20	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 02:20	1
Trichloroethene	**5.66**		0.500	0.200	ug/L			06/03/14 02:20	1
Vinyl chloride	**0.879**		0.500	0.180	ug/L			06/03/14 02:20	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*06/03/14 02:20*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*06/03/14 14:46*	*5*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*06/03/14 02:20*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*06/03/14 14:46*	*5*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*06/03/14 02:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*06/03/14 14:46*	*5*
Toluene-d8 (Surr)	*106*		*70 - 130*		*06/03/14 02:20*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/03/14 14:46*	*5*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-306D (185-195)

Lab Sample ID: 490-53821-6

Date Collected: 05/22/14 14:15

Matrix: Water

Date Received: 05/23/14 08:15

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00960	J	0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 01:56	1
Manganese	0.0262		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 01:56	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-306D (280-300)

Lab Sample ID: 490-53821-7

Date Collected: 05/22/14 15:30
Date Received: 05/23/14 08:15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/03/14 02:46	1
Benzene	**1.89**		0.500	0.200	ug/L			06/03/14 02:46	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 02:46	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 02:46	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 02:46	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 02:46	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 02:46	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 02:46	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 02:46	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 02:46	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 02:46	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 02:46	1
cis-1,2-Dichloroethene	**19.6**		0.500	0.210	ug/L			06/03/14 02:46	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 02:46	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 02:46	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 02:46	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 02:46	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 02:46	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 02:46	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 02:46	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 02:46	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 02:46	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 02:46	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 02:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 02:46	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 02:46	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 02:46	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 02:46	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 02:46	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 02:46	1
Toluene	ND		0.500	0.170	ug/L			06/03/14 02:46	1
trans-1,2-Dichloroethene	**0.513**		0.500	0.230	ug/L			06/03/14 02:46	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 02:46	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 02:46	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 02:46	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 02:46	1
Trichloroethene	**1.03**		0.500	0.200	ug/L			06/03/14 02:46	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 02:46	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 02:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*06/03/14 02:46*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*06/03/14 02:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*06/03/14 02:46*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/03/14 02:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:00	1
Manganese	**0.0516**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:00	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-305 (35-45)

Lab Sample ID: 490-53821-8

Date Collected: 05/22/14 10:00
Date Received: 05/23/14 08:15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.96**		5.00	2.66	ug/L			06/03/14 03:12	1
Benzene	**2.27**		0.500	0.200	ug/L			06/03/14 03:12	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 03:12	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 03:12	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 03:12	1
Carbon disulfide	**0.430**	**J**	0.500	0.220	ug/L			06/03/14 03:12	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 03:12	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 03:12	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 03:12	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 03:12	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 03:12	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 03:12	1
cis-1,2-Dichloroethene	**4.59**		0.500	0.210	ug/L			06/03/14 03:12	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 03:12	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 03:12	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 03:12	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 03:12	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 03:12	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 03:12	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 03:12	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 03:12	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 03:12	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 03:12	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 03:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 03:12	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 03:12	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 03:12	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 03:12	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 03:12	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 03:12	1
Toluene	**1.82**		0.500	0.170	ug/L			06/03/14 03:12	1
trans-1,2-Dichloroethene	**0.290**	**J**	0.500	0.230	ug/L			06/03/14 03:12	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 03:12	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 03:12	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 03:12	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 03:12	1
Trichloroethene	**0.208**	**J**	0.500	0.200	ug/L			06/03/14 03:12	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 03:12	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 03:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*06/03/14 03:12*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*06/03/14 03:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*06/03/14 03:12*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/03/14 03:12*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0160**		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:03	1
Manganese	**3.05**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:03	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-305 (62-72)

Lab Sample ID: 490-53821-9

Date Collected: 05/22/14 10:05

Matrix: Water

Date Received: 05/23/14 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/03/14 03:38	1
Benzene	**4.01**		0.500	0.200	ug/L			06/03/14 03:38	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 03:38	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 03:38	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 03:38	1
Carbon disulfide	**0.353**	**J**	0.500	0.220	ug/L			06/03/14 03:38	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 03:38	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 03:38	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 03:38	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 03:38	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 03:38	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 03:38	1
cis-1,2-Dichloroethene	**2.81**		0.500	0.210	ug/L			06/03/14 03:38	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 03:38	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 03:38	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 03:38	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 03:38	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 03:38	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 03:38	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 03:38	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 03:38	1
Ethylbenzene	**0.298**	**J**	0.500	0.190	ug/L			06/03/14 03:38	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 03:38	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 03:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 03:38	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 03:38	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 03:38	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 03:38	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 03:38	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 03:38	1
Toluene	**0.736**		0.500	0.170	ug/L			06/03/14 03:38	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/03/14 03:38	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 03:38	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 03:38	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 03:38	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 03:38	1
Trichloroethene	**0.421**	**J**	0.500	0.200	ug/L			06/03/14 03:38	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 03:38	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 03:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*06/03/14 03:38*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*06/03/14 03:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*06/03/14 03:38*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/03/14 03:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0148**		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:07	1
Manganese	**1.31**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:07	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-305 (145-155)

Lab Sample ID: 490-53821-10

Date Collected: 05/22/14 11:30

Matrix: Water

Date Received: 05/23/14 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.90**	**J**	5.00	2.66	ug/L			06/03/14 04:04	1
Benzene	**0.273**	**J**	0.500	0.200	ug/L			06/03/14 04:04	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 04:04	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 04:04	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 04:04	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 04:04	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 04:04	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 04:04	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 04:04	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 04:04	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 04:04	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 04:04	1
cis-1,2-Dichloroethene	**0.890**		0.500	0.210	ug/L			06/03/14 04:04	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 04:04	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 04:04	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 04:04	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 04:04	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 04:04	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 04:04	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 04:04	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 04:04	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 04:04	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 04:04	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 04:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 04:04	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 04:04	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 04:04	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 04:04	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 04:04	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 04:04	1
Toluene	**1.44**		0.500	0.170	ug/L			06/03/14 04:04	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/03/14 04:04	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 04:04	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 04:04	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 04:04	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 04:04	1
Trichloroethene	ND		0.500	0.200	ug/L			06/03/14 04:04	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 04:04	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 04:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*06/03/14 04:04*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*06/03/14 04:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*06/03/14 04:04*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*06/03/14 04:04*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00890**	**J**	0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:10	1
Manganese	**0.897**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:10	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-305 (233-243)

Lab Sample ID: 490-53821-11

Date Collected: 05/22/14 10:15
Matrix: Water
Date Received: 05/23/14 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**11.7**		5.00	2.66	ug/L			06/03/14 04:30	1
Benzene	**0.989**		0.500	0.200	ug/L			06/03/14 04:30	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 04:30	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 04:30	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 04:30	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 04:30	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 04:30	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 04:30	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 04:30	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 04:30	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 04:30	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 04:30	1
cis-1,2-Dichloroethene	**4.70**		0.500	0.210	ug/L			06/03/14 04:30	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 04:30	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 04:30	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 04:30	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 04:30	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 04:30	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 04:30	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 04:30	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 04:30	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 04:30	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 04:30	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 04:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 04:30	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 04:30	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 04:30	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 04:30	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 04:30	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 04:30	1
Toluene	**3.44**		0.500	0.170	ug/L			06/03/14 04:30	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/03/14 04:30	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 04:30	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 04:30	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 04:30	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 04:30	1
Trichloroethene	**0.255**	**J**	0.500	0.200	ug/L			06/03/14 04:30	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 04:30	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*06/03/14 04:30*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*06/03/14 04:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*06/03/14 04:30*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*06/03/14 04:30*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0130**		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:14	1
Manganese	**1.06**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:14	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-305 (265-275)

Lab Sample ID: 490-53821-12

Date Collected: 05/22/14 10:20
Matrix: Water
Date Received: 05/23/14 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**10.8**		5.00	2.66	ug/L			06/03/14 04:56	1
Benzene	**1.10**		0.500	0.200	ug/L			06/03/14 04:56	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 04:56	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 04:56	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 04:56	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 04:56	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 04:56	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 04:56	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 04:56	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 04:56	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 04:56	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 04:56	1
cis-1,2-Dichloroethene	**9.39**		0.500	0.210	ug/L			06/03/14 04:56	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 04:56	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 04:56	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 04:56	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 04:56	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 04:56	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 04:56	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 04:56	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 04:56	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 04:56	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 04:56	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 04:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 04:56	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 04:56	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 04:56	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 04:56	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 04:56	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 04:56	1
Toluene	**1.66**		0.500	0.170	ug/L			06/03/14 04:56	1
trans-1,2-Dichloroethene	**0.281**	**J**	0.500	0.230	ug/L			06/03/14 04:56	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 04:56	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 04:56	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 04:56	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 04:56	1
Trichloroethene	**0.408**	**J**	0.500	0.200	ug/L			06/03/14 04:56	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 04:56	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 04:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*06/03/14 04:56*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*06/03/14 04:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*06/03/14 04:56*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*06/03/14 04:56*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:18	1
Manganese	**0.628**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:18	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-305 (285-300)

Lab Sample ID: 490-53821-13

Date Collected: 05/22/14 10:30
Matrix: Water
Date Received: 05/23/14 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**15.8**		5.00	2.66	ug/L			06/03/14 05:22	1
Benzene	**0.809**		0.500	0.200	ug/L			06/03/14 05:22	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 05:22	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 05:22	1
2-Butanone (MEK)	**6.86**	**J**	50.0	2.64	ug/L			06/03/14 05:22	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 05:22	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 05:22	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 05:22	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 05:22	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 05:22	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 05:22	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 05:22	1
cis-1,2-Dichloroethene	**4.63**		0.500	0.210	ug/L			06/03/14 05:22	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 05:22	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 05:22	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 05:22	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 05:22	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 05:22	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 05:22	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 05:22	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 05:22	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 05:22	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 05:22	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 05:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 05:22	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 05:22	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 05:22	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 05:22	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 05:22	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 05:22	1
Toluene	**1.97**		0.500	0.170	ug/L			06/03/14 05:22	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/03/14 05:22	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 05:22	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 05:22	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 05:22	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 05:22	1
Trichloroethene	ND		0.500	0.200	ug/L			06/03/14 05:22	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 05:22	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*06/03/14 05:22*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*06/03/14 05:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*06/03/14 05:22*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/03/14 05:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00900**	**J**	0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:33	1
Manganese	**3.88**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:33	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: IW-101

Date Collected: 05/22/14 12:35
Date Received: 05/23/14 08:15

Lab Sample ID: 490-53821-14

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**16.1**		5.00	2.66	ug/L			06/03/14 05:48	1
Benzene	**17.5**		0.500	0.200	ug/L			06/03/14 05:48	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 05:48	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 05:48	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 05:48	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 05:48	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 05:48	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 05:48	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 05:48	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 05:48	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 05:48	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 05:48	1
cis-1,2-Dichloroethene	**7.04**		0.500	0.210	ug/L			06/03/14 05:48	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 05:48	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 05:48	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 05:48	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 05:48	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 05:48	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 05:48	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 05:48	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 05:48	1
Ethylbenzene	**5.46**		0.500	0.190	ug/L			06/03/14 05:48	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 05:48	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 05:48	1
4-Methyl-2-pentanone (MIBK)	**18.9**		5.00	0.810	ug/L			06/03/14 05:48	1
m-Xylene & p-Xylene	**7.80**		0.500	0.380	ug/L			06/03/14 05:48	1
o-Xylene	**1.64**		0.500	0.200	ug/L			06/03/14 05:48	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 05:48	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 05:48	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 05:48	1
Toluene	**7.96**		0.500	0.170	ug/L			06/03/14 05:48	1
trans-1,2-Dichloroethene	**0.238**	**J**	0.500	0.230	ug/L			06/03/14 05:48	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 05:48	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 05:48	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 05:48	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 05:48	1
Trichloroethene	**0.208**	**J**	0.500	0.200	ug/L			06/03/14 05:48	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 05:48	1
Xylenes, Total	**9.45**		1.50	0.580	ug/L			06/03/14 05:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*06/03/14 05:48*	*1*
Dibromofluoromethane (Surr)	*108*		*70 - 130*		*06/03/14 05:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*06/03/14 05:48*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/03/14 05:48*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: IW-100

Date Collected: 05/22/14 13:55
Date Received: 05/23/14 08:15

Lab Sample ID: 490-53821-15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**27.2**		5.00	2.66	ug/L			06/03/14 06:13	1
Benzene	**474**		2.50	1.00	ug/L			06/03/14 15:12	5
Bromoform	ND		0.500	0.290	ug/L			06/03/14 06:13	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 06:13	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 06:13	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 06:13	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 06:13	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 06:13	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 06:13	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 06:13	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 06:13	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 06:13	1
cis-1,2-Dichloroethene	**198**		2.50	1.05	ug/L			06/03/14 15:12	5
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 06:13	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 06:13	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 06:13	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 06:13	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 06:13	1
1,1-Dichloroethene	**0.404**	**J**	0.500	0.250	ug/L			06/03/14 06:13	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 06:13	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 06:13	1
Ethylbenzene	**84.0**		0.500	0.190	ug/L			06/03/14 06:13	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 06:13	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 06:13	1
4-Methyl-2-pentanone (MIBK)	**857**		5.00	0.810	ug/L			06/03/14 06:13	1
m-Xylene & p-Xylene	**182**		2.50	1.90	ug/L			06/03/14 15:12	5
o-Xylene	**72.0**		2.50	1.00	ug/L			06/03/14 15:12	5
Styrene	ND		0.500	0.280	ug/L			06/03/14 06:13	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 06:13	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 06:13	1
Toluene	**54.3**		0.500	0.170	ug/L			06/03/14 06:13	1
trans-1,2-Dichloroethene	**3.09**		0.500	0.230	ug/L			06/03/14 06:13	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 06:13	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 06:13	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 06:13	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 06:13	1
Trichloroethene	**0.570**		0.500	0.200	ug/L			06/03/14 06:13	1
Vinyl chloride	**0.889**		0.500	0.180	ug/L			06/03/14 06:13	1
Xylenes, Total	**254**		7.50	2.90	ug/L			06/03/14 15:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*06/03/14 06:13*	*1*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*06/03/14 15:12*	*5*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*06/03/14 06:13*	*1*
Dibromofluoromethane (Surr)	*111*		*70 - 130*		*06/03/14 15:12*	*5*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*06/03/14 06:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 130*		*06/03/14 15:12*	*5*
Toluene-d8 (Surr)	*100*		*70 - 130*		*06/03/14 06:13*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/03/14 15:12*	*5*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: 205R

Date Collected: 05/22/14 13:55
Date Received: 05/23/14 08:15

Lab Sample ID: 490-53821-16

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**126**		5.00	2.66	ug/L			06/03/14 06:39	1
Benzene	**96.3**		0.500	0.200	ug/L			06/03/14 06:39	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 06:39	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 06:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 06:39	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 06:39	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 06:39	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 06:39	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 06:39	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 06:39	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 06:39	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 06:39	1
cis-1,2-Dichloroethene	**44.6**		0.500	0.210	ug/L			06/03/14 06:39	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 06:39	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 06:39	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 06:39	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 06:39	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 06:39	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 06:39	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 06:39	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 06:39	1
Ethylbenzene	**20.3**		0.500	0.190	ug/L			06/03/14 06:39	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 06:39	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 06:39	1
4-Methyl-2-pentanone (MIBK)	**166**		5.00	0.810	ug/L			06/03/14 06:39	1
m-Xylene & p-Xylene	**14.5**		0.500	0.380	ug/L			06/03/14 06:39	1
o-Xylene	**0.676**		0.500	0.200	ug/L			06/03/14 06:39	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 06:39	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 06:39	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 06:39	1
Toluene	ND		0.500	0.170	ug/L			06/03/14 06:39	1
trans-1,2-Dichloroethene	**4.09**		0.500	0.230	ug/L			06/03/14 06:39	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 06:39	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 06:39	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 06:39	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 06:39	1
Trichloroethene	**1.77**		0.500	0.200	ug/L			06/03/14 06:39	1
Vinyl chloride	**0.211**	**J**	0.500	0.180	ug/L			06/03/14 06:39	1
Xylenes, Total	**15.2**		1.50	0.580	ug/L			06/03/14 06:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*06/03/14 06:39*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*06/03/14 06:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*06/03/14 06:39*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/03/14 06:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0321**		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:37	1
Manganese	**0.871**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:37	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: 405R

Date Collected: 05/22/14 14:55
Date Received: 05/23/14 08:15

Lab Sample ID: 490-53821-17

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**54.4**		5.00	2.66	ug/L			06/03/14 07:05	1
Benzene	**98.0**		0.500	0.200	ug/L			06/03/14 07:05	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 07:05	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 07:05	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 07:05	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 07:05	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 07:05	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 07:05	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 07:05	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 07:05	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 07:05	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 07:05	1
cis-1,2-Dichloroethene	**44.1**		0.500	0.210	ug/L			06/03/14 07:05	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 07:05	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 07:05	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 07:05	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 07:05	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 07:05	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 07:05	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 07:05	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 07:05	1
Ethylbenzene	**21.1**		0.500	0.190	ug/L			06/03/14 07:05	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 07:05	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 07:05	1
4-Methyl-2-pentanone (MIBK)	**161**		5.00	0.810	ug/L			06/03/14 07:05	1
m-Xylene & p-Xylene	**14.7**		0.500	0.380	ug/L			06/03/14 07:05	1
o-Xylene	**0.677**		0.500	0.200	ug/L			06/03/14 07:05	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 07:05	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 07:05	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 07:05	1
Toluene	ND		0.500	0.170	ug/L			06/03/14 07:05	1
trans-1,2-Dichloroethene	**3.99**		0.500	0.230	ug/L			06/03/14 07:05	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 07:05	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 07:05	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 07:05	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 07:05	1
Trichloroethene	**1.74**		0.500	0.200	ug/L			06/03/14 07:05	1
Vinyl chloride	**0.218**	**J**	0.500	0.180	ug/L			06/03/14 07:05	1
Xylenes, Total	**15.3**		1.50	0.580	ug/L			06/03/14 07:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*06/03/14 07:05*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*06/03/14 07:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*		*06/03/14 07:05*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*06/03/14 07:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0322**		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:41	1
Manganese	**0.890**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:41	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-301 (35-45)

Lab Sample ID: 490-53821-18

Date Collected: 05/22/14 14:20
Matrix: Water
Date Received: 05/23/14 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**111**		5.00	2.66	ug/L			06/03/14 07:31	1
Benzene	**30.9**		0.500	0.200	ug/L			06/03/14 07:31	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 07:31	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 07:31	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 07:31	1
Carbon disulfide	**0.719**		0.500	0.220	ug/L			06/03/14 07:31	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 07:31	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 07:31	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 07:31	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 07:31	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 07:31	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 07:31	1
cis-1,2-Dichloroethene	**23.4**		0.500	0.210	ug/L			06/03/14 07:31	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 07:31	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 07:31	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 07:31	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 07:31	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 07:31	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 07:31	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 07:31	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 07:31	1
Ethylbenzene	**5.87**		0.500	0.190	ug/L			06/03/14 07:31	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 07:31	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 07:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 07:31	1
m-Xylene & p-Xylene	**4.85**		0.500	0.380	ug/L			06/03/14 07:31	1
o-Xylene	**0.226**	**J**	0.500	0.200	ug/L			06/03/14 07:31	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 07:31	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 07:31	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 07:31	1
Toluene	**0.599**		0.500	0.170	ug/L			06/03/14 07:31	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/03/14 07:31	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 07:31	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 07:31	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 07:31	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 07:31	1
Trichloroethene	ND		0.500	0.200	ug/L			06/03/14 07:31	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 07:31	1
Xylenes, Total	**5.08**		1.50	0.580	ug/L			06/03/14 07:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*06/03/14 07:31*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*06/03/14 07:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*		*06/03/14 07:31*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/03/14 07:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.118**		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:44	1
Manganese	**1.87**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:44	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-301 (115-125)

Lab Sample ID: 490-53821-19

Date Collected: 05/22/14 14:30
Matrix: Water
Date Received: 05/23/14 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**27.1**		5.00	2.66	ug/L			06/03/14 13:01	1
Benzene	**3.92**		0.500	0.200	ug/L			06/03/14 13:01	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 13:01	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 13:01	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 13:01	1
Carbon disulfide	**1.55**		0.500	0.220	ug/L			06/03/14 13:01	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 13:01	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 13:01	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 13:01	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 13:01	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 13:01	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 13:01	1
cis-1,2-Dichloroethene	**10.1**		0.500	0.210	ug/L			06/03/14 13:01	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 13:01	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 13:01	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 13:01	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 13:01	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 13:01	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 13:01	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 13:01	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 13:01	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 13:01	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 13:01	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 13:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 13:01	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 13:01	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 13:01	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 13:01	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 13:01	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 13:01	1
Toluene	**0.659**		0.500	0.170	ug/L			06/03/14 13:01	1
trans-1,2-Dichloroethene	**0.324**	**J**	0.500	0.230	ug/L			06/03/14 13:01	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 13:01	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 13:01	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 13:01	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 13:01	1
Trichloroethene	**0.727**		0.500	0.200	ug/L			06/03/14 13:01	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 13:01	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*06/03/14 13:01*	*1*
Dibromofluoromethane (Surr)	*112*		*70 - 130*		*06/03/14 13:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*06/03/14 13:01*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/03/14 13:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:48	1
Manganese	**0.588**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:48	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-301 (145-155)

Date Collected: 05/22/14 14:35
Date Received: 05/23/14 08:15

Lab Sample ID: 490-53821-20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**14.1**		5.00	2.66	ug/L			06/03/14 13:28	1
Benzene	**12.1**		0.500	0.200	ug/L			06/03/14 13:28	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 13:28	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 13:28	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 13:28	1
Carbon disulfide	**0.986**		0.500	0.220	ug/L			06/03/14 13:28	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 13:28	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 13:28	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 13:28	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 13:28	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 13:28	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 13:28	1
cis-1,2-Dichloroethene	**32.4**		0.500	0.210	ug/L			06/03/14 13:28	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 13:28	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 13:28	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 13:28	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 13:28	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 13:28	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 13:28	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 13:28	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 13:28	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 13:28	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 13:28	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 13:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 13:28	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 13:28	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 13:28	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 13:28	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 13:28	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 13:28	1
Toluene	**1.10**		0.500	0.170	ug/L			06/03/14 13:28	1
trans-1,2-Dichloroethene	**0.638**		0.500	0.230	ug/L			06/03/14 13:28	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 13:28	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 13:28	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 13:28	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 13:28	1
Trichloroethene	**0.652**		0.500	0.200	ug/L			06/03/14 13:28	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 13:28	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*06/03/14 13:28*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*06/03/14 13:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*120*		*70 - 130*		*06/03/14 13:28*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*06/03/14 13:28*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:51	1
Manganese	**1.53**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:51	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-301 (240-250)

Lab Sample ID: 490-53821-21

Date Collected: 05/22/14 14:45
Matrix: Water
Date Received: 05/23/14 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.33**		5.00	2.66	ug/L			06/03/14 13:54	1
Benzene	**14.9**		0.500	0.200	ug/L			06/03/14 13:54	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 13:54	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 13:54	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 13:54	1
Carbon disulfide	**0.818**		0.500	0.220	ug/L			06/03/14 13:54	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 13:54	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 13:54	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 13:54	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 13:54	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 13:54	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 13:54	1
cis-1,2-Dichloroethene	**28.9**		0.500	0.210	ug/L			06/03/14 13:54	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 13:54	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 13:54	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 13:54	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 13:54	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 13:54	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 13:54	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 13:54	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 13:54	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 13:54	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 13:54	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 13:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 13:54	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 13:54	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 13:54	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 13:54	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 13:54	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 13:54	1
Toluene	**1.84**		0.500	0.170	ug/L			06/03/14 13:54	1
trans-1,2-Dichloroethene	**0.563**		0.500	0.230	ug/L			06/03/14 13:54	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 13:54	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 13:54	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 13:54	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 13:54	1
Trichloroethene	**0.902**		0.500	0.200	ug/L			06/03/14 13:54	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 13:54	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*06/03/14 13:54*	*1*
Dibromofluoromethane (Surr)	*110*		*70 - 130*		*06/03/14 13:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*		*70 - 130*		*06/03/14 13:54*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*06/03/14 13:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:55	1
Manganese	**1.17**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:55	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-301 (290-300)

Lab Sample ID: 490-53821-22

Date Collected: 05/22/14 14:50
Matrix: Water
Date Received: 05/23/14 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**13.5**		5.00	2.66	ug/L			06/03/14 14:20	1
Benzene	**6.05**		0.500	0.200	ug/L			06/03/14 14:20	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 14:20	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 14:20	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 14:20	1
Carbon disulfide	**0.688**		0.500	0.220	ug/L			06/03/14 14:20	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 14:20	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 14:20	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 14:20	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 14:20	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 14:20	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 14:20	1
cis-1,2-Dichloroethene	**41.9**		0.500	0.210	ug/L			06/03/14 14:20	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 14:20	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 14:20	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 14:20	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 14:20	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 14:20	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 14:20	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 14:20	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 14:20	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 14:20	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 14:20	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 14:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 14:20	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 14:20	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 14:20	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 14:20	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 14:20	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 14:20	1
Toluene	**0.664**		0.500	0.170	ug/L			06/03/14 14:20	1
trans-1,2-Dichloroethene	**0.877**		0.500	0.230	ug/L			06/03/14 14:20	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 14:20	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 14:20	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 14:20	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 14:20	1
Trichloroethene	**1.19**		0.500	0.200	ug/L			06/03/14 14:20	1
Vinyl chloride	**0.188**	**J**	0.500	0.180	ug/L			06/03/14 14:20	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*06/03/14 14:20*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*06/03/14 14:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*		*06/03/14 14:20*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*06/03/14 14:20*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0119**		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 02:58	1
Manganese	**1.16**		0.0150	0.00500	mg/L		05/29/14 10:28	05/31/14 02:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-166408/6
Matrix: Water
Analysis Batch: 166408

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/02/14 23:44	1
Benzene	ND		0.500	0.200	ug/L			06/02/14 23:44	1
Bromoform	ND		0.500	0.290	ug/L			06/02/14 23:44	1
Bromomethane	ND		0.500	0.350	ug/L			06/02/14 23:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/02/14 23:44	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/02/14 23:44	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/02/14 23:44	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/02/14 23:44	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/02/14 23:44	1
Chloroethane	ND		0.500	0.360	ug/L			06/02/14 23:44	1
Chloroform	ND		0.500	0.230	ug/L			06/02/14 23:44	1
Chloromethane	ND		0.500	0.360	ug/L			06/02/14 23:44	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			06/02/14 23:44	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/02/14 23:44	1
Dibromomethane	ND		0.500	0.450	ug/L			06/02/14 23:44	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/02/14 23:44	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/02/14 23:44	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/02/14 23:44	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/02/14 23:44	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/02/14 23:44	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/02/14 23:44	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/02/14 23:44	1
2-Hexanone	ND		5.00	1.28	ug/L			06/02/14 23:44	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/02/14 23:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/02/14 23:44	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/02/14 23:44	1
o-Xylene	ND		0.500	0.200	ug/L			06/02/14 23:44	1
Styrene	ND		0.500	0.280	ug/L			06/02/14 23:44	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/02/14 23:44	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/02/14 23:44	1
Toluene	ND		0.500	0.170	ug/L			06/02/14 23:44	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/02/14 23:44	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/02/14 23:44	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/02/14 23:44	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/02/14 23:44	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/02/14 23:44	1
Trichloroethene	ND		0.500	0.200	ug/L			06/02/14 23:44	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/02/14 23:44	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/02/14 23:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*06/02/14 23:44*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*06/02/14 23:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*06/02/14 23:44*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*06/02/14 23:44*	*1*

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

Lab Sample ID: LCS 490-166408/25
Matrix: Water
Analysis Batch: 166408

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	232.4		ug/L		93	54 - 145
Benzene	50.0	49.33		ug/L		99	80 - 121
Bromoform	50.0	51.41		ug/L		103	46 - 145
Bromomethane	50.0	24.52		ug/L		49	41 - 150
2-Butanone (MEK)	250	227.2		ug/L		91	62 - 133
Carbon disulfide	50.0	51.36		ug/L		103	77 - 126
Carbon tetrachloride	50.0	58.04		ug/L		116	64 - 147
Chlorobenzene	50.0	51.54		ug/L		103	80 - 120
Chlorodibromomethane	50.0	59.98		ug/L		120	69 - 133
Chloroethane	50.0	50.97		ug/L		102	72 - 120
Chloroform	50.0	53.54		ug/L		107	73 - 129
Chloromethane	50.0	40.19		ug/L		80	12 - 150
cis-1,2-Dichloroethene	50.0	50.60		ug/L		101	76 - 125
cis-1,3-Dichloropropene	50.0	57.57		ug/L		115	74 - 140
Dibromomethane	50.0	52.95		ug/L		106	71 - 125
Dichlorobromomethane	50.0	53.73		ug/L		107	75 - 129
1,1-Dichloroethane	50.0	51.18		ug/L		102	78 - 125
1,2-Dichloroethane	50.0	55.09		ug/L		110	77 - 121
1,1-Dichloroethene	50.0	51.01		ug/L		102	79 - 124
1,2-Dichloropropane	50.0	47.50		ug/L		95	75 - 120
1,1-Dichloropropene	50.0	53.13		ug/L		106	80 - 122
Ethylbenzene	50.0	49.40		ug/L		99	80 - 130
2-Hexanone	250	270.4		ug/L		108	60 - 142
Methylene Chloride	50.0	51.24		ug/L		102	79 - 123
4-Methyl-2-pentanone (MIBK)	250	258.6		ug/L		103	60 - 137
m-Xylene & p-Xylene	50.0	48.36		ug/L		97	80 - 141
o-Xylene	50.0	48.95		ug/L		98	80 - 127
Styrene	50.0	48.29		ug/L		97	80 - 127
1,1,1,2-Tetrachloroethane	50.0	52.78		ug/L		106	74 - 135
Tetrachloroethene	50.0	54.21		ug/L		108	80 - 126
Toluene	50.0	53.89		ug/L		108	80 - 126
trans-1,2-Dichloroethene	50.0	50.79		ug/L		102	79 - 126
trans-1,3-Dichloropropene	50.0	58.76		ug/L		118	63 - 134
1,3,5-Trichlorobenzene	50.0	45.11		ug/L		90	70 - 130
1,1,1-Trichloroethane	50.0	54.90		ug/L		110	78 - 135
1,1,2-Trichloroethane	50.0	52.40		ug/L		105	80 - 124
Trichloroethene	50.0	49.14		ug/L		98	80 - 123
Vinyl chloride	50.0	45.40		ug/L		91	68 - 120
Xylenes, Total	100	97.31		ug/L		97	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

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

Lab Sample ID: 490-53821-2 MS
Matrix: Water
Analysis Batch: 166408

Client Sample ID: IW-103
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	6.46		250	272.8		ug/L		107	45 - 141
Benzene	47.7		50.0	101.7		ug/L		108	75 - 133
Bromoform	ND		50.0	53.83		ug/L		108	42 - 147
Bromomethane	ND		50.0	32.48		ug/L		65	16 - 163
2-Butanone (MEK)	ND		250	252.9		ug/L		101	50 - 138
Carbon disulfide	ND		50.0	55.14		ug/L		110	48 - 152
Carbon tetrachloride	ND		50.0	64.91		ug/L		130	62 - 164
Chlorobenzene	ND		50.0	52.32		ug/L		105	80 - 129
Chlorodibromomethane	ND		50.0	63.60		ug/L		127	66 - 140
Chloroethane	ND		50.0	52.95		ug/L		106	58 - 137
Chloroform	ND		50.0	56.36		ug/L		113	66 - 138
Chloromethane	ND		50.0	38.68		ug/L		77	10 - 169
cis-1,2-Dichloroethene	45.3		50.0	102.0		ug/L		113	68 - 138
cis-1,3-Dichloropropene	ND		50.0	58.42		ug/L		117	71 - 141
Dibromomethane	ND		50.0	53.54		ug/L		107	58 - 140
Dichlorobromomethane	ND		50.0	57.58		ug/L		115	70 - 140
1,1-Dichloroethane	ND		50.0	57.91		ug/L		116	71 - 139
1,2-Dichloroethane	ND		50.0	60.02		ug/L		120	64 - 136
1,1-Dichloroethene	ND		50.0	57.89		ug/L		116	70 - 142
1,2-Dichloropropane	ND		50.0	50.27		ug/L		101	67 - 131
1,1-Dichloropropene	ND		50.0	57.40		ug/L		115	76 - 139
Ethylbenzene	17.3		50.0	69.57		ug/L		105	79 - 139
2-Hexanone	ND		250	291.2		ug/L		116	50 - 150
Methylene Chloride	ND		50.0	56.21		ug/L		112	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	270.5		ug/L		108	50 - 147
m-Xylene & p-Xylene	13.5		50.0	63.91		ug/L		101	80 - 153
o-Xylene	0.323	J	50.0	50.50		ug/L		100	74 - 138
Styrene	ND		50.0	49.93		ug/L		100	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	52.83		ug/L		106	73 - 141
Tetrachloroethene	ND		50.0	58.88		ug/L		118	72 - 145
Toluene	0.386	J	50.0	55.96		ug/L		111	75 - 136
trans-1,2-Dichloroethene	0.535		50.0	56.25		ug/L		111	66 - 143
trans-1,3-Dichloropropene	ND		50.0	60.90		ug/L		122	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	46.20		ug/L		92	60 - 140
1,1,1-Trichloroethane	ND		50.0	60.54		ug/L		121	76 - 149
1,1,2-Trichloroethane	ND		50.0	55.01		ug/L		110	74 - 134
Trichloroethene	0.780		50.0	54.60		ug/L		108	73 - 144
Vinyl chloride	ND		50.0	47.44		ug/L		95	56 - 129
Xylenes, Total	13.8		100	114.4		ug/L		101	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*110*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

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

Lab Sample ID: 490-53821-2 MSD
Matrix: Water
Analysis Batch: 166408

Client Sample ID: IW-103
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	6.46		250	257.8		ug/L		101	45 - 141	6	21
Benzene	47.7		50.0	97.67		ug/L		100	75 - 133	4	17
Bromoform	ND		50.0	56.15		ug/L		112	42 - 147	4	16
Bromomethane	ND		50.0	34.72		ug/L		69	16 - 163	7	50
2-Butanone (MEK)	ND		250	250.3		ug/L		100	50 - 138	1	19
Carbon disulfide	ND		50.0	49.50		ug/L		99	48 - 152	11	21
Carbon tetrachloride	ND		50.0	59.85		ug/L		120	62 - 164	8	19
Chlorobenzene	ND		50.0	51.29		ug/L		103	80 - 129	2	14
Chlorodibromomethane	ND		50.0	62.70		ug/L		125	66 - 140	1	15
Chloroethane	ND		50.0	49.54		ug/L		99	58 - 137	7	20
Chloroform	ND		50.0	53.01		ug/L		106	66 - 138	6	18
Chloromethane	ND		50.0	36.76		ug/L		74	10 - 169	5	31
cis-1,2-Dichloroethene	45.3		50.0	97.07		ug/L		104	68 - 138	5	17
cis-1,3-Dichloropropene	ND		50.0	57.87		ug/L		116	71 - 141	1	15
Dibromomethane	ND		50.0	52.86		ug/L		106	58 - 140	1	16
Dichlorobromomethane	ND		50.0	55.17		ug/L		110	70 - 140	4	18
1,1-Dichloroethane	ND		50.0	52.88		ug/L		106	71 - 139	9	17
1,2-Dichloroethane	ND		50.0	56.94		ug/L		114	64 - 136	5	17
1,1-Dichloroethene	ND		50.0	54.26		ug/L		109	70 - 142	6	17
1,2-Dichloropropane	ND		50.0	49.45		ug/L		99	67 - 131	2	17
1,1-Dichloropropene	ND		50.0	53.86		ug/L		108	76 - 139	6	17
Ethylbenzene	17.3		50.0	68.88		ug/L		103	79 - 139	1	15
2-Hexanone	ND		250	294.1		ug/L		118	50 - 150	1	15
Methylene Chloride	ND		50.0	52.06		ug/L		104	64 - 139	8	17
4-Methyl-2-pentanone (MIBK)	ND		250	265.7		ug/L		106	50 - 147	2	17
m-Xylene & p-Xylene	13.5		50.0	64.86		ug/L		103	80 - 153	1	16
o-Xylene	0.323	J	50.0	51.40		ug/L		102	74 - 138	2	14
Styrene	ND		50.0	50.90		ug/L		102	61 - 148	2	24
1,1,1,2-Tetrachloroethane	ND		50.0	53.12		ug/L		106	73 - 141	1	16
Tetrachloroethene	ND		50.0	56.17		ug/L		112	72 - 145	5	16
Toluene	0.386	J	50.0	53.21		ug/L		106	75 - 136	5	15
trans-1,2-Dichloroethene	0.535		50.0	52.39		ug/L		104	66 - 143	7	16
trans-1,3-Dichloropropene	ND		50.0	61.42		ug/L		123	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	45.64		ug/L		91	60 - 140	1	30
1,1,1-Trichloroethane	ND		50.0	57.30		ug/L		115	76 - 149	6	17
1,1,2-Trichloroethane	ND		50.0	53.85		ug/L		108	74 - 134	2	15
Trichloroethene	0.780		50.0	54.20		ug/L		107	73 - 144	1	17
Vinyl chloride	ND		50.0	44.52		ug/L		89	56 - 129	6	17
Xylenes, Total	13.8		100	116.3		ug/L		102	74 - 141	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: MB 490-166480/7
Matrix: Water
Analysis Batch: 166480

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			06/03/14 12:35	1
Benzene	ND		0.500	0.200	ug/L			06/03/14 12:35	1
Bromoform	ND		0.500	0.290	ug/L			06/03/14 12:35	1
Bromomethane	ND		0.500	0.350	ug/L			06/03/14 12:35	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			06/03/14 12:35	1
Carbon disulfide	ND		0.500	0.220	ug/L			06/03/14 12:35	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			06/03/14 12:35	1
Chlorobenzene	ND		0.500	0.180	ug/L			06/03/14 12:35	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			06/03/14 12:35	1
Chloroethane	ND		0.500	0.360	ug/L			06/03/14 12:35	1
Chloroform	ND		0.500	0.230	ug/L			06/03/14 12:35	1
Chloromethane	ND		0.500	0.360	ug/L			06/03/14 12:35	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			06/03/14 12:35	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 12:35	1
Dibromomethane	ND		0.500	0.450	ug/L			06/03/14 12:35	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			06/03/14 12:35	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			06/03/14 12:35	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			06/03/14 12:35	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			06/03/14 12:35	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			06/03/14 12:35	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			06/03/14 12:35	1
Ethylbenzene	ND		0.500	0.190	ug/L			06/03/14 12:35	1
2-Hexanone	ND		5.00	1.28	ug/L			06/03/14 12:35	1
Methylene Chloride	ND		5.00	0.220	ug/L			06/03/14 12:35	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			06/03/14 12:35	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			06/03/14 12:35	1
o-Xylene	ND		0.500	0.200	ug/L			06/03/14 12:35	1
Styrene	ND		0.500	0.280	ug/L			06/03/14 12:35	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			06/03/14 12:35	1
Tetrachloroethene	ND		0.500	0.140	ug/L			06/03/14 12:35	1
Toluene	ND		0.500	0.170	ug/L			06/03/14 12:35	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			06/03/14 12:35	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			06/03/14 12:35	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			06/03/14 12:35	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 12:35	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			06/03/14 12:35	1
Trichloroethene	ND		0.500	0.200	ug/L			06/03/14 12:35	1
Vinyl chloride	ND		0.500	0.180	ug/L			06/03/14 12:35	1
Xylenes, Total	ND		1.50	0.580	ug/L			06/03/14 12:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*06/03/14 12:35*	*1*
Dibromofluoromethane (Surr)	*109*		*70 - 130*		*06/03/14 12:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*		*06/03/14 12:35*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*06/03/14 12:35*	*1*

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

Lab Sample ID: LCS 490-166480/3
Matrix: Water
Analysis Batch: 166480

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	253.9		ug/L		102	54 - 145
Benzene	50.0	43.52		ug/L		87	80 - 121
Bromoform	50.0	54.50		ug/L		109	46 - 145
Bromomethane	50.0	40.18		ug/L		80	41 - 150
2-Butanone (MEK)	250	242.6		ug/L		97	62 - 133
Carbon disulfide	50.0	45.03		ug/L		90	77 - 126
Carbon tetrachloride	50.0	53.78		ug/L		108	64 - 147
Chlorobenzene	50.0	46.42		ug/L		93	80 - 120
Chlorodibromomethane	50.0	60.61		ug/L		121	69 - 133
Chloroethane	50.0	45.18		ug/L		90	72 - 120
Chloroform	50.0	49.04		ug/L		98	73 - 129
Chloromethane	50.0	33.96		ug/L		68	12 - 150
cis-1,2-Dichloroethene	50.0	44.13		ug/L		88	76 - 125
cis-1,3-Dichloropropene	50.0	54.98		ug/L		110	74 - 140
Dibromomethane	50.0	52.37		ug/L		105	71 - 125
Dichlorobromomethane	50.0	52.18		ug/L		104	75 - 129
1,1-Dichloroethane	50.0	46.03		ug/L		92	78 - 125
1,2-Dichloroethane	50.0	54.47		ug/L		109	77 - 121
1,1-Dichloroethene	50.0	45.54		ug/L		91	79 - 124
1,2-Dichloropropane	50.0	44.14		ug/L		88	75 - 120
1,1-Dichloropropene	50.0	46.67		ug/L		93	80 - 122
Ethylbenzene	50.0	45.07		ug/L		90	80 - 130
2-Hexanone	250	298.4		ug/L		119	60 - 142
Methylene Chloride	50.0	49.68		ug/L		99	79 - 123
4-Methyl-2-pentanone (MIBK)	250	284.4		ug/L		114	60 - 137
m-Xylene & p-Xylene	50.0	44.58		ug/L		89	80 - 141
o-Xylene	50.0	45.72		ug/L		91	80 - 127
Styrene	50.0	45.54		ug/L		91	80 - 127
1,1,1,2-Tetrachloroethane	50.0	48.57		ug/L		97	74 - 135
Tetrachloroethene	50.0	48.47		ug/L		97	80 - 126
Toluene	50.0	47.44		ug/L		95	80 - 126
trans-1,2-Dichloroethene	50.0	44.10		ug/L		88	79 - 126
trans-1,3-Dichloropropene	50.0	61.27		ug/L		123	63 - 134
1,3,5-Trichlorobenzene	50.0	41.50		ug/L		83	70 - 130
1,1,1-Trichloroethane	50.0	51.86		ug/L		104	78 - 135
1,1,2-Trichloroethane	50.0	54.44		ug/L		109	80 - 124
Trichloroethene	50.0	44.14		ug/L		88	80 - 123
Vinyl chloride	50.0	38.59		ug/L		77	68 - 120
Xylenes, Total	100	90.30		ug/L		90	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*110*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

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

Lab Sample ID: LCSD 490-166480/4
Matrix: Water
Analysis Batch: 166480

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
Acetone	250	278.3		ug/L		111	54 - 145	9	21
Benzene	50.0	49.65		ug/L		99	80 - 121	13	17
Bromoform	50.0	57.19		ug/L		114	46 - 145	5	16
Bromomethane	50.0	46.53		ug/L		93	41 - 150	15	50
2-Butanone (MEK)	250	273.6		ug/L		109	62 - 133	12	19
Carbon disulfide	50.0	49.32		ug/L		99	77 - 126	9	21
Carbon tetrachloride	50.0	62.34		ug/L		125	64 - 147	15	19
Chlorobenzene	50.0	50.42		ug/L		101	80 - 120	8	14
Chlorodibromomethane	50.0	60.58		ug/L		121	69 - 133	0	15
Chloroethane	50.0	50.56		ug/L		101	72 - 120	11	20
Chloroform	50.0	56.30		ug/L		113	73 - 129	14	18
Chloromethane	50.0	38.74		ug/L		77	12 - 150	13	31
cis-1,2-Dichloroethene	50.0	50.52		ug/L		101	76 - 125	14	17
cis-1,3-Dichloropropene	50.0	57.34		ug/L		115	74 - 140	4	15
Dibromomethane	50.0	57.62		ug/L		115	71 - 125	10	16
Dichlorobromomethane	50.0	59.08		ug/L		118	75 - 129	12	18
1,1-Dichloroethane	50.0	51.06		ug/L		102	78 - 125	10	17
1,2-Dichloroethane	50.0	60.51		ug/L		121	77 - 121	11	17
1,1-Dichloroethene	50.0	51.39		ug/L		103	79 - 124	12	17
1,2-Dichloropropane	50.0	48.91		ug/L		98	75 - 120	10	17
1,1-Dichloropropene	50.0	53.34		ug/L		107	80 - 122	13	17
Ethylbenzene	50.0	48.69		ug/L		97	80 - 130	8	15
2-Hexanone	250	292.7		ug/L		117	60 - 142	2	15
Methylene Chloride	50.0	53.26		ug/L		107	79 - 123	7	17
4-Methyl-2-pentanone (MIBK)	250	276.3		ug/L		111	60 - 137	3	17
m-Xylene & p-Xylene	50.0	47.85		ug/L		96	80 - 141	7	16
o-Xylene	50.0	49.72		ug/L		99	80 - 127	8	14
Styrene	50.0	48.93		ug/L		98	80 - 127	7	24
1,1,1,2-Tetrachloroethane	50.0	53.00		ug/L		106	74 - 135	9	16
Tetrachloroethene	50.0	52.05		ug/L		104	80 - 126	7	16
Toluene	50.0	51.78		ug/L		104	80 - 126	9	15
trans-1,2-Dichloroethene	50.0	48.96		ug/L		98	79 - 126	10	16
trans-1,3-Dichloropropene	50.0	60.67		ug/L		121	63 - 134	1	14
1,3,5-Trichlorobenzene	50.0	43.81		ug/L		88	70 - 130	5	30
1,1,1-Trichloroethane	50.0	58.08		ug/L		116	78 - 135	11	17
1,1,2-Trichloroethane	50.0	53.42		ug/L		107	80 - 124	2	15
Trichloroethene	50.0	51.73		ug/L		103	80 - 123	16	17
Vinyl chloride	50.0	45.07		ug/L		90	68 - 120	15	17
Xylenes, Total	100	97.57		ug/L		98	80 - 132	8	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*112*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*117*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

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

Lab Sample ID: 490-53821-19 MS
Matrix: Water
Analysis Batch: 166480

Client Sample ID: MW-301 (115-125)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	27.1		250	285.8		ug/L		103	45 - 141
Benzene	3.92		50.0	50.67		ug/L		93	75 - 133
Bromoform	ND		50.0	45.91		ug/L		92	42 - 147
Bromomethane	ND		50.0	17.33		ug/L		35	16 - 163
2-Butanone (MEK)	ND		250	261.7		ug/L		105	50 - 138
Carbon disulfide	1.55		50.0	47.04		ug/L		91	48 - 152
Carbon tetrachloride	ND		50.0	34.40		ug/L		69	62 - 164
Chlorobenzene	ND		50.0	51.62		ug/L		103	80 - 129
Chlorodibromomethane	ND		50.0	51.92		ug/L		104	66 - 140
Chloroethane	ND		50.0	47.24		ug/L		94	58 - 137
Chloroform	ND		50.0	56.85		ug/L		114	66 - 138
Chloromethane	ND		50.0	35.23		ug/L		70	10 - 169
cis-1,2-Dichloroethene	10.1		50.0	55.74		ug/L		91	68 - 138
cis-1,3-Dichloropropene	ND		50.0	53.71		ug/L		107	71 - 141
Dibromomethane	ND		50.0	54.53		ug/L		109	58 - 140
Dichlorobromomethane	ND		50.0	53.98		ug/L		108	70 - 140
1,1-Dichloroethane	ND		50.0	49.84		ug/L		100	71 - 139
1,2-Dichloroethane	ND		50.0	56.02		ug/L		112	64 - 136
1,1-Dichloroethene	ND		50.0	56.86		ug/L		114	70 - 142
1,2-Dichloropropane	ND		50.0	48.03		ug/L		96	67 - 131
1,1-Dichloropropene	ND		50.0	53.36		ug/L		107	76 - 139
Ethylbenzene	ND		50.0	50.62		ug/L		101	79 - 139
2-Hexanone	ND		250	297.7		ug/L		119	50 - 150
Methylene Chloride	ND		50.0	49.83		ug/L		100	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	272.2		ug/L		109	50 - 147
m-Xylene & p-Xylene	ND		50.0	49.80		ug/L		100	80 - 153
o-Xylene	ND		50.0	51.07		ug/L		102	74 - 138
Styrene	ND		50.0	50.96		ug/L		102	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	51.15		ug/L		102	73 - 141
Tetrachloroethene	ND		50.0	56.22		ug/L		112	72 - 145
Toluene	0.659		50.0	53.10		ug/L		105	75 - 136
trans-1,2-Dichloroethene	0.324	J	50.0	49.10		ug/L		98	66 - 143
trans-1,3-Dichloropropene	ND		50.0	57.56		ug/L		115	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	47.89		ug/L		96	60 - 140
1,1,1-Trichloroethane	ND		50.0	58.80		ug/L		118	76 - 149
1,1,2-Trichloroethane	ND		50.0	53.89		ug/L		108	74 - 134
Trichloroethene	0.727		50.0	55.41		ug/L		109	73 - 144
Vinyl chloride	ND		50.0	41.68		ug/L		83	56 - 129
Xylenes, Total	ND		100	100.9		ug/L		101	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

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

Lab Sample ID: 490-53821-19 MSD
Matrix: Water
Analysis Batch: 166480

Client Sample ID: MW-301 (115-125)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	27.1		250	295.7		ug/L		107	45 - 141	3	21
Benzene	3.92		50.0	53.00		ug/L		98	75 - 133	5	17
Bromoform	ND		50.0	46.07		ug/L		92	42 - 147	0	16
Bromomethane	ND		50.0	17.27		ug/L		35	16 - 163	0	50
2-Butanone (MEK)	ND		250	271.6		ug/L		109	50 - 138	4	19
Carbon disulfide	1.55		50.0	50.17		ug/L		97	48 - 152	6	21
Carbon tetrachloride	ND		50.0	36.23		ug/L		72	62 - 164	5	19
Chlorobenzene	ND		50.0	51.36		ug/L		103	80 - 129	1	14
Chlorodibromomethane	ND		50.0	53.94		ug/L		108	66 - 140	4	15
Chloroethane	ND		50.0	46.47		ug/L		93	58 - 137	2	20
Chloroform	ND		50.0	59.73		ug/L		119	66 - 138	5	18
Chloromethane	ND		50.0	33.51		ug/L		67	10 - 169	5	31
cis-1,2-Dichloroethene	10.1		50.0	58.11		ug/L		96	68 - 138	4	17
cis-1,3-Dichloropropene	ND		50.0	54.29		ug/L		109	71 - 141	1	15
Dibromomethane	ND		50.0	54.84		ug/L		110	58 - 140	1	16
Dichlorobromomethane	ND		50.0	52.75		ug/L		105	70 - 140	2	18
1,1-Dichloroethane	ND		50.0	53.16		ug/L		106	71 - 139	6	17
1,2-Dichloroethane	ND		50.0	57.68		ug/L		115	64 - 136	3	17
1,1-Dichloroethene	ND		50.0	53.32		ug/L		107	70 - 142	6	17
1,2-Dichloropropane	ND		50.0	47.20		ug/L		94	67 - 131	2	17
1,1-Dichloropropene	ND		50.0	53.33		ug/L		107	76 - 139	0	17
Ethylbenzene	ND		50.0	51.18		ug/L		102	79 - 139	1	15
2-Hexanone	ND		250	306.7		ug/L		123	50 - 150	3	15
Methylene Chloride	ND		50.0	51.53		ug/L		103	64 - 139	3	17
4-Methyl-2-pentanone (MIBK)	ND		250	284.9		ug/L		114	50 - 147	5	17
m-Xylene & p-Xylene	ND		50.0	50.04		ug/L		100	80 - 153	0	16
o-Xylene	ND		50.0	49.47		ug/L		99	74 - 138	3	14
Styrene	ND		50.0	48.62		ug/L		97	61 - 148	5	24
1,1,1,2-Tetrachloroethane	ND		50.0	51.61		ug/L		103	73 - 141	1	16
Tetrachloroethene	ND		50.0	54.16		ug/L		108	72 - 145	4	16
Toluene	0.659		50.0	55.58		ug/L		110	75 - 136	5	15
trans-1,2-Dichloroethene	0.324	J	50.0	49.28		ug/L		98	66 - 143	0	16
trans-1,3-Dichloropropene	ND		50.0	59.41		ug/L		119	59 - 135	3	14
1,3,5-Trichlorobenzene	ND		50.0	48.25		ug/L		96	60 - 140	1	30
1,1,1-Trichloroethane	ND		50.0	60.78		ug/L		122	76 - 149	3	17
1,1,2-Trichloroethane	ND		50.0	56.82		ug/L		114	74 - 134	5	15
Trichloroethene	0.727		50.0	55.09		ug/L		109	73 - 144	1	17
Vinyl chloride	ND		50.0	40.29		ug/L		81	56 - 129	3	17
Xylenes, Total	ND		100	99.51		ug/L		100	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*116*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-165514/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 165514**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		05/29/14 10:28	05/31/14 01:19	1

Lab Sample ID: MB 490-165514/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166369 — **Prep Batch: 165514**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	ND		0.0150	0.00500	mg/L		05/29/14 10:28	06/02/14 13:32	1

Lab Sample ID: LCS 490-165514/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 165514**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.05280		mg/L		106	80 - 120
Manganese	0.500	0.5407		mg/L		108	80 - 120

Lab Sample ID: LCSD 490-165514/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 165514**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0500	0.05200		mg/L		104	80 - 120	2	20
Manganese	0.500	0.5258		mg/L		105	80 - 120	3	20

Lab Sample ID: 490-53821-4 MS — **Client Sample ID: MW-306S (85-100)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 165514**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.0500	0.05620		mg/L		112	75 - 125
Manganese	0.0166		0.500	0.5260		mg/L		102	75 - 125

Lab Sample ID: 490-53821-4 MSD — **Client Sample ID: MW-306S (85-100)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 166267 — **Prep Batch: 165514**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.0500	0.05770		mg/L		115	75 - 125	3	20
Manganese	0.0166		0.500	0.5294		mg/L		103	75 - 125	1	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

GC/MS VOA

Analysis Batch: 166408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53821-1	Trip Blank	Total/NA	Water	8260B	
490-53821-2	IW-103	Total/NA	Water	8260B	
490-53821-2 MS	IW-103	Total/NA	Water	8260B	
490-53821-2 MSD	IW-103	Total/NA	Water	8260B	
490-53821-3	IW-102	Total/NA	Water	8260B	
490-53821-4	MW-306S (85-100)	Total/NA	Water	8260B	
490-53821-5	MW-306S (130-140)	Total/NA	Water	8260B	
490-53821-6	MW-306D (185-195)	Total/NA	Water	8260B	
490-53821-7	MW-306D (280-300)	Total/NA	Water	8260B	
490-53821-8	MW-305 (35-45)	Total/NA	Water	8260B	
490-53821-9	MW-305 (62-72)	Total/NA	Water	8260B	
490-53821-10	MW-305 (145-155)	Total/NA	Water	8260B	
490-53821-11	MW-305 (233-243)	Total/NA	Water	8260B	
490-53821-12	MW-305 (265-275)	Total/NA	Water	8260B	
490-53821-13	MW-305 (285-300)	Total/NA	Water	8260B	
490-53821-14	IW-101	Total/NA	Water	8260B	
490-53821-15	IW-100	Total/NA	Water	8260B	
490-53821-16	205R	Total/NA	Water	8260B	
490-53821-17	405R	Total/NA	Water	8260B	
490-53821-18	MW-301 (35-45)	Total/NA	Water	8260B	
LCS 490-166408/25	Lab Control Sample	Total/NA	Water	8260B	
MB 490-166408/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 166480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53821-6	MW-306D (185-195)	Total/NA	Water	8260B	
490-53821-15	IW-100	Total/NA	Water	8260B	
490-53821-19	MW-301 (115-125)	Total/NA	Water	8260B	
490-53821-19 MS	MW-301 (115-125)	Total/NA	Water	8260B	
490-53821-19 MSD	MW-301 (115-125)	Total/NA	Water	8260B	
490-53821-20	MW-301 (145-155)	Total/NA	Water	8260B	
490-53821-21	MW-301 (240-250)	Total/NA	Water	8260B	
490-53821-22	MW-301 (290-300)	Total/NA	Water	8260B	
LCS 490-166480/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-166480/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-166480/7	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 165514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53821-4	MW-306S (85-100)	Total/NA	Water	3010A	
490-53821-4 MS	MW-306S (85-100)	Total/NA	Water	3010A	
490-53821-4 MSD	MW-306S (85-100)	Total/NA	Water	3010A	
490-53821-5	MW-306S (130-140)	Total/NA	Water	3010A	
490-53821-6	MW-306D (185-195)	Total/NA	Water	3010A	
490-53821-7	MW-306D (280-300)	Total/NA	Water	3010A	
490-53821-8	MW-305 (35-45)	Total/NA	Water	3010A	
490-53821-9	MW-305 (62-72)	Total/NA	Water	3010A	
490-53821-10	MW-305 (145-155)	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 165514 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53821-11	MW-305 (233-243)	Total/NA	Water	3010A	
490-53821-12	MW-305 (265-275)	Total/NA	Water	3010A	
490-53821-13	MW-305 (285-300)	Total/NA	Water	3010A	
490-53821-16	205R	Total/NA	Water	3010A	
490-53821-17	405R	Total/NA	Water	3010A	
490-53821-18	MW-301 (35-45)	Total/NA	Water	3010A	
490-53821-19	MW-301 (115-125)	Total/NA	Water	3010A	
490-53821-20	MW-301 (145-155)	Total/NA	Water	3010A	
490-53821-21	MW-301 (240-250)	Total/NA	Water	3010A	
490-53821-22	MW-301 (290-300)	Total/NA	Water	3010A	
LCS 490-165514/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-165514/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-165514/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 166267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-53821-4	MW-306S (85-100)	Total/NA	Water	6010B	165514
490-53821-4 MS	MW-306S (85-100)	Total/NA	Water	6010B	165514
490-53821-4 MSD	MW-306S (85-100)	Total/NA	Water	6010B	165514
490-53821-5	MW-306S (130-140)	Total/NA	Water	6010B	165514
490-53821-6	MW-306D (185-195)	Total/NA	Water	6010B	165514
490-53821-7	MW-306D (280-300)	Total/NA	Water	6010B	165514
490-53821-8	MW-305 (35-45)	Total/NA	Water	6010B	165514
490-53821-9	MW-305 (62-72)	Total/NA	Water	6010B	165514
490-53821-10	MW-305 (145-155)	Total/NA	Water	6010B	165514
490-53821-11	MW-305 (233-243)	Total/NA	Water	6010B	165514
490-53821-12	MW-305 (265-275)	Total/NA	Water	6010B	165514
490-53821-13	MW-305 (285-300)	Total/NA	Water	6010B	165514
490-53821-16	205R	Total/NA	Water	6010B	165514
490-53821-17	405R	Total/NA	Water	6010B	165514
490-53821-18	MW-301 (35-45)	Total/NA	Water	6010B	165514
490-53821-19	MW-301 (115-125)	Total/NA	Water	6010B	165514
490-53821-20	MW-301 (145-155)	Total/NA	Water	6010B	165514
490-53821-21	MW-301 (240-250)	Total/NA	Water	6010B	165514
490-53821-22	MW-301 (290-300)	Total/NA	Water	6010B	165514
LCS 490-165514/2-A	Lab Control Sample	Total/NA	Water	6010B	165514
LCSD 490-165514/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	165514
MB 490-165514/1-A	Method Blank	Total/NA	Water	6010B	165514

Analysis Batch: 166369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-165514/1-A	Method Blank	Total/NA	Water	6010B	165514

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: Trip Blank — Lab Sample ID: 490-53821-1

Date Collected: 04/30/14 00:01 — **Matrix: Water**
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 00:10	EML	TAL NSH

Client Sample ID: IW-103 — Lab Sample ID: 490-53821-2

Date Collected: 05/22/14 10:20 — **Matrix: Water**
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 00:36	EML	TAL NSH

Client Sample ID: IW-102 — Lab Sample ID: 490-53821-3

Date Collected: 05/22/14 11:25 — **Matrix: Water**
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 01:02	EML	TAL NSH

Client Sample ID: MW-306S (85-100) — Lab Sample ID: 490-53821-4

Date Collected: 05/22/14 11:45 — **Matrix: Water**
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 01:28	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 01:30	DBK	TAL NSH

Client Sample ID: MW-306S (130-140) — Lab Sample ID: 490-53821-5

Date Collected: 05/22/14 10:20 — **Matrix: Water**
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 01:54	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 01:53	DBK	TAL NSH

Client Sample ID: MW-306D (185-195) — Lab Sample ID: 490-53821-6

Date Collected: 05/22/14 14:15 — **Matrix: Water**
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 02:20	EML	TAL NSH
Total/NA	Analysis	8260B		5	10 mL	10 mL	166480	06/03/14 14:46	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-306D (185-195)

Lab Sample ID: 490-53821-6

Date Collected: 05/22/14 14:15
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 01:56	DBK	TAL NSH

Client Sample ID: MW-306D (280-300)

Lab Sample ID: 490-53821-7

Date Collected: 05/22/14 15:30
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 02:46	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:00	DBK	TAL NSH

Client Sample ID: MW-305 (35-45)

Lab Sample ID: 490-53821-8

Date Collected: 05/22/14 10:00
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 03:12	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:03	DBK	TAL NSH

Client Sample ID: MW-305 (62-72)

Lab Sample ID: 490-53821-9

Date Collected: 05/22/14 10:05
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 03:38	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:07	DBK	TAL NSH

Client Sample ID: MW-305 (145-155)

Lab Sample ID: 490-53821-10

Date Collected: 05/22/14 11:30
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 04:04	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:10	DBK	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-305 (233-243)

Lab Sample ID: 490-53821-11

Date Collected: 05/22/14 10:15
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 04:30	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:14	DBK	TAL NSH

Client Sample ID: MW-305 (265-275)

Lab Sample ID: 490-53821-12

Date Collected: 05/22/14 10:20
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 04:56	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:18	DBK	TAL NSH

Client Sample ID: MW-305 (285-300)

Lab Sample ID: 490-53821-13

Date Collected: 05/22/14 10:30
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 05:22	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:33	DBK	TAL NSH

Client Sample ID: IW-101

Lab Sample ID: 490-53821-14

Date Collected: 05/22/14 12:35
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 05:48	EML	TAL NSH

Client Sample ID: IW-100

Lab Sample ID: 490-53821-15

Date Collected: 05/22/14 13:55
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 06:13	EML	TAL NSH
Total/NA	Analysis	8260B		5	10 mL	10 mL	166480	06/03/14 15:12	EML	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: 205R

Lab Sample ID: 490-53821-16

Date Collected: 05/22/14 13:55
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 06:39	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:37	DBK	TAL NSH

Client Sample ID: 405R

Lab Sample ID: 490-53821-17

Date Collected: 05/22/14 14:55
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 07:05	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:41	DBK	TAL NSH

Client Sample ID: MW-301 (35-45)

Lab Sample ID: 490-53821-18

Date Collected: 05/22/14 14:20
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166408	06/03/14 07:31	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:44	DBK	TAL NSH

Client Sample ID: MW-301 (115-125)

Lab Sample ID: 490-53821-19

Date Collected: 05/22/14 14:30
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166480	06/03/14 13:01	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:48	DBK	TAL NSH

Client Sample ID: MW-301 (145-155)

Lab Sample ID: 490-53821-20

Date Collected: 05/22/14 14:35
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166480	06/03/14 13:28	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:51	DBK	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Client Sample ID: MW-301 (240-250)

Lab Sample ID: 490-53821-21

Date Collected: 05/22/14 14:45
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166480	06/03/14 13:54	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:55	DBK	TAL NSH

Client Sample ID: MW-301 (290-300)

Lab Sample ID: 490-53821-22

Date Collected: 05/22/14 14:50
Matrix: Water
Date Received: 05/23/14 08:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	166480	06/03/14 14:20	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	165514	05/29/14 10:28	JBD	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	166267	05/31/14 02:58	DBK	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-53821-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

490-53821 Chain of Custody

COOLER RECEIPT FORM

Cooler Received/Opened On 5/23/2014@ 0815

1. Tracking # 9980 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 4.1 *Degrees Celsius*

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

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

   If yes, how many and where: one front

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
53821

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/4/2014

Client Information

Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone:
Email: chuck.castelluccio@arcadis-us.com
Project Name: Tibbetts Road Site E101274
Site:

Sampler: DC/TZ/TM
Phone:
Due Date Requested:
TAT Requested (days): Standard
PO #: Purchase Order Requested
WO #:
Lab Project #: 49002494
Client Project #: MA000725201400105

Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Carrier Tr.

FORD Site E101274
Page: Page 1 of 2
Job #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
Trip Blank	4-30-14	–	–	W			X		2	1
IW-103	5-22-14	1020	G	W			X		3	2
IW-102	5-22-14	1125	G	W			X		3	3
MW-306S (85-100)	5-22-14	1145	G	W			X	X	4	4
MW-306S (130-140)	5-22-14	1020	G	W			X	X	4	5
MW-306D (185-195)	5-22-14	1415	G	W			X	X	4	6
MW-306D (280-300)	5-22-14	1530	G	W			X	X	4	7
MW-305 (35-45)	5-22-14	1000	G	W			X	X	4	8
MW-305 (62-72)	5-22-14	1005	G	W			X	X	4	9
MW-305 (145-155)	5-22-14	1130	G	W			X	X	4	10
MW-305 (233-243	5-22-14	1015	G	W			X	X	4	11

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	5/22/14 1730	Arcadis	[signature]	5-23-14 @ 0815	TAN

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 4.1c

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
53821
#1
A

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

6/4/2014

Client Information	Sampler: DC/TZ/TM.	Lab PM: Brown, Shali	Carri	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone:	E-Mail: shali.brown@testamericainc.com		Page: Page 2 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Standard			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #: MA000725201400105			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:	
			Preservation Code:				A	D			
MW-305 (265-275)	5-22-14	1020	G	W			X	X	4		13
MW-305 (285-300)	5-22-14	1030	G	W			X	X	4		14
IW-101	5-22-14	1235	G	W			X		3		15
IW-100	5-22-14	1355	G	W			X		3		15
205R	5-22-14	1355	G	W			X	X	4		16
405R	5-22-14	1455	G	W			X	X	4		17
MW-301 (35-45)	5-22-14	1420	G	W			X	X	4		18
MW-301 (115-125)	5-22-14	1430	G	W			X	X	4		19
MW-301 (145-155)	5-22-14	1435	G	W			X	X	4		20
MW-301 (240-250)	5-22-14	1445	G	W			X	X	4		21
MW-301 (290-300)	5-22-14	1450	G	W			X	X	4		22

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 5/22/14 1730	Company: Arcadis	Received by:	Date/Time: 5-23-14 @ 0815	Company: TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 4.1c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-53821-1

Login Number: 53821
List Number: 1
Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

TestAmerica Job ID: 490-56973-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
7/18/2014 1:02:18 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

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Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-56973-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-56973-1	MW-307S (80-90)	Water	07/08/14 10:25	07/09/14 08:30
490-56973-2	MW-307S (172-187)	Water	07/08/14 16:12	07/09/14 08:30
490-56973-3	MW-307D (200-210)	Water	07/08/14 14:10	07/09/14 08:30
490-56973-4	BD-07082014	Water	07/08/14 00:01	07/09/14 08:30
490-56973-5	Trip Blank	Water	07/08/14 00:01	07/09/14 08:30

Job ID: 490-56973-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-56973-1

Comments
No additional comments.

Receipt
The samples were received on 7/9/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 2.2º C.

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

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

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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-56973-1

Client Sample ID: MW-307S (80-90)

Date Collected: 07/08/14 10:25
Date Received: 07/09/14 08:30

Lab Sample ID: 490-56973-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			07/11/14 12:48	1
Benzene	**0.226**	**J**	0.500	0.200	ug/L			07/11/14 12:48	1
Bromoform	ND		0.500	0.290	ug/L			07/11/14 12:48	1
Bromomethane	ND		0.500	0.350	ug/L			07/11/14 12:48	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/11/14 12:48	1
Carbon disulfide	ND		0.500	0.220	ug/L			07/11/14 12:48	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			07/11/14 12:48	1
Chlorobenzene	ND		0.500	0.180	ug/L			07/11/14 12:48	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			07/11/14 12:48	1
Chloroethane	ND		0.500	0.360	ug/L			07/11/14 12:48	1
Chloroform	ND		0.500	0.230	ug/L			07/11/14 12:48	1
Chloromethane	ND		0.500	0.360	ug/L			07/11/14 12:48	1
cis-1,2-Dichloroethene	**17.4**		0.500	0.210	ug/L			07/11/14 12:48	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/11/14 12:48	1
Dibromomethane	ND		0.500	0.450	ug/L			07/11/14 12:48	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			07/11/14 12:48	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			07/11/14 12:48	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			07/11/14 12:48	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			07/11/14 12:48	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			07/11/14 12:48	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			07/11/14 12:48	1
Ethylbenzene	ND		0.500	0.190	ug/L			07/11/14 12:48	1
2-Hexanone	ND		5.00	1.28	ug/L			07/11/14 12:48	1
Methylene Chloride	ND		5.00	0.220	ug/L			07/11/14 12:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			07/11/14 12:48	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			07/11/14 12:48	1
o-Xylene	ND		0.500	0.200	ug/L			07/11/14 12:48	1
Styrene	ND		0.500	0.280	ug/L			07/11/14 12:48	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			07/11/14 12:48	1
Tetrachloroethene	ND		0.500	0.140	ug/L			07/11/14 12:48	1
Toluene	ND		0.500	0.170	ug/L			07/11/14 12:48	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			07/11/14 12:48	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/11/14 12:48	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			07/11/14 12:48	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			07/11/14 12:48	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			07/11/14 12:48	1
Trichloroethene	**6.87**		0.500	0.200	ug/L			07/11/14 12:48	1
Vinyl chloride	ND		0.500	0.180	ug/L			07/11/14 12:48	1
Xylenes, Total	ND		1.50	0.580	ug/L			07/11/14 12:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*		*07/11/14 12:48*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*07/11/14 12:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*07/11/14 12:48*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/11/14 12:48*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-56973-1

Client Sample ID: MW-307S (172-187)

Lab Sample ID: 490-56973-2

Date Collected: 07/08/14 16:12
Matrix: Water
Date Received: 07/09/14 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			07/11/14 13:16	1
Benzene	ND		0.500	0.200	ug/L			07/11/14 13:16	1
Bromoform	ND		0.500	0.290	ug/L			07/11/14 13:16	1
Bromomethane	ND		0.500	0.350	ug/L			07/11/14 13:16	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/11/14 13:16	1
Carbon disulfide	ND		0.500	0.220	ug/L			07/11/14 13:16	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			07/11/14 13:16	1
Chlorobenzene	ND		0.500	0.180	ug/L			07/11/14 13:16	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			07/11/14 13:16	1
Chloroethane	ND		0.500	0.360	ug/L			07/11/14 13:16	1
Chloroform	ND		0.500	0.230	ug/L			07/11/14 13:16	1
Chloromethane	ND		0.500	0.360	ug/L			07/11/14 13:16	1
cis-1,2-Dichloroethene	**23.6**		0.500	0.210	ug/L			07/11/14 13:16	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/11/14 13:16	1
Dibromomethane	ND		0.500	0.450	ug/L			07/11/14 13:16	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			07/11/14 13:16	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			07/11/14 13:16	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			07/11/14 13:16	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			07/11/14 13:16	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			07/11/14 13:16	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			07/11/14 13:16	1
Ethylbenzene	ND		0.500	0.190	ug/L			07/11/14 13:16	1
2-Hexanone	ND		5.00	1.28	ug/L			07/11/14 13:16	1
Methylene Chloride	ND		5.00	0.220	ug/L			07/11/14 13:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			07/11/14 13:16	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			07/11/14 13:16	1
o-Xylene	ND		0.500	0.200	ug/L			07/11/14 13:16	1
Styrene	ND		0.500	0.280	ug/L			07/11/14 13:16	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			07/11/14 13:16	1
Tetrachloroethene	ND		0.500	0.140	ug/L			07/11/14 13:16	1
Toluene	ND		0.500	0.170	ug/L			07/11/14 13:16	1
trans-1,2-Dichloroethene	**0.278**	**J**	0.500	0.230	ug/L			07/11/14 13:16	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/11/14 13:16	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			07/11/14 13:16	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			07/11/14 13:16	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			07/11/14 13:16	1
Trichloroethene	**7.83**		0.500	0.200	ug/L			07/11/14 13:16	1
Vinyl chloride	ND		0.500	0.180	ug/L			07/11/14 13:16	1
Xylenes, Total	ND		1.50	0.580	ug/L			07/11/14 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*		*07/11/14 13:16*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*07/11/14 13:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*07/11/14 13:16*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/11/14 13:16*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-56973-1

Client Sample ID: MW-307D (200-210)

Lab Sample ID: 490-56973-3

Date Collected: 07/08/14 14:10

Matrix: Water

Date Received: 07/09/14 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			07/11/14 13:44	1
Benzene	**1.37**		0.500	0.200	ug/L			07/11/14 13:44	1
Bromoform	ND		0.500	0.290	ug/L			07/11/14 13:44	1
Bromomethane	ND		0.500	0.350	ug/L			07/11/14 13:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/11/14 13:44	1
Carbon disulfide	ND		0.500	0.220	ug/L			07/11/14 13:44	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			07/11/14 13:44	1
Chlorobenzene	ND		0.500	0.180	ug/L			07/11/14 13:44	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			07/11/14 13:44	1
Chloroethane	ND		0.500	0.360	ug/L			07/11/14 13:44	1
Chloroform	**0.238**	**J**	0.500	0.230	ug/L			07/11/14 13:44	1
Chloromethane	ND		0.500	0.360	ug/L			07/11/14 13:44	1
cis-1,2-Dichloroethene	**38.4**		0.500	0.210	ug/L			07/11/14 13:44	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/11/14 13:44	1
Dibromomethane	ND		0.500	0.450	ug/L			07/11/14 13:44	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			07/11/14 13:44	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			07/11/14 13:44	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			07/11/14 13:44	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			07/11/14 13:44	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			07/11/14 13:44	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			07/11/14 13:44	1
Ethylbenzene	ND		0.500	0.190	ug/L			07/11/14 13:44	1
2-Hexanone	ND		5.00	1.28	ug/L			07/11/14 13:44	1
Methylene Chloride	ND		5.00	0.220	ug/L			07/11/14 13:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			07/11/14 13:44	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			07/11/14 13:44	1
o-Xylene	ND		0.500	0.200	ug/L			07/11/14 13:44	1
Styrene	ND		0.500	0.280	ug/L			07/11/14 13:44	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			07/11/14 13:44	1
Tetrachloroethene	ND		0.500	0.140	ug/L			07/11/14 13:44	1
Toluene	**9.48**		0.500	0.170	ug/L			07/11/14 13:44	1
trans-1,2-Dichloroethene	**0.326**	**J**	0.500	0.230	ug/L			07/11/14 13:44	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/11/14 13:44	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			07/11/14 13:44	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			07/11/14 13:44	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			07/11/14 13:44	1
Trichloroethene	**4.95**		0.500	0.200	ug/L			07/11/14 13:44	1
Vinyl chloride	**0.218**	**J**	0.500	0.180	ug/L			07/11/14 13:44	1
Xylenes, Total	ND		1.50	0.580	ug/L			07/11/14 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*		*07/11/14 13:44*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*07/11/14 13:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*07/11/14 13:44*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/11/14 13:44*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-56973-1

Client Sample ID: BD-07082014

Date Collected: 07/08/14 00:01
Date Received: 07/09/14 08:30

Lab Sample ID: 490-56973-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			07/10/14 20:00	1
Benzene	ND		0.500	0.200	ug/L			07/10/14 20:00	1
Bromoform	ND		0.500	0.290	ug/L			07/10/14 20:00	1
Bromomethane	ND		0.500	0.350	ug/L			07/10/14 20:00	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/10/14 20:00	1
Carbon disulfide	ND		0.500	0.220	ug/L			07/10/14 20:00	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			07/10/14 20:00	1
Chlorobenzene	ND		0.500	0.180	ug/L			07/10/14 20:00	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			07/10/14 20:00	1
Chloroethane	ND		0.500	0.360	ug/L			07/10/14 20:00	1
Chloroform	ND		0.500	0.230	ug/L			07/10/14 20:00	1
Chloromethane	ND		0.500	0.360	ug/L			07/10/14 20:00	1
cis-1,2-Dichloroethene	**24.3**		0.500	0.210	ug/L			07/10/14 20:00	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/10/14 20:00	1
Dibromomethane	ND		0.500	0.450	ug/L			07/10/14 20:00	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			07/10/14 20:00	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			07/10/14 20:00	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			07/10/14 20:00	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			07/10/14 20:00	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			07/10/14 20:00	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			07/10/14 20:00	1
Ethylbenzene	ND		0.500	0.190	ug/L			07/10/14 20:00	1
2-Hexanone	ND		5.00	1.28	ug/L			07/10/14 20:00	1
Methylene Chloride	ND		5.00	0.220	ug/L			07/10/14 20:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			07/10/14 20:00	1
m-Xylene & p-Xylene	**0.423**	**J**	0.500	0.380	ug/L			07/10/14 20:00	1
o-Xylene	ND		0.500	0.200	ug/L			07/10/14 20:00	1
Styrene	ND		0.500	0.280	ug/L			07/10/14 20:00	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			07/10/14 20:00	1
Tetrachloroethene	ND		0.500	0.140	ug/L			07/10/14 20:00	1
Toluene	**0.376**	**J**	0.500	0.170	ug/L			07/10/14 20:00	1
trans-1,2-Dichloroethene	**0.354**	**J**	0.500	0.230	ug/L			07/10/14 20:00	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/10/14 20:00	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			07/10/14 20:00	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			07/10/14 20:00	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			07/10/14 20:00	1
Trichloroethene	**7.87**		0.500	0.200	ug/L			07/10/14 20:00	1
Vinyl chloride	ND		0.500	0.180	ug/L			07/10/14 20:00	1
Xylenes, Total	**0.620**	**J**	1.50	0.580	ug/L			07/10/14 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*07/10/14 20:00*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*07/10/14 20:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*		*07/10/14 20:00*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*07/10/14 20:00*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-56973-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-56973-5

Date Collected: 07/08/14 00:01
Matrix: Water
Date Received: 07/09/14 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			07/10/14 13:23	1
Benzene	ND		0.500	0.200	ug/L			07/10/14 13:23	1
Bromoform	ND		0.500	0.290	ug/L			07/10/14 13:23	1
Bromomethane	ND		0.500	0.350	ug/L			07/10/14 13:23	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/10/14 13:23	1
Carbon disulfide	ND		0.500	0.220	ug/L			07/10/14 13:23	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			07/10/14 13:23	1
Chlorobenzene	ND		0.500	0.180	ug/L			07/10/14 13:23	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			07/10/14 13:23	1
Chloroethane	ND		0.500	0.360	ug/L			07/10/14 13:23	1
Chloroform	ND		0.500	0.230	ug/L			07/10/14 13:23	1
Chloromethane	ND		0.500	0.360	ug/L			07/10/14 13:23	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			07/10/14 13:23	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/10/14 13:23	1
Dibromomethane	ND		0.500	0.450	ug/L			07/10/14 13:23	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			07/10/14 13:23	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			07/10/14 13:23	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			07/10/14 13:23	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			07/10/14 13:23	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			07/10/14 13:23	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			07/10/14 13:23	1
Ethylbenzene	ND		0.500	0.190	ug/L			07/10/14 13:23	1
2-Hexanone	ND		5.00	1.28	ug/L			07/10/14 13:23	1
Methylene Chloride	ND		5.00	0.220	ug/L			07/10/14 13:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			07/10/14 13:23	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			07/10/14 13:23	1
o-Xylene	ND		0.500	0.200	ug/L			07/10/14 13:23	1
Styrene	ND		0.500	0.280	ug/L			07/10/14 13:23	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			07/10/14 13:23	1
Tetrachloroethene	ND		0.500	0.140	ug/L			07/10/14 13:23	1
Toluene	ND		0.500	0.170	ug/L			07/10/14 13:23	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			07/10/14 13:23	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/10/14 13:23	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			07/10/14 13:23	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			07/10/14 13:23	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			07/10/14 13:23	1
Trichloroethene	ND		0.500	0.200	ug/L			07/10/14 13:23	1
Vinyl chloride	ND		0.500	0.180	ug/L			07/10/14 13:23	1
Xylenes, Total	ND		1.50	0.580	ug/L			07/10/14 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*07/10/14 13:23*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*07/10/14 13:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*07/10/14 13:23*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/10/14 13:23*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-175622/7
Matrix: Water
Analysis Batch: 175622

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			07/10/14 12:55	1
Benzene	ND		0.500	0.200	ug/L			07/10/14 12:55	1
Bromoform	ND		0.500	0.290	ug/L			07/10/14 12:55	1
Bromomethane	ND		0.500	0.350	ug/L			07/10/14 12:55	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/10/14 12:55	1
Carbon disulfide	ND		0.500	0.220	ug/L			07/10/14 12:55	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			07/10/14 12:55	1
Chlorobenzene	ND		0.500	0.180	ug/L			07/10/14 12:55	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			07/10/14 12:55	1
Chloroethane	ND		0.500	0.360	ug/L			07/10/14 12:55	1
Chloroform	ND		0.500	0.230	ug/L			07/10/14 12:55	1
Chloromethane	ND		0.500	0.360	ug/L			07/10/14 12:55	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			07/10/14 12:55	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/10/14 12:55	1
Dibromomethane	ND		0.500	0.450	ug/L			07/10/14 12:55	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			07/10/14 12:55	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			07/10/14 12:55	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			07/10/14 12:55	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			07/10/14 12:55	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			07/10/14 12:55	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			07/10/14 12:55	1
Ethylbenzene	ND		0.500	0.190	ug/L			07/10/14 12:55	1
2-Hexanone	ND		5.00	1.28	ug/L			07/10/14 12:55	1
Methylene Chloride	ND		5.00	0.220	ug/L			07/10/14 12:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			07/10/14 12:55	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			07/10/14 12:55	1
o-Xylene	ND		0.500	0.200	ug/L			07/10/14 12:55	1
Styrene	ND		0.500	0.280	ug/L			07/10/14 12:55	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			07/10/14 12:55	1
Tetrachloroethene	ND		0.500	0.140	ug/L			07/10/14 12:55	1
Toluene	ND		0.500	0.170	ug/L			07/10/14 12:55	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			07/10/14 12:55	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/10/14 12:55	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			07/10/14 12:55	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			07/10/14 12:55	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			07/10/14 12:55	1
Trichloroethene	ND		0.500	0.200	ug/L			07/10/14 12:55	1
Vinyl chloride	ND		0.500	0.180	ug/L			07/10/14 12:55	1
Xylenes, Total	ND		1.50	0.580	ug/L			07/10/14 12:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*07/10/14 12:55*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*07/10/14 12:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*07/10/14 12:55*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/10/14 12:55*	*1*

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

Lab Sample ID: LCS 490-175622/4
Matrix: Water
Analysis Batch: 175622

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	318.9		ug/L		128	54 - 145
Benzene	50.0	51.63		ug/L		103	80 - 121
Bromoform	50.0	55.59		ug/L		111	46 - 145
Bromomethane	50.0	50.46		ug/L		101	41 - 150
2-Butanone (MEK)	250	320.6		ug/L		128	62 - 133
Carbon disulfide	50.0	56.20		ug/L		112	77 - 126
Carbon tetrachloride	50.0	46.94		ug/L		94	64 - 147
Chlorobenzene	50.0	49.87		ug/L		100	80 - 120
Chlorodibromomethane	50.0	52.19		ug/L		104	69 - 133
Chloroethane	50.0	51.42		ug/L		103	72 - 120
Chloroform	50.0	47.80		ug/L		96	73 - 129
Chloromethane	50.0	48.41		ug/L		97	12 - 150
cis-1,2-Dichloroethene	50.0	54.34		ug/L		109	76 - 125
cis-1,3-Dichloropropene	50.0	53.03		ug/L		106	74 - 140
Dibromomethane	50.0	54.48		ug/L		109	71 - 125
Dichlorobromomethane	50.0	51.49		ug/L		103	75 - 129
1,1-Dichloroethane	50.0	55.45		ug/L		111	78 - 125
1,2-Dichloroethane	50.0	49.03		ug/L		98	77 - 121
1,1-Dichloroethene	50.0	55.62		ug/L		111	79 - 124
1,2-Dichloropropane	50.0	54.24		ug/L		108	75 - 120
1,1-Dichloropropene	50.0	49.86		ug/L		100	80 - 122
Ethylbenzene	50.0	47.72		ug/L		95	80 - 130
2-Hexanone	250	296.9		ug/L		119	60 - 142
Methylene Chloride	50.0	52.06		ug/L		104	79 - 123
4-Methyl-2-pentanone (MIBK)	250	287.9		ug/L		115	60 - 137
m-Xylene & p-Xylene	50.0	47.44		ug/L		95	80 - 141
o-Xylene	50.0	49.24		ug/L		98	80 - 127
Styrene	50.0	50.70		ug/L		101	80 - 127
1,1,1,2-Tetrachloroethane	50.0	50.22		ug/L		100	74 - 135
Tetrachloroethene	50.0	48.22		ug/L		96	80 - 126
Toluene	50.0	47.46		ug/L		95	80 - 126
trans-1,2-Dichloroethene	50.0	55.68		ug/L		111	79 - 126
trans-1,3-Dichloropropene	50.0	52.71		ug/L		105	63 - 134
1,3,5-Trichlorobenzene	50.0	48.02		ug/L		96	70 - 130
1,1,1-Trichloroethane	50.0	45.60		ug/L		91	78 - 135
1,1,2-Trichloroethane	50.0	53.30		ug/L		107	80 - 124
Trichloroethene	50.0	50.90		ug/L		102	80 - 123
Vinyl chloride	50.0	54.54		ug/L		109	68 - 120
Xylenes, Total	100	96.68		ug/L		97	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*

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

Lab Sample ID: LCSD 490-175622/5
Matrix: Water
Analysis Batch: 175622

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
Acetone	250	327.9		ug/L		131	54 - 145	3	21
Benzene	50.0	53.42		ug/L		107	80 - 121	3	17
Bromoform	50.0	57.21		ug/L		114	46 - 145	3	16
Bromomethane	50.0	54.23		ug/L		108	41 - 150	7	50
2-Butanone (MEK)	250	329.1		ug/L		132	62 - 133	3	19
Carbon disulfide	50.0	59.14		ug/L		118	77 - 126	5	21
Carbon tetrachloride	50.0	48.93		ug/L		98	64 - 147	4	19
Chlorobenzene	50.0	51.13		ug/L		102	80 - 120	2	14
Chlorodibromomethane	50.0	53.76		ug/L		108	69 - 133	3	15
Chloroethane	50.0	53.82		ug/L		108	72 - 120	5	20
Chloroform	50.0	49.74		ug/L		99	73 - 129	4	18
Chloromethane	50.0	52.88		ug/L		106	12 - 150	9	31
cis-1,2-Dichloroethene	50.0	55.57		ug/L		111	76 - 125	2	17
cis-1,3-Dichloropropene	50.0	54.29		ug/L		109	74 - 140	2	15
Dibromomethane	50.0	56.56		ug/L		113	71 - 125	4	16
Dichlorobromomethane	50.0	53.22		ug/L		106	75 - 129	3	18
1,1-Dichloroethane	50.0	57.44		ug/L		115	78 - 125	4	17
1,2-Dichloroethane	50.0	50.77		ug/L		102	77 - 121	3	17
1,1-Dichloroethene	50.0	56.76		ug/L		114	79 - 124	2	17
1,2-Dichloropropane	50.0	56.30		ug/L		113	75 - 120	4	17
1,1-Dichloropropene	50.0	51.71		ug/L		103	80 - 122	4	17
Ethylbenzene	50.0	49.12		ug/L		98	80 - 130	3	15
2-Hexanone	250	306.8		ug/L		123	60 - 142	3	15
Methylene Chloride	50.0	54.40		ug/L		109	79 - 123	4	17
4-Methyl-2-pentanone (MIBK)	250	298.8		ug/L		120	60 - 137	4	17
m-Xylene & p-Xylene	50.0	49.03		ug/L		98	80 - 141	3	16
o-Xylene	50.0	50.36		ug/L		101	80 - 127	2	14
Styrene	50.0	52.14		ug/L		104	80 - 127	3	24
1,1,1,2-Tetrachloroethane	50.0	51.54		ug/L		103	74 - 135	3	16
Tetrachloroethene	50.0	49.54		ug/L		99	80 - 126	3	16
Toluene	50.0	49.29		ug/L		99	80 - 126	4	15
trans-1,2-Dichloroethene	50.0	58.02		ug/L		116	79 - 126	4	16
trans-1,3-Dichloropropene	50.0	54.64		ug/L		109	63 - 134	4	14
1,3,5-Trichlorobenzene	50.0	48.96		ug/L		98	70 - 130	2	30
1,1,1-Trichloroethane	50.0	47.75		ug/L		96	78 - 135	5	17
1,1,2-Trichloroethane	50.0	54.92		ug/L		110	80 - 124	3	15
Trichloroethene	50.0	52.67		ug/L		105	80 - 123	3	17
Vinyl chloride	50.0	56.93		ug/L		114	68 - 120	4	17
Xylenes, Total	100	99.40		ug/L		99	80 - 132	3	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

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

Lab Sample ID: 490-57003-B-1 MS
Matrix: Water
Analysis Batch: 175622

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	274.2		ug/L		110	45 - 141
Benzene	ND		50.0	53.20		ug/L		106	75 - 133
Bromoform	ND		50.0	49.22		ug/L		98	42 - 147
Bromomethane	ND		50.0	42.03		ug/L		84	16 - 163
2-Butanone (MEK)	ND		250	271.3		ug/L		109	50 - 138
Carbon disulfide	ND		50.0	58.05		ug/L		116	48 - 152
Carbon tetrachloride	ND		50.0	51.58		ug/L		103	62 - 164
Chlorobenzene	ND		50.0	51.47		ug/L		103	80 - 129
Chlorodibromomethane	ND		50.0	48.79		ug/L		98	66 - 140
Chloroethane	ND		50.0	50.27		ug/L		101	58 - 137
Chloroform	ND		50.0	49.64		ug/L		99	66 - 138
Chloromethane	ND		50.0	41.23		ug/L		82	10 - 169
cis-1,2-Dichloroethene	ND		50.0	55.13		ug/L		110	68 - 138
cis-1,3-Dichloropropene	ND		50.0	52.09		ug/L		104	71 - 141
Dibromomethane	ND		50.0	50.41		ug/L		101	58 - 140
Dichlorobromomethane	ND		50.0	50.50		ug/L		101	70 - 140
1,1-Dichloroethane	ND		50.0	57.30		ug/L		115	71 - 139
1,2-Dichloroethane	ND		50.0	45.32		ug/L		91	64 - 136
1,1-Dichloroethene	ND		50.0	57.41		ug/L		115	70 - 142
1,2-Dichloropropane	ND		50.0	54.99		ug/L		110	67 - 131
1,1-Dichloropropene	ND		50.0	54.89		ug/L		110	76 - 139
Ethylbenzene	ND		50.0	51.08		ug/L		102	79 - 139
2-Hexanone	ND		250	256.3		ug/L		103	50 - 150
Methylene Chloride	ND		50.0	51.69		ug/L		103	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	252.8		ug/L		101	50 - 147
m-Xylene & p-Xylene	ND		50.0	51.51		ug/L		103	80 - 153
o-Xylene	ND		50.0	50.33		ug/L		101	74 - 138
Styrene	ND		50.0	50.56		ug/L		101	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	50.26		ug/L		101	73 - 141
Tetrachloroethene	ND		50.0	53.71		ug/L		107	72 - 145
Toluene	ND		50.0	51.55		ug/L		103	75 - 136
trans-1,2-Dichloroethene	ND		50.0	58.55		ug/L		117	66 - 143
trans-1,3-Dichloropropene	ND		50.0	49.78		ug/L		100	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	45.76		ug/L		92	60 - 140
1,1,1-Trichloroethane	ND		50.0	49.91		ug/L		100	76 - 149
1,1,2-Trichloroethane	ND		50.0	49.57		ug/L		99	74 - 134
Trichloroethene	ND		50.0	55.36		ug/L		111	73 - 144
Vinyl chloride	ND		50.0	50.89		ug/L		102	56 - 129
Xylenes, Total	ND		100	101.8		ug/L		102	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*
Toluene-d8 (Surr)	*91*		*70 - 130*

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

Lab Sample ID: 490-57003-C-1 MSD
Matrix: Water
Analysis Batch: 175622

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	287.9		ug/L		115	45 - 141	5	21
Benzene	ND		50.0	54.09		ug/L		108	75 - 133	2	17
Bromoform	ND		50.0	53.86		ug/L		108	42 - 147	9	16
Bromomethane	ND		50.0	46.46		ug/L		93	16 - 163	10	50
2-Butanone (MEK)	ND		250	294.1		ug/L		118	50 - 138	8	19
Carbon disulfide	ND		50.0	55.56		ug/L		111	48 - 152	4	21
Carbon tetrachloride	ND		50.0	51.75		ug/L		103	62 - 164	0	19
Chlorobenzene	ND		50.0	51.12		ug/L		102	80 - 129	1	14
Chlorodibromomethane	ND		50.0	50.98		ug/L		102	66 - 140	4	15
Chloroethane	ND		50.0	50.50		ug/L		101	58 - 137	0	20
Chloroform	ND		50.0	49.74		ug/L		99	66 - 138	0	18
Chloromethane	ND		50.0	38.66		ug/L		77	10 - 169	6	31
cis-1,2-Dichloroethene	ND		50.0	55.55		ug/L		111	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	53.12		ug/L		106	71 - 141	2	15
Dibromomethane	ND		50.0	52.90		ug/L		106	58 - 140	5	16
Dichlorobromomethane	ND		50.0	51.85		ug/L		104	70 - 140	3	18
1,1-Dichloroethane	ND		50.0	55.85		ug/L		112	71 - 139	3	17
1,2-Dichloroethane	ND		50.0	48.01		ug/L		96	64 - 136	6	17
1,1-Dichloroethene	ND		50.0	58.13		ug/L		116	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	55.71		ug/L		111	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	54.37		ug/L		109	76 - 139	1	17
Ethylbenzene	ND		50.0	50.06		ug/L		100	79 - 139	2	15
2-Hexanone	ND		250	277.0		ug/L		111	50 - 150	8	15
Methylene Chloride	ND		50.0	50.12		ug/L		100	64 - 139	3	17
4-Methyl-2-pentanone (MIBK)	ND		250	275.4		ug/L		110	50 - 147	9	17
m-Xylene & p-Xylene	ND		50.0	49.70		ug/L		99	80 - 153	4	16
o-Xylene	ND		50.0	50.25		ug/L		101	74 - 138	0	14
Styrene	ND		50.0	51.43		ug/L		103	61 - 148	2	24
1,1,1,2-Tetrachloroethane	ND		50.0	50.58		ug/L		101	73 - 141	1	16
Tetrachloroethene	ND		50.0	52.62		ug/L		105	72 - 145	2	16
Toluene	ND		50.0	50.08		ug/L		100	75 - 136	3	15
trans-1,2-Dichloroethene	ND		50.0	56.29		ug/L		113	66 - 143	4	16
trans-1,3-Dichloropropene	ND		50.0	51.92		ug/L		104	59 - 135	4	14
1,3,5-Trichlorobenzene	ND		50.0	48.52		ug/L		97	60 - 140	6	30
1,1,1-Trichloroethane	ND		50.0	49.76		ug/L		100	76 - 149	0	17
1,1,2-Trichloroethane	ND		50.0	51.70		ug/L		103	74 - 134	4	15
Trichloroethene	ND		50.0	54.28		ug/L		109	73 - 144	2	17
Vinyl chloride	ND		50.0	50.77		ug/L		102	56 - 129	0	17
Xylenes, Total	ND		100	99.95		ug/L		100	74 - 141	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*88*		*70 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*

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

Lab Sample ID: MB 490-175929/6
Matrix: Water
Analysis Batch: 175929

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			07/11/14 11:51	1
Benzene	ND		0.500	0.200	ug/L			07/11/14 11:51	1
Bromoform	ND		0.500	0.290	ug/L			07/11/14 11:51	1
Bromomethane	ND		0.500	0.350	ug/L			07/11/14 11:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/11/14 11:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			07/11/14 11:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			07/11/14 11:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			07/11/14 11:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			07/11/14 11:51	1
Chloroethane	ND		0.500	0.360	ug/L			07/11/14 11:51	1
Chloroform	ND		0.500	0.230	ug/L			07/11/14 11:51	1
Chloromethane	ND		0.500	0.360	ug/L			07/11/14 11:51	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			07/11/14 11:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/11/14 11:51	1
Dibromomethane	ND		0.500	0.450	ug/L			07/11/14 11:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			07/11/14 11:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			07/11/14 11:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			07/11/14 11:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			07/11/14 11:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			07/11/14 11:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			07/11/14 11:51	1
Ethylbenzene	ND		0.500	0.190	ug/L			07/11/14 11:51	1
2-Hexanone	ND		5.00	1.28	ug/L			07/11/14 11:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			07/11/14 11:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			07/11/14 11:51	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			07/11/14 11:51	1
o-Xylene	ND		0.500	0.200	ug/L			07/11/14 11:51	1
Styrene	ND		0.500	0.280	ug/L			07/11/14 11:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			07/11/14 11:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			07/11/14 11:51	1
Toluene	ND		0.500	0.170	ug/L			07/11/14 11:51	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			07/11/14 11:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			07/11/14 11:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			07/11/14 11:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			07/11/14 11:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			07/11/14 11:51	1
Trichloroethene	ND		0.500	0.200	ug/L			07/11/14 11:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			07/11/14 11:51	1
Xylenes, Total	ND		1.50	0.580	ug/L			07/11/14 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*07/11/14 11:51*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*07/11/14 11:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*07/11/14 11:51*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*07/11/14 11:51*	*1*

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

Lab Sample ID: LCS 490-175929/3
Matrix: Water
Analysis Batch: 175929

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	317.8		ug/L		127	54 - 145
Benzene	50.0	51.60		ug/L		103	80 - 121
Bromoform	50.0	55.56		ug/L		111	46 - 145
Bromomethane	50.0	50.60		ug/L		101	41 - 150
2-Butanone (MEK)	250	310.0		ug/L		124	62 - 133
Carbon disulfide	50.0	55.32		ug/L		111	77 - 126
Carbon tetrachloride	50.0	46.54		ug/L		93	64 - 147
Chlorobenzene	50.0	47.96		ug/L		96	80 - 120
Chlorodibromomethane	50.0	52.68		ug/L		105	69 - 133
Chloroethane	50.0	50.41		ug/L		101	72 - 120
Chloroform	50.0	48.08		ug/L		96	73 - 129
Chloromethane	50.0	48.27		ug/L		97	12 - 150
cis-1,2-Dichloroethene	50.0	53.39		ug/L		107	76 - 125
cis-1,3-Dichloropropene	50.0	52.55		ug/L		105	74 - 140
Dibromomethane	50.0	55.02		ug/L		110	71 - 125
Dichlorobromomethane	50.0	51.43		ug/L		103	75 - 129
1,1-Dichloroethane	50.0	55.69		ug/L		111	78 - 125
1,2-Dichloroethane	50.0	49.00		ug/L		98	77 - 121
1,1-Dichloroethene	50.0	54.13		ug/L		108	79 - 124
1,2-Dichloropropane	50.0	53.86		ug/L		108	75 - 120
1,1-Dichloropropene	50.0	49.33		ug/L		99	80 - 122
Ethylbenzene	50.0	45.57		ug/L		91	80 - 130
2-Hexanone	250	293.4		ug/L		117	60 - 142
Methylene Chloride	50.0	52.10		ug/L		104	79 - 123
4-Methyl-2-pentanone (MIBK)	250	282.9		ug/L		113	60 - 137
m-Xylene & p-Xylene	50.0	47.79		ug/L		96	80 - 141
o-Xylene	50.0	49.35		ug/L		99	80 - 127
Styrene	50.0	50.87		ug/L		102	80 - 127
1,1,1,2-Tetrachloroethane	50.0	48.14		ug/L		96	74 - 135
Tetrachloroethene	50.0	47.36		ug/L		95	80 - 126
Toluene	50.0	47.31		ug/L		95	80 - 126
trans-1,2-Dichloroethene	50.0	55.29		ug/L		111	79 - 126
trans-1,3-Dichloropropene	50.0	53.15		ug/L		106	63 - 134
1,3,5-Trichlorobenzene	50.0	46.40		ug/L		93	70 - 130
1,1,1-Trichloroethane	50.0	45.30		ug/L		91	78 - 135
1,1,2-Trichloroethane	50.0	53.75		ug/L		107	80 - 124
Trichloroethene	50.0	50.43		ug/L		101	80 - 123
Vinyl chloride	50.0	53.66		ug/L		107	68 - 120
Xylenes, Total	100	97.14		ug/L		97	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*

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

Lab Sample ID: LCSD 490-175929/4
Matrix: Water
Analysis Batch: 175929

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
Acetone	250	308.2		ug/L		123	54 - 145	3	21
Benzene	50.0	51.75		ug/L		103	80 - 121	0	17
Bromoform	50.0	56.41		ug/L		113	46 - 145	2	16
Bromomethane	50.0	51.50		ug/L		103	41 - 150	2	50
2-Butanone (MEK)	250	312.0		ug/L		125	62 - 133	1	19
Carbon disulfide	50.0	53.73		ug/L		107	77 - 126	3	21
Carbon tetrachloride	50.0	47.03		ug/L		94	64 - 147	1	19
Chlorobenzene	50.0	49.61		ug/L		99	80 - 120	3	14
Chlorodibromomethane	50.0	52.02		ug/L		104	69 - 133	1	15
Chloroethane	50.0	50.36		ug/L		101	72 - 120	0	20
Chloroform	50.0	48.43		ug/L		97	73 - 129	1	18
Chloromethane	50.0	45.34		ug/L		91	12 - 150	6	31
cis-1,2-Dichloroethene	50.0	53.33		ug/L		107	76 - 125	0	17
cis-1,3-Dichloropropene	50.0	51.87		ug/L		104	74 - 140	1	15
Dibromomethane	50.0	54.99		ug/L		110	71 - 125	0	16
Dichlorobromomethane	50.0	51.82		ug/L		104	75 - 129	1	18
1,1-Dichloroethane	50.0	55.11		ug/L		110	78 - 125	1	17
1,2-Dichloroethane	50.0	49.68		ug/L		99	77 - 121	1	17
1,1-Dichloroethene	50.0	54.83		ug/L		110	79 - 124	1	17
1,2-Dichloropropane	50.0	54.82		ug/L		110	75 - 120	2	17
1,1-Dichloropropene	50.0	49.41		ug/L		99	80 - 122	0	17
Ethylbenzene	50.0	47.68		ug/L		95	80 - 130	5	15
2-Hexanone	250	293.6		ug/L		117	60 - 142	0	15
Methylene Chloride	50.0	51.71		ug/L		103	79 - 123	1	17
4-Methyl-2-pentanone (MIBK)	250	286.2		ug/L		114	60 - 137	1	17
m-Xylene & p-Xylene	50.0	46.70		ug/L		93	80 - 141	2	16
o-Xylene	50.0	48.51		ug/L		97	80 - 127	2	14
Styrene	50.0	50.60		ug/L		101	80 - 127	1	24
1,1,1,2-Tetrachloroethane	50.0	50.11		ug/L		100	74 - 135	4	16
Tetrachloroethene	50.0	47.15		ug/L		94	80 - 126	0	16
Toluene	50.0	47.49		ug/L		95	80 - 126	0	15
trans-1,2-Dichloroethene	50.0	55.00		ug/L		110	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	53.18		ug/L		106	63 - 134	0	14
1,3,5-Trichlorobenzene	50.0	48.00		ug/L		96	70 - 130	3	30
1,1,1-Trichloroethane	50.0	46.10		ug/L		92	78 - 135	2	17
1,1,2-Trichloroethane	50.0	53.68		ug/L		107	80 - 124	0	15
Trichloroethene	50.0	51.43		ug/L		103	80 - 123	2	17
Vinyl chloride	50.0	53.81		ug/L		108	68 - 120	0	17
Xylenes, Total	100	95.21		ug/L		95	80 - 132	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*

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

Lab Sample ID: 490-57068-A-3 MS
Matrix: Water
Analysis Batch: 175929

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	292.8		ug/L		117	45 - 141
Benzene	ND		50.0	53.87		ug/L		108	75 - 133
Bromoform	ND		50.0	57.27		ug/L		115	42 - 147
Bromomethane	ND		50.0	45.96		ug/L		92	16 - 163
2-Butanone (MEK)	ND		250	320.4		ug/L		128	50 - 138
Carbon disulfide	ND		50.0	55.88		ug/L		112	48 - 152
Carbon tetrachloride	ND		50.0	53.62		ug/L		107	62 - 164
Chlorobenzene	ND		50.0	51.32		ug/L		103	80 - 129
Chlorodibromomethane	ND		50.0	54.13		ug/L		108	66 - 140
Chloroethane	ND		50.0	54.68		ug/L		109	58 - 137
Chloroform	ND		50.0	50.84		ug/L		102	66 - 138
Chloromethane	ND		50.0	48.88		ug/L		98	10 - 169
cis-1,2-Dichloroethene	4.35		50.0	58.44		ug/L		108	68 - 138
cis-1,3-Dichloropropene	ND		50.0	52.10		ug/L		104	71 - 141
Dibromomethane	ND		50.0	57.50		ug/L		115	58 - 140
Dichlorobromomethane	ND		50.0	54.08		ug/L		108	70 - 140
1,1-Dichloroethane	2.36		50.0	57.99		ug/L		111	71 - 139
1,2-Dichloroethane	ND		50.0	51.72		ug/L		103	64 - 136
1,1-Dichloroethene	ND		50.0	59.05		ug/L		118	70 - 142
1,2-Dichloropropane	ND		50.0	55.37		ug/L		111	67 - 131
1,1-Dichloropropene	ND		50.0	53.98		ug/L		108	76 - 139
Ethylbenzene	ND		50.0	46.67		ug/L		93	79 - 139
2-Hexanone	ND		250	296.4		ug/L		119	50 - 150
Methylene Chloride	ND		50.0	49.93		ug/L		100	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	291.9		ug/L		117	50 - 147
m-Xylene & p-Xylene	ND		50.0	49.24		ug/L		98	80 - 153
o-Xylene	ND		50.0	47.72		ug/L		95	74 - 138
Styrene	ND		50.0	49.38		ug/L		99	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	49.76		ug/L		100	73 - 141
Tetrachloroethene	2.04		50.0	55.26		ug/L		106	72 - 145
Toluene	ND		50.0	49.88		ug/L		100	75 - 136
trans-1,2-Dichloroethene	ND		50.0	55.59		ug/L		111	66 - 143
trans-1,3-Dichloropropene	ND		50.0	52.91		ug/L		106	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	47.89		ug/L		96	60 - 140
1,1,1-Trichloroethane	0.271	J	50.0	51.58		ug/L		103	76 - 149
1,1,2-Trichloroethane	ND		50.0	54.89		ug/L		110	74 - 134
Trichloroethene	0.830		50.0	56.80		ug/L		112	73 - 144
Vinyl chloride	0.693		50.0	59.54		ug/L		118	56 - 129
Xylenes, Total	ND		100	96.96		ug/L		97	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*

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

Lab Sample ID: 490-57068-A-3 MSD
Matrix: Water
Analysis Batch: 175929

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	314.0		ug/L		126	45 - 141	7	21
Benzene	ND		50.0	55.01		ug/L		110	75 - 133	2	17
Bromoform	ND		50.0	56.87		ug/L		114	42 - 147	1	16
Bromomethane	ND		50.0	51.56		ug/L		103	16 - 163	11	50
2-Butanone (MEK)	ND		250	321.0		ug/L		128	50 - 138	0	19
Carbon disulfide	ND		50.0	60.88		ug/L		122	48 - 152	9	21
Carbon tetrachloride	ND		50.0	54.26		ug/L		109	62 - 164	1	19
Chlorobenzene	ND		50.0	50.11		ug/L		100	80 - 129	2	14
Chlorodibromomethane	ND		50.0	52.48		ug/L		105	66 - 140	3	15
Chloroethane	ND		50.0	54.86		ug/L		110	58 - 137	0	20
Chloroform	ND		50.0	49.74		ug/L		99	66 - 138	2	18
Chloromethane	ND		50.0	47.08		ug/L		94	10 - 169	4	31
cis-1,2-Dichloroethene	4.35		50.0	59.56		ug/L		110	68 - 138	2	17
cis-1,3-Dichloropropene	ND		50.0	50.91		ug/L		102	71 - 141	2	15
Dibromomethane	ND		50.0	57.26		ug/L		115	58 - 140	0	16
Dichlorobromomethane	ND		50.0	54.39		ug/L		109	70 - 140	1	18
1,1-Dichloroethane	2.36		50.0	60.73		ug/L		117	71 - 139	5	17
1,2-Dichloroethane	ND		50.0	52.54		ug/L		105	64 - 136	2	17
1,1-Dichloroethene	ND		50.0	61.21		ug/L		122	70 - 142	4	17
1,2-Dichloropropane	ND		50.0	55.83		ug/L		112	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	55.33		ug/L		111	76 - 139	2	17
Ethylbenzene	ND		50.0	45.71		ug/L		91	79 - 139	2	15
2-Hexanone	ND		250	286.5		ug/L		115	50 - 150	3	15
Methylene Chloride	ND		50.0	54.02		ug/L		108	64 - 139	8	17
4-Methyl-2-pentanone (MIBK)	ND		250	283.3		ug/L		113	50 - 147	3	17
m-Xylene & p-Xylene	ND		50.0	46.37		ug/L		93	80 - 153	6	16
o-Xylene	ND		50.0	49.52		ug/L		99	74 - 138	4	14
Styrene	ND		50.0	50.67		ug/L		101	61 - 148	3	24
1,1,1,2-Tetrachloroethane	ND		50.0	47.98		ug/L		96	73 - 141	4	16
Tetrachloroethene	2.04		50.0	53.36		ug/L		103	72 - 145	4	16
Toluene	ND		50.0	48.72		ug/L		97	75 - 136	2	15
trans-1,2-Dichloroethene	ND		50.0	59.51		ug/L		119	66 - 143	7	16
trans-1,3-Dichloropropene	ND		50.0	48.63		ug/L		97	59 - 135	8	14
1,3,5-Trichlorobenzene	ND		50.0	48.11		ug/L		96	60 - 140	0	30
1,1,1-Trichloroethane	0.271	J	50.0	52.08		ug/L		104	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	53.04		ug/L		106	74 - 134	3	15
Trichloroethene	0.830		50.0	57.46		ug/L		113	73 - 144	1	17
Vinyl chloride	0.693		50.0	61.14		ug/L		121	56 - 129	3	17
Xylenes, Total	ND		100	95.89		ug/L		96	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-56973-1

GC/MS VOA

Analysis Batch: 175622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-56973-4	BD-07082014	Total/NA	Water	8260B	
490-56973-5	Trip Blank	Total/NA	Water	8260B	
490-57003-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-57003-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-175622/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-175622/5	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-175622/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 175929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-56973-1	MW-307S (80-90)	Total/NA	Water	8260B	
490-56973-2	MW-307S (172-187)	Total/NA	Water	8260B	
490-56973-3	MW-307D (200-210)	Total/NA	Water	8260B	
490-57068-A-3 MS	Matrix Spike	Total/NA	Water	8260B	
490-57068-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-175929/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-175929/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-175929/6	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-56973-1

Client Sample ID: MW-307S (80-90)

Lab Sample ID: 490-56973-1

Date Collected: 07/08/14 10:25
Matrix: Water
Date Received: 07/09/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	175929	07/11/14 12:48	JMG	TAL NSH

Client Sample ID: MW-307S (172-187)

Lab Sample ID: 490-56973-2

Date Collected: 07/08/14 16:12
Matrix: Water
Date Received: 07/09/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	175929	07/11/14 13:16	JMG	TAL NSH

Client Sample ID: MW-307D (200-210)

Lab Sample ID: 490-56973-3

Date Collected: 07/08/14 14:10
Matrix: Water
Date Received: 07/09/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	175929	07/11/14 13:44	JMG	TAL NSH

Client Sample ID: BD-07082014

Lab Sample ID: 490-56973-4

Date Collected: 07/08/14 00:01
Matrix: Water
Date Received: 07/09/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	175622	07/10/14 20:00	JMG	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-56973-5

Date Collected: 07/08/14 00:01
Matrix: Water
Date Received: 07/09/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	175622	07/10/14 13:23	JMG	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-56973-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-56973-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-56973 Chain of Custody

Cooler Received/Opened On 7/9/2014 @ 0830

1. Tracking # 8260 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.2 *Degrees Celsius*

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

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

   If yes, how many and where: 2 Front

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-I
End of Form

Revised 11/28/12

ARCADIS
Infrastructure · Water · Environment · Buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Chuck Castelluccio
Telephone: 978-937-9999
Address: 200 Harvard Mills SQ
Fax: 978-937-7555
City State Zip: Wakefield MA
E-mail Address: Chuck.castelluccio@arcadis-us.com
Project Name/Location (City, State): Tibbetts Barrington NH
Project #: MA000725001000105
Sampler's Printed Name: Diane Champagne
Sampler's Signature: Diane Champ

Preservative	B											
Filtered (✓)												
# of Containers	3											
Container Information	1											

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	8260B LL MOD NH Volatiles List							REMARKS
MW-307S (80-90)	7/8/14	1025		✓	W	3							-1
MW-307S (172-187)	7/8/14	1612		✓	W	3							-2
MW-307D (200-210)	7/8/14	1410		✓	W	3							-3
BD-07082014	7/8/14	—		✓	W	3							-4
Trip Blank	—	—			W	2							-5

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

Loc: 490
56973

Special Instructions/Comments:

Level II deliverables

☐ Special QA/QC Instructions(✓):

Ford site ID E101274

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Test America	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Diane Champagne	Printed Name: Jenny Hukubn	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature: Diane Champ	Signature:	Signature:	Signature:
Specify Turnaround Requirements: Standard TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: TAW	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 7/8/14 1800	Date/Time: 7-9-14 / 0830 2.2°	Date/Time:	Date/Time:

20730826 CofC AR Form 01.12.2007

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

7/18/2014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-56973 Chain of Custody

Cooler Received/Opened On 7/9/2014 @ 0830

1. Tracking # 8260 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17610176

2. Temperature of rep. sample or temp blank when opened: 2.2 *Degrees Celsius*

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

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

   If yes, how many and where: 2 Front

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment

ARCADIS
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ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Chuck Castelluccio
Telephone: 978-937-9999
Address: 200 Harvard Mills SQ
Fax: 978-937-7555
City: Wakefield State: MA Zip:
E-mail Address: Chuck.castelluccio@arcadis-us.com
Project Name/Location (City, State): Tibbetts Barrington NH
Project #: MA000725001000105
Sampler's Printed Name: Diane Champagne
Sampler's Signature: Diane Champ

Preservative	B								
Filtered (✓)									
# of Containers	3								
Container Information	1								

PARAMETER ANALYSIS & METHOD

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil, SE - Sediment, NL - NAPL/Oil
W - Water, SL - Sludge, SW - Sample Wipe
T - Tissue, A - Air, Other: _____

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	8260B LL MOD NH Volatiles List							REMARKS	
MW-307S (80-90)	7/8/14	1025		✓	W	3								-1
MW-307S (172-187)	7/8/14	1612		✓	W	3								-2
MW-307D (200-210)	7/8/14	1410		✓	W	3								-3
BD-07082014	7/8/14	—		✓	W	3								-4
Trip Blank	—	—			W	2								-5

Loc: 490
56973

Special Instructions/Comments:

Level II deliverables

☐ Special QA/QC Instructions(✓):

Ford site ID E101274

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Test America	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Diane Champagne	Printed Name: Jimmy Hukuba	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature: Diane Champ	Signature:	Signature:	Signature:
Specify Turnaround Requirements: Standard TAT	Sample Receipt:	Firm: Arcadis	Firm/Courier: TAW	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 7/8/14 1800	Date/Time: 7-9-14 / 0830 2.2°	Date/Time:	Date/Time:

20730826 CofC AR Form 01.12.2007

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

7/18/2014

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-56973-1

Login Number: 56973

List Source: TestAmerica Nashville

List Number: 1

Creator: Huckaba, Jimmy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-66000-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
11/21/2014 2:01:07 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-66000-1	MW-306D (185-195)	Water	11/10/14 14:05	11/11/14 08:35
490-66000-2	MW-306D (280-300)	Water	11/10/14 15:15	11/11/14 08:35
490-66000-3	MW-406D	Water	11/10/14 16:30	11/11/14 08:35
490-66000-4	52S	Water	11/10/14 09:40	11/11/14 08:35
490-66000-5	EW-3S	Water	11/10/14 13:50	11/11/14 08:35
490-66000-6	103R	Water	11/10/14 13:50	11/11/14 08:35
490-66000-7	203R	Water	11/10/14 10:50	11/11/14 08:35
490-66000-8	MW-306S (130-140)	Water	11/10/14 11:30	11/11/14 08:35
490-66000-9	202R	Water	11/10/14 11:00	11/11/14 08:35
490-66000-10	37D	Water	11/10/14 15:05	11/11/14 08:35
490-66000-11	69R	Water	11/10/14 15:30	11/11/14 08:35
490-66000-12	MW-306S (85-100)	Water	11/10/14 10:35	11/11/14 08:35
490-66000-13	Trip Blank	Water	11/10/14 00:01	11/11/14 08:35

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.
F2	MS/MSD RPD exceeds 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.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: MW-306D (185-195)

Lab Sample ID: 490-66000-1

Date Collected: 11/10/14 14:05
Date Received: 11/11/14 08:35

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 02:42	1
Benzene	**4.37**		0.500	0.200	ug/L			11/18/14 02:42	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 02:42	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 02:42	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 02:42	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 02:42	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 02:42	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 02:42	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 02:42	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 02:42	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 02:42	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 02:42	1
cis-1,2-Dichloroethene	**47.4**		0.500	0.210	ug/L			11/18/14 02:42	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 02:42	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 02:42	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 02:42	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 02:42	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 02:42	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 02:42	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 02:42	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 02:42	1
Ethylbenzene	**0.944**		0.500	0.190	ug/L			11/18/14 02:42	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 02:42	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 02:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 02:42	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 02:42	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 02:42	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 02:42	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 02:42	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 02:42	1
Toluene	**0.223**	**J**	0.500	0.170	ug/L			11/18/14 02:42	1
trans-1,2-Dichloroethene	**1.64**		0.500	0.230	ug/L			11/18/14 02:42	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 02:42	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 02:42	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 02:42	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 02:42	1
Trichloroethene	**1.24**		0.500	0.200	ug/L			11/18/14 02:42	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 02:42	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 02:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*11/18/14 02:42*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/18/14 02:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*11/18/14 02:42*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/18/14 02:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00970**	**J**	0.0100	0.00720	mg/L		11/17/14 13:38	11/19/14 13:16	1
Manganese	**0.0350**		0.0150	0.00500	mg/L		11/17/14 13:38	11/19/14 13:16	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: MW-306D (280-300)

Lab Sample ID: 490-66000-2

Date Collected: 11/10/14 15:15
Date Received: 11/11/14 08:35

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 03:08	1
Benzene	**2.00**		0.500	0.200	ug/L			11/18/14 03:08	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 03:08	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 03:08	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 03:08	1
Carbon disulfide	**1.23**		0.500	0.220	ug/L			11/18/14 03:08	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 03:08	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 03:08	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 03:08	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 03:08	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 03:08	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 03:08	1
cis-1,2-Dichloroethene	**19.1**		0.500	0.210	ug/L			11/18/14 03:08	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 03:08	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 03:08	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 03:08	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 03:08	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 03:08	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 03:08	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 03:08	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 03:08	1
Ethylbenzene	**0.201**	**J**	0.500	0.190	ug/L			11/18/14 03:08	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 03:08	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 03:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 03:08	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 03:08	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 03:08	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 03:08	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 03:08	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 03:08	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 03:08	1
trans-1,2-Dichloroethene	**0.469**	**J**	0.500	0.230	ug/L			11/18/14 03:08	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 03:08	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 03:08	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 03:08	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 03:08	1
Trichloroethene	**0.842**		0.500	0.200	ug/L			11/18/14 03:08	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 03:08	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/18/14 03:08*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*11/18/14 03:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*11/18/14 03:08*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*11/18/14 03:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 17:51	1
Manganese	**0.0294**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 17:51	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: MW-406D

Date Collected: 11/10/14 16:30
Date Received: 11/11/14 08:35

Lab Sample ID: 490-66000-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 03:34	1
Benzene	**2.05**		0.500	0.200	ug/L			11/18/14 03:34	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 03:34	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 03:34	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 03:34	1
Carbon disulfide	**0.823**		0.500	0.220	ug/L			11/18/14 03:34	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 03:34	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 03:34	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 03:34	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 03:34	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 03:34	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 03:34	1
cis-1,2-Dichloroethene	**19.0**		0.500	0.210	ug/L			11/18/14 03:34	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 03:34	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 03:34	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 03:34	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 03:34	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 03:34	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 03:34	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 03:34	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 03:34	1
Ethylbenzene	**0.203**	**J**	0.500	0.190	ug/L			11/18/14 03:34	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 03:34	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 03:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 03:34	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 03:34	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 03:34	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 03:34	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 03:34	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 03:34	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 03:34	1
trans-1,2-Dichloroethene	**0.488**	**J**	0.500	0.230	ug/L			11/18/14 03:34	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 03:34	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 03:34	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 03:34	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 03:34	1
Trichloroethene	**0.888**		0.500	0.200	ug/L			11/18/14 03:34	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 03:34	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/18/14 03:34*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/18/14 03:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*11/18/14 03:34*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/18/14 03:34*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 17:54	1
Manganese	**0.0291**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 17:54	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: 52S

Date Collected: 11/10/14 09:40
Date Received: 11/11/14 08:35

Lab Sample ID: 490-66000-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 03:59	1
Benzene	ND		0.500	0.200	ug/L			11/18/14 03:59	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 03:59	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 03:59	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 03:59	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 03:59	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 03:59	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 03:59	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 03:59	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 03:59	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 03:59	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 03:59	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/18/14 03:59	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 03:59	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 03:59	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 03:59	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 03:59	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 03:59	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 03:59	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 03:59	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 03:59	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/18/14 03:59	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 03:59	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 03:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 03:59	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 03:59	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 03:59	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 03:59	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 03:59	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 03:59	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 03:59	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/18/14 03:59	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 03:59	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 03:59	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 03:59	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 03:59	1
Trichloroethene	ND		0.500	0.200	ug/L			11/18/14 03:59	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 03:59	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/18/14 03:59*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/18/14 03:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*11/18/14 03:59*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/18/14 03:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 17:58	1
Manganese	**0.923**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 17:58	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: EW-3S

Date Collected: 11/10/14 13:50
Date Received: 11/11/14 08:35

Lab Sample ID: 490-66000-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 04:25	1
Benzene	ND		0.500	0.200	ug/L			11/18/14 04:25	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 04:25	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 04:25	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 04:25	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 04:25	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 04:25	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 04:25	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 04:25	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 04:25	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 04:25	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 04:25	1
cis-1,2-Dichloroethene	**0.489**	**J**	0.500	0.210	ug/L			11/18/14 04:25	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 04:25	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 04:25	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 04:25	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 04:25	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 04:25	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 04:25	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 04:25	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 04:25	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/18/14 04:25	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 04:25	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 04:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 04:25	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 04:25	1
o-Xylene	**0.575**		0.500	0.200	ug/L			11/18/14 04:25	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 04:25	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 04:25	1
Tetrachloroethene	**0.266**	**J**	0.500	0.140	ug/L			11/18/14 04:25	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 04:25	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/18/14 04:25	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 04:25	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 04:25	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 04:25	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 04:25	1
Trichloroethene	ND		0.500	0.200	ug/L			11/18/14 04:25	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 04:25	1
Xylenes, Total	**0.676**	**J**	1.50	0.580	ug/L			11/18/14 04:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/18/14 04:25*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/18/14 04:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*11/18/14 04:25*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/18/14 04:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 18:02	1
Manganese	**3.75**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 18:02	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: 103R

Date Collected: 11/10/14 13:50
Date Received: 11/11/14 08:35

Lab Sample ID: 490-66000-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 04:50	1
Benzene	**15.7**		0.500	0.200	ug/L			11/18/14 04:50	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 04:50	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 04:50	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 04:50	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 04:50	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 04:50	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 04:50	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 04:50	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 04:50	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 04:50	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 04:50	1
cis-1,2-Dichloroethene	**13.5**		0.500	0.210	ug/L			11/18/14 04:50	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 04:50	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 04:50	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 04:50	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 04:50	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 04:50	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 04:50	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 04:50	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 04:50	1
Ethylbenzene	**1.24**		0.500	0.190	ug/L			11/18/14 04:50	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 04:50	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 04:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 04:50	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 04:50	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 04:50	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 04:50	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 04:50	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 04:50	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 04:50	1
trans-1,2-Dichloroethene	**1.36**		0.500	0.230	ug/L			11/18/14 04:50	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 04:50	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 04:50	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 04:50	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 04:50	1
Trichloroethene	**0.784**		0.500	0.200	ug/L			11/18/14 04:50	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 04:50	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 04:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/18/14 04:50*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*11/18/14 04:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*11/18/14 04:50*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/18/14 04:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0146**		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 18:06	1
Manganese	**1.43**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 18:06	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: 203R

Date Collected: 11/10/14 10:50
Date Received: 11/11/14 08:35

Lab Sample ID: 490-66000-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 05:16	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 05:16	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 05:16	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 05:16	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 05:16	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 05:16	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 05:16	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 05:16	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 05:16	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 05:16	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 05:16	1
cis-1,2-Dichloroethene	**166**		0.500	0.210	ug/L			11/18/14 05:16	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 05:16	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 05:16	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 05:16	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 05:16	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 05:16	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 05:16	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 05:16	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 05:16	1
Ethylbenzene	**39.3**		0.500	0.190	ug/L			11/18/14 05:16	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 05:16	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 05:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 05:16	1
m-Xylene & p-Xylene	**34.0**		0.500	0.380	ug/L			11/18/14 05:16	1
o-Xylene	**1.70**		0.500	0.200	ug/L			11/18/14 05:16	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 05:16	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 05:16	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 05:16	1
Toluene	**2.20**		0.500	0.170	ug/L			11/18/14 05:16	1
trans-1,2-Dichloroethene	**0.401**	**J**	0.500	0.230	ug/L			11/18/14 05:16	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 05:16	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 05:16	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 05:16	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 05:16	1
Trichloroethene	**0.461**	**J**	0.500	0.200	ug/L			11/18/14 05:16	1
Vinyl chloride	**0.867**		0.500	0.180	ug/L			11/18/14 05:16	1
Xylenes, Total	**35.7**		1.50	0.580	ug/L			11/18/14 05:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/18/14 05:16*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*11/18/14 05:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*11/18/14 05:16*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*11/18/14 05:16*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**227**		2.50	1.00	ug/L			11/19/14 04:28	5

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: 203R

Lab Sample ID: 490-66000-7

Date Collected: 11/10/14 10:50

Matrix: Water

Date Received: 11/11/14 08:35

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*		*11/19/14 04:28*	*5*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/19/14 04:28*	*5*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*11/19/14 04:28*	*5*
Toluene-d8 (Surr)	*103*		*70 - 130*		*11/19/14 04:28*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0407**		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 18:10	1
Manganese	**7.21**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 18:10	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: MW-306S (130-140)

Lab Sample ID: 490-66000-8

Date Collected: 11/10/14 11:30
Date Received: 11/11/14 08:35

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 05:41	1
Benzene	ND		0.500	0.200	ug/L			11/18/14 05:41	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 05:41	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 05:41	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 05:41	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 05:41	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 05:41	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 05:41	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 05:41	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 05:41	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 05:41	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 05:41	1
cis-1,2-Dichloroethene	**0.451**	**J**	0.500	0.210	ug/L			11/18/14 05:41	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 05:41	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 05:41	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 05:41	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 05:41	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 05:41	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 05:41	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 05:41	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 05:41	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/18/14 05:41	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 05:41	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 05:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 05:41	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 05:41	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 05:41	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 05:41	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 05:41	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 05:41	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 05:41	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/18/14 05:41	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 05:41	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 05:41	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 05:41	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 05:41	1
Trichloroethene	ND		0.500	0.200	ug/L			11/18/14 05:41	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 05:41	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 05:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/18/14 05:41*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/18/14 05:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*11/18/14 05:41*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/18/14 05:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 18:14	1
Manganese	**0.0194**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 18:14	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: 202R

Date Collected: 11/10/14 11:00
Date Received: 11/11/14 08:35

Lab Sample ID: 490-66000-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 06:06	1
Benzene	**0.313**	**J**	0.500	0.200	ug/L			11/18/14 06:06	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 06:06	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 06:06	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 06:06	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 06:06	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 06:06	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 06:06	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 06:06	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 06:06	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 06:06	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 06:06	1
cis-1,2-Dichloroethene	**2.80**		0.500	0.210	ug/L			11/18/14 06:06	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 06:06	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 06:06	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 06:06	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 06:06	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 06:06	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 06:06	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 06:06	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 06:06	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/18/14 06:06	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 06:06	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 06:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 06:06	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 06:06	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 06:06	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 06:06	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 06:06	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 06:06	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 06:06	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/18/14 06:06	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 06:06	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 06:06	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 06:06	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 06:06	1
Trichloroethene	**0.314**	**J**	0.500	0.200	ug/L			11/18/14 06:06	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 06:06	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 06:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/18/14 06:06*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/18/14 06:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*11/18/14 06:06*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/18/14 06:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00960**	**J**	0.0100	0.00720	mg/L		11/14/14 11:59	11/18/14 12:06	1
Manganese	**1.98**		0.0150	0.00500	mg/L		11/14/14 11:59	11/18/14 12:06	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: 37D

Date Collected: 11/10/14 15:05
Date Received: 11/11/14 08:35

Lab Sample ID: 490-66000-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 06:32	1
Benzene	ND		0.500	0.200	ug/L			11/18/14 06:32	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 06:32	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 06:32	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 06:32	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 06:32	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 06:32	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 06:32	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 06:32	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 06:32	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 06:32	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 06:32	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/18/14 06:32	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 06:32	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 06:32	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 06:32	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 06:32	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 06:32	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 06:32	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 06:32	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 06:32	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/18/14 06:32	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 06:32	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 06:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 06:32	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 06:32	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 06:32	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 06:32	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 06:32	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 06:32	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 06:32	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/18/14 06:32	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 06:32	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 06:32	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 06:32	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 06:32	1
Trichloroethene	ND		0.500	0.200	ug/L			11/18/14 06:32	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 06:32	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 06:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/18/14 06:32*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/18/14 06:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*11/18/14 06:32*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/18/14 06:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.247**		0.0100	0.00720	mg/L		11/14/14 11:59	11/18/14 12:11	1
Manganese	**5.88**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 18:30	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: 69R

Date Collected: 11/10/14 15:30
Date Received: 11/11/14 08:35

Lab Sample ID: 490-66000-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 06:57	1
Benzene	**0.449**	**J**	0.500	0.200	ug/L			11/18/14 06:57	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 06:57	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 06:57	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 06:57	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 06:57	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 06:57	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 06:57	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 06:57	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 06:57	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 06:57	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 06:57	1
cis-1,2-Dichloroethene	**1.10**		0.500	0.210	ug/L			11/18/14 06:57	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 06:57	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 06:57	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 06:57	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 06:57	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 06:57	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 06:57	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 06:57	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 06:57	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/18/14 06:57	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 06:57	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 06:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 06:57	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 06:57	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 06:57	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 06:57	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 06:57	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 06:57	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 06:57	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/18/14 06:57	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 06:57	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 06:57	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 06:57	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 06:57	1
Trichloroethene	ND		0.500	0.200	ug/L			11/18/14 06:57	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 06:57	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 06:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*11/18/14 06:57*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/18/14 06:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*11/18/14 06:57*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/18/14 06:57*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0536**		0.0100	0.00720	mg/L		11/14/14 11:59	11/18/14 12:17	1
Manganese	**1.66**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 18:34	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: MW-306S (85-100)

Lab Sample ID: 490-66000-12

Date Collected: 11/10/14 10:35
Date Received: 11/11/14 08:35

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 07:22	1
Benzene	**1.02**		0.500	0.200	ug/L			11/18/14 07:22	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 07:22	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 07:22	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 07:22	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 07:22	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 07:22	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 07:22	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 07:22	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 07:22	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 07:22	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 07:22	1
cis-1,2-Dichloroethene	**30.8**		0.500	0.210	ug/L			11/18/14 07:22	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 07:22	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 07:22	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 07:22	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 07:22	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 07:22	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 07:22	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 07:22	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 07:22	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/18/14 07:22	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 07:22	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 07:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 07:22	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 07:22	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 07:22	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 07:22	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 07:22	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 07:22	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 07:22	1
trans-1,2-Dichloroethene	**1.28**		0.500	0.230	ug/L			11/18/14 07:22	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 07:22	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 07:22	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 07:22	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 07:22	1
Trichloroethene	ND		0.500	0.200	ug/L			11/18/14 07:22	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 07:22	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 07:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/18/14 07:22*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*11/18/14 07:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*11/18/14 07:22*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/18/14 07:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 18:38	1
Manganese	**0.170**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 18:38	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-66000-13

Date Collected: 11/10/14 00:01
Date Received: 11/11/14 08:35

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 00:34	1
Benzene	ND		0.500	0.200	ug/L			11/18/14 00:34	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 00:34	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 00:34	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 00:34	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 00:34	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 00:34	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 00:34	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 00:34	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 00:34	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 00:34	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 00:34	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/18/14 00:34	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 00:34	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 00:34	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 00:34	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 00:34	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 00:34	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 00:34	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 00:34	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 00:34	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/18/14 00:34	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 00:34	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 00:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 00:34	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 00:34	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 00:34	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 00:34	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 00:34	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 00:34	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 00:34	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/18/14 00:34	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 00:34	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 00:34	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 00:34	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 00:34	1
Trichloroethene	ND		0.500	0.200	ug/L			11/18/14 00:34	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 00:34	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/18/14 00:34*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*11/18/14 00:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*11/18/14 00:34*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/18/14 00:34*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-206875/6
Matrix: Water
Analysis Batch: 206875

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 00:09	1
Benzene	ND		0.500	0.200	ug/L			11/18/14 00:09	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 00:09	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 00:09	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 00:09	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 00:09	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 00:09	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 00:09	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 00:09	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 00:09	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 00:09	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 00:09	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/18/14 00:09	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 00:09	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 00:09	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 00:09	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 00:09	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 00:09	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 00:09	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 00:09	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 00:09	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/18/14 00:09	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 00:09	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 00:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 00:09	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 00:09	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 00:09	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 00:09	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 00:09	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 00:09	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 00:09	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/18/14 00:09	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 00:09	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 00:09	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 00:09	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 00:09	1
Trichloroethene	ND		0.500	0.200	ug/L			11/18/14 00:09	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 00:09	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 00:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/18/14 00:09*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/18/14 00:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*11/18/14 00:09*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/18/14 00:09*	*1*

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

Lab Sample ID: LCS 490-206875/3
Matrix: Water
Analysis Batch: 206875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	200.4		ug/L		80	54 - 145
Benzene	50.0	49.28		ug/L		99	80 - 121
Bromoform	50.0	46.34		ug/L		93	46 - 145
Bromomethane	50.0	62.32		ug/L		125	41 - 150
2-Butanone (MEK)	250	195.3		ug/L		78	62 - 133
Carbon disulfide	50.0	59.05		ug/L		118	77 - 126
Carbon tetrachloride	50.0	50.35		ug/L		101	64 - 147
Chlorobenzene	50.0	50.60		ug/L		101	80 - 120
Chlorodibromomethane	50.0	49.72		ug/L		99	69 - 133
Chloroethane	50.0	52.86		ug/L		106	72 - 120
Chloroform	50.0	47.46		ug/L		95	73 - 129
Chloromethane	50.0	50.77		ug/L		102	12 - 150
cis-1,2-Dichloroethene	50.0	50.75		ug/L		102	76 - 125
cis-1,3-Dichloropropene	50.0	50.44		ug/L		101	74 - 140
Dibromomethane	50.0	45.08		ug/L		90	71 - 125
Dichlorobromomethane	50.0	45.37		ug/L		91	75 - 129
1,1-Dichloroethane	50.0	50.70		ug/L		101	78 - 125
1,2-Dichloroethane	50.0	47.24		ug/L		94	77 - 121
1,1-Dichloroethene	50.0	49.79		ug/L		100	79 - 124
1,2-Dichloropropane	50.0	48.58		ug/L		97	75 - 120
1,1-Dichloropropene	50.0	51.81		ug/L		104	80 - 122
Ethylbenzene	50.0	49.96		ug/L		100	80 - 130
2-Hexanone	250	209.3		ug/L		84	60 - 142
Methylene Chloride	50.0	49.92		ug/L		100	79 - 123
4-Methyl-2-pentanone (MIBK)	250	204.4		ug/L		82	60 - 137
m-Xylene & p-Xylene	50.0	49.57		ug/L		99	80 - 141
o-Xylene	50.0	48.86		ug/L		98	80 - 127
Styrene	50.0	50.79		ug/L		102	80 - 127
1,1,1,2-Tetrachloroethane	50.0	48.69		ug/L		97	74 - 135
Tetrachloroethene	50.0	52.87		ug/L		106	80 - 126
Toluene	50.0	50.84		ug/L		102	80 - 126
trans-1,2-Dichloroethene	50.0	51.53		ug/L		103	79 - 126
trans-1,3-Dichloropropene	50.0	47.48		ug/L		95	63 - 134
1,3,5-Trichlorobenzene	50.0	52.52		ug/L		105	70 - 130
1,1,1-Trichloroethane	50.0	49.30		ug/L		99	78 - 135
1,1,2-Trichloroethane	50.0	43.58		ug/L		87	80 - 124
Trichloroethene	50.0	49.65		ug/L		99	80 - 123
Vinyl chloride	50.0	55.34		ug/L		111	68 - 120
Xylenes, Total	100	98.43		ug/L		98	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

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

Lab Sample ID: 490-66000-1 MS
Matrix: Water
Analysis Batch: 206875

Client Sample ID: MW-306D (185-195)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	143.7		ug/L		57	45 - 141
Benzene	4.37		50.0	51.26		ug/L		94	75 - 133
Bromoform	ND		50.0	38.13		ug/L		76	42 - 147
Bromomethane	ND		50.0	50.39		ug/L		101	16 - 163
2-Butanone (MEK)	ND		250	153.0		ug/L		61	50 - 138
Carbon disulfide	ND		50.0	60.93		ug/L		122	48 - 152
Carbon tetrachloride	ND		50.0	50.97		ug/L		102	62 - 164
Chlorobenzene	ND		50.0	48.45		ug/L		97	80 - 129
Chlorodibromomethane	ND		50.0	43.36		ug/L		87	66 - 140
Chloroethane	ND		50.0	49.69		ug/L		99	58 - 137
Chloroform	ND		50.0	45.60		ug/L		91	66 - 138
Chloromethane	ND		50.0	42.91		ug/L		86	10 - 169
cis-1,2-Dichloroethene	47.4		50.0	96.92		ug/L		99	68 - 138
cis-1,3-Dichloropropene	ND		50.0	47.27		ug/L		95	71 - 141
Dibromomethane	ND		50.0	37.45		ug/L		75	58 - 140
Dichlorobromomethane	ND		50.0	41.42		ug/L		83	70 - 140
1,1-Dichloroethane	ND		50.0	48.77		ug/L		98	71 - 139
1,2-Dichloroethane	ND		50.0	42.49		ug/L		85	64 - 136
1,1-Dichloroethene	ND		50.0	49.93		ug/L		100	70 - 142
1,2-Dichloropropane	ND		50.0	44.47		ug/L		89	67 - 131
1,1-Dichloropropene	ND		50.0	51.83		ug/L		104	76 - 139
Ethylbenzene	0.944		50.0	50.63		ug/L		99	79 - 139
2-Hexanone	ND		250	154.0		ug/L		62	50 - 150
Methylene Chloride	ND		50.0	46.05		ug/L		92	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	159.2		ug/L		64	50 - 147
m-Xylene & p-Xylene	ND		50.0	49.24		ug/L		98	80 - 153
o-Xylene	ND		50.0	46.81		ug/L		94	74 - 138
Styrene	ND		50.0	47.30		ug/L		95	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	45.18		ug/L		90	73 - 141
Tetrachloroethene	ND		50.0	54.52		ug/L		109	72 - 145
Toluene	0.223	J	50.0	51.37		ug/L		102	75 - 136
trans-1,2-Dichloroethene	1.64		50.0	53.00		ug/L		103	66 - 143
trans-1,3-Dichloropropene	ND		50.0	42.82		ug/L		86	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	47.40		ug/L		95	60 - 140
1,1,1-Trichloroethane	ND		50.0	49.28		ug/L		99	76 - 149
1,1,2-Trichloroethane	ND		50.0	38.06		ug/L		76	74 - 134
Trichloroethene	1.24		50.0	49.62		ug/L		97	73 - 144
Vinyl chloride	ND		50.0	50.82		ug/L		102	56 - 129
Xylenes, Total	ND		100	96.05		ug/L		96	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

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

Lab Sample ID: 490-66000-1 MSD
Matrix: Water
Analysis Batch: 206875

Client Sample ID: MW-306D (185-195)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	176.0		ug/L		70	45 - 141	20	21
Benzene	4.37		50.0	55.62		ug/L		102	75 - 133	8	17
Bromoform	ND		50.0	45.28	F2	ug/L		91	42 - 147	17	16
Bromomethane	ND		50.0	57.84		ug/L		116	16 - 163	14	50
2-Butanone (MEK)	ND		250	179.9		ug/L		72	50 - 138	16	19
Carbon disulfide	ND		50.0	65.09		ug/L		130	48 - 152	7	21
Carbon tetrachloride	ND		50.0	56.41		ug/L		113	62 - 164	10	19
Chlorobenzene	ND		50.0	52.68		ug/L		105	80 - 129	8	14
Chlorodibromomethane	ND		50.0	49.19		ug/L		98	66 - 140	13	15
Chloroethane	ND		50.0	52.38		ug/L		105	58 - 137	5	20
Chloroform	ND		50.0	49.61		ug/L		99	66 - 138	8	18
Chloromethane	ND		50.0	45.13		ug/L		90	10 - 169	5	31
cis-1,2-Dichloroethene	47.4		50.0	102.2		ug/L		110	68 - 138	5	17
cis-1,3-Dichloropropene	ND		50.0	51.60		ug/L		103	71 - 141	9	15
Dibromomethane	ND		50.0	42.46		ug/L		85	58 - 140	13	16
Dichlorobromomethane	ND		50.0	45.64		ug/L		91	70 - 140	10	18
1,1-Dichloroethane	ND		50.0	53.07		ug/L		106	71 - 139	8	17
1,2-Dichloroethane	ND		50.0	47.84		ug/L		96	64 - 136	12	17
1,1-Dichloroethene	ND		50.0	54.11		ug/L		108	70 - 142	8	17
1,2-Dichloropropane	ND		50.0	48.77		ug/L		98	67 - 131	9	17
1,1-Dichloropropene	ND		50.0	55.95		ug/L		112	76 - 139	8	17
Ethylbenzene	0.944		50.0	54.25		ug/L		107	79 - 139	7	15
2-Hexanone	ND		250	189.2	F2	ug/L		76	50 - 150	20	15
Methylene Chloride	ND		50.0	49.99		ug/L		100	64 - 139	8	17
4-Methyl-2-pentanone (MIBK)	ND		250	186.9		ug/L		75	50 - 147	16	17
m-Xylene & p-Xylene	ND		50.0	53.17		ug/L		106	80 - 153	8	16
o-Xylene	ND		50.0	51.50		ug/L		103	74 - 138	10	14
Styrene	ND		50.0	51.73		ug/L		103	61 - 148	9	24
1,1,1,2-Tetrachloroethane	ND		50.0	50.21		ug/L		100	73 - 141	11	16
Tetrachloroethene	ND		50.0	58.03		ug/L		116	72 - 145	6	16
Toluene	0.223	J	50.0	54.58		ug/L		109	75 - 136	6	15
trans-1,2-Dichloroethene	1.64		50.0	56.27		ug/L		109	66 - 143	6	16
trans-1,3-Dichloropropene	ND		50.0	47.65		ug/L		95	59 - 135	11	14
1,3,5-Trichlorobenzene	ND		50.0	53.05		ug/L		106	60 - 140	11	30
1,1,1-Trichloroethane	ND		50.0	53.20		ug/L		106	76 - 149	8	17
1,1,2-Trichloroethane	ND		50.0	42.40		ug/L		85	74 - 134	11	15
Trichloroethene	1.24		50.0	54.53		ug/L		107	73 - 144	9	17
Vinyl chloride	ND		50.0	53.04		ug/L		106	56 - 129	4	17
Xylenes, Total	ND		100	104.7		ug/L		105	74 - 141	9	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

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

Lab Sample ID: MB 490-207140/7
Matrix: Water
Analysis Batch: 207140

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/19/14 00:37	1
Benzene	ND		0.500	0.200	ug/L			11/19/14 00:37	1
Bromoform	ND		0.500	0.290	ug/L			11/19/14 00:37	1
Bromomethane	ND		0.500	0.350	ug/L			11/19/14 00:37	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/19/14 00:37	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/19/14 00:37	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/19/14 00:37	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/19/14 00:37	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/19/14 00:37	1
Chloroethane	ND		0.500	0.360	ug/L			11/19/14 00:37	1
Chloroform	ND		0.500	0.230	ug/L			11/19/14 00:37	1
Chloromethane	ND		0.500	0.360	ug/L			11/19/14 00:37	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/19/14 00:37	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 00:37	1
Dibromomethane	ND		0.500	0.450	ug/L			11/19/14 00:37	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/19/14 00:37	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/19/14 00:37	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/19/14 00:37	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/19/14 00:37	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/19/14 00:37	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/19/14 00:37	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/19/14 00:37	1
2-Hexanone	ND		5.00	1.28	ug/L			11/19/14 00:37	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/19/14 00:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/19/14 00:37	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/19/14 00:37	1
o-Xylene	ND		0.500	0.200	ug/L			11/19/14 00:37	1
Styrene	ND		0.500	0.280	ug/L			11/19/14 00:37	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/19/14 00:37	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/19/14 00:37	1
Toluene	ND		0.500	0.170	ug/L			11/19/14 00:37	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/19/14 00:37	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 00:37	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/19/14 00:37	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 00:37	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 00:37	1
Trichloroethene	ND		0.500	0.200	ug/L			11/19/14 00:37	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/19/14 00:37	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/19/14 00:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/19/14 00:37*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*11/19/14 00:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/19/14 00:37*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*11/19/14 00:37*	*1*

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

Lab Sample ID: LCS 490-207140/3
Matrix: Water
Analysis Batch: 207140

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	213.8		ug/L		86	54 - 145
Benzene	50.0	49.72		ug/L		99	80 - 121
Bromoform	50.0	47.79		ug/L		96	46 - 145
Bromomethane	50.0	59.29		ug/L		119	41 - 150
2-Butanone (MEK)	250	199.9		ug/L		80	62 - 133
Carbon disulfide	50.0	61.24		ug/L		122	77 - 126
Carbon tetrachloride	50.0	51.60		ug/L		103	64 - 147
Chlorobenzene	50.0	51.60		ug/L		103	80 - 120
Chlorodibromomethane	50.0	50.62		ug/L		101	69 - 133
Chloroethane	50.0	50.61		ug/L		101	72 - 120
Chloroform	50.0	49.98		ug/L		100	73 - 129
Chloromethane	50.0	45.17		ug/L		90	12 - 150
cis-1,2-Dichloroethene	50.0	52.31		ug/L		105	76 - 125
cis-1,3-Dichloropropene	50.0	51.57		ug/L		103	74 - 140
Dibromomethane	50.0	45.05		ug/L		90	71 - 125
Dichlorobromomethane	50.0	47.31		ug/L		95	75 - 129
1,1-Dichloroethane	50.0	52.31		ug/L		105	78 - 125
1,2-Dichloroethane	50.0	49.55		ug/L		99	77 - 121
1,1-Dichloroethene	50.0	51.20		ug/L		102	79 - 124
1,2-Dichloropropane	50.0	49.52		ug/L		99	75 - 120
1,1-Dichloropropene	50.0	51.54		ug/L		103	80 - 122
Ethylbenzene	50.0	51.11		ug/L		102	80 - 130
2-Hexanone	250	219.8		ug/L		88	60 - 142
Methylene Chloride	50.0	52.65		ug/L		105	79 - 123
4-Methyl-2-pentanone (MIBK)	250	206.2		ug/L		82	60 - 137
m-Xylene & p-Xylene	50.0	51.00		ug/L		102	80 - 141
o-Xylene	50.0	49.97		ug/L		100	80 - 127
Styrene	50.0	51.71		ug/L		103	80 - 127
1,1,1,2-Tetrachloroethane	50.0	51.15		ug/L		102	74 - 135
Tetrachloroethene	50.0	53.17		ug/L		106	80 - 126
Toluene	50.0	51.13		ug/L		102	80 - 126
trans-1,2-Dichloroethene	50.0	52.55		ug/L		105	79 - 126
trans-1,3-Dichloropropene	50.0	49.29		ug/L		99	63 - 134
1,3,5-Trichlorobenzene	50.0	53.66		ug/L		107	70 - 130
1,1,1-Trichloroethane	50.0	50.22		ug/L		100	78 - 135
1,1,2-Trichloroethane	50.0	44.62		ug/L		89	80 - 124
Trichloroethene	50.0	50.67		ug/L		101	80 - 123
Vinyl chloride	50.0	50.06		ug/L		100	68 - 120
Xylenes, Total	100	101.0		ug/L		101	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: LCSD 490-207140/4
Matrix: Water
Analysis Batch: 207140

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
Acetone	250	198.7		ug/L		79	54 - 145	7	21
Benzene	50.0	49.56		ug/L		99	80 - 121	0	17
Bromoform	50.0	47.57		ug/L		95	46 - 145	0	16
Bromomethane	50.0	59.37		ug/L		119	41 - 150	0	50
2-Butanone (MEK)	250	189.7		ug/L		76	62 - 133	5	19
Carbon disulfide	50.0	60.87		ug/L		122	77 - 126	1	21
Carbon tetrachloride	50.0	52.30		ug/L		105	64 - 147	1	19
Chlorobenzene	50.0	51.07		ug/L		102	80 - 120	1	14
Chlorodibromomethane	50.0	50.56		ug/L		101	69 - 133	0	15
Chloroethane	50.0	50.80		ug/L		102	72 - 120	0	20
Chloroform	50.0	48.56		ug/L		97	73 - 129	3	18
Chloromethane	50.0	45.46		ug/L		91	12 - 150	1	31
cis-1,2-Dichloroethene	50.0	51.41		ug/L		103	76 - 125	2	17
cis-1,3-Dichloropropene	50.0	50.12		ug/L		100	74 - 140	3	15
Dibromomethane	50.0	44.17		ug/L		88	71 - 125	2	16
Dichlorobromomethane	50.0	46.80		ug/L		94	75 - 129	1	18
1,1-Dichloroethane	50.0	51.72		ug/L		103	78 - 125	1	17
1,2-Dichloroethane	50.0	49.20		ug/L		98	77 - 121	1	17
1,1-Dichloroethene	50.0	51.49		ug/L		103	79 - 124	1	17
1,2-Dichloropropane	50.0	49.02		ug/L		98	75 - 120	1	17
1,1-Dichloropropene	50.0	51.60		ug/L		103	80 - 122	0	17
Ethylbenzene	50.0	51.22		ug/L		102	80 - 130	0	15
2-Hexanone	250	212.4		ug/L		85	60 - 142	3	15
Methylene Chloride	50.0	51.12		ug/L		102	79 - 123	3	17
4-Methyl-2-pentanone (MIBK)	250	201.1		ug/L		80	60 - 137	2	17
m-Xylene & p-Xylene	50.0	50.77		ug/L		102	80 - 141	0	16
o-Xylene	50.0	50.28		ug/L		101	80 - 127	1	14
Styrene	50.0	51.74		ug/L		103	80 - 127	0	24
1,1,1,2-Tetrachloroethane	50.0	50.43		ug/L		101	74 - 135	1	16
Tetrachloroethene	50.0	53.54		ug/L		107	80 - 126	1	16
Toluene	50.0	50.99		ug/L		102	80 - 126	0	15
trans-1,2-Dichloroethene	50.0	53.14		ug/L		106	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	48.01		ug/L		96	63 - 134	3	14
1,3,5-Trichlorobenzene	50.0	52.76		ug/L		106	70 - 130	2	30
1,1,1-Trichloroethane	50.0	50.26		ug/L		101	78 - 135	0	17
1,1,2-Trichloroethane	50.0	44.15		ug/L		88	80 - 124	1	15
Trichloroethene	50.0	50.15		ug/L		100	80 - 123	1	17
Vinyl chloride	50.0	50.32		ug/L		101	68 - 120	1	17
Xylenes, Total	100	101.0		ug/L		101	80 - 132	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: 490-65739-B-1 MS
Matrix: Water
Analysis Batch: 207140

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	197.1		ug/L		79	45 - 141
Benzene	ND		50.0	48.53		ug/L		97	75 - 133
Bromoform	ND		50.0	46.39		ug/L		93	42 - 147
Bromomethane	ND		50.0	32.55		ug/L		65	16 - 163
2-Butanone (MEK)	ND		250	202.0		ug/L		81	50 - 138
Carbon disulfide	ND		50.0	52.98		ug/L		106	48 - 152
Carbon tetrachloride	ND		50.0	52.88		ug/L		106	62 - 164
Chlorobenzene	ND		50.0	50.13		ug/L		100	80 - 129
Chlorodibromomethane	ND		50.0	47.50		ug/L		95	66 - 140
Chloroethane	ND		50.0	49.20		ug/L		98	58 - 137
Chloroform	ND		50.0	48.84		ug/L		98	66 - 138
Chloromethane	0.396	J	50.0	38.60		ug/L		76	10 - 169
cis-1,2-Dichloroethene	ND		50.0	52.70		ug/L		105	68 - 138
cis-1,3-Dichloropropene	ND		50.0	49.00		ug/L		98	71 - 141
Dibromomethane	ND		50.0	43.37		ug/L		87	58 - 140
Dichlorobromomethane	ND		50.0	46.18		ug/L		92	70 - 140
1,1-Dichloroethane	ND		50.0	51.96		ug/L		104	71 - 139
1,2-Dichloroethane	ND		50.0	47.09		ug/L		94	64 - 136
1,1-Dichloroethene	ND		50.0	48.99		ug/L		98	70 - 142
1,2-Dichloropropane	ND		50.0	48.91		ug/L		98	67 - 131
1,1-Dichloropropene	ND		50.0	53.95		ug/L		108	76 - 139
Ethylbenzene	ND		50.0	50.56		ug/L		101	79 - 139
2-Hexanone	ND		250	212.3		ug/L		85	50 - 150
Methylene Chloride	ND		50.0	47.67		ug/L		95	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	201.0		ug/L		80	50 - 147
m-Xylene & p-Xylene	ND		50.0	51.07		ug/L		102	80 - 153
o-Xylene	ND		50.0	50.51		ug/L		101	74 - 138
Styrene	ND		50.0	52.99		ug/L		106	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	48.33		ug/L		97	73 - 141
Tetrachloroethene	ND		50.0	51.93		ug/L		104	72 - 145
Toluene	ND		50.0	49.22		ug/L		98	75 - 136
trans-1,2-Dichloroethene	ND		50.0	51.07		ug/L		102	66 - 143
trans-1,3-Dichloropropene	ND		50.0	46.88		ug/L		94	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	51.69		ug/L		103	60 - 140
1,1,1-Trichloroethane	ND		50.0	51.86		ug/L		104	76 - 149
1,1,2-Trichloroethane	ND		50.0	42.28		ug/L		85	74 - 134
Trichloroethene	ND		50.0	49.73		ug/L		99	73 - 144
Vinyl chloride	ND		50.0	47.61		ug/L		95	56 - 129
Xylenes, Total	ND		100	101.6		ug/L		102	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-65739-C-1 MSD
Matrix: Water
Analysis Batch: 207140

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	194.7		ug/L		78	45 - 141	1	21
Benzene	ND		50.0	47.22		ug/L		94	75 - 133	3	17
Bromoform	ND		50.0	46.73		ug/L		93	42 - 147	1	16
Bromomethane	ND		50.0	40.66		ug/L		81	16 - 163	22	50
2-Butanone (MEK)	ND		250	200.5		ug/L		80	50 - 138	1	19
Carbon disulfide	ND		50.0	52.03		ug/L		104	48 - 152	2	21
Carbon tetrachloride	ND		50.0	49.91		ug/L		100	62 - 164	6	19
Chlorobenzene	ND		50.0	49.76		ug/L		100	80 - 129	1	14
Chlorodibromomethane	ND		50.0	49.51		ug/L		99	66 - 140	4	15
Chloroethane	ND		50.0	47.48		ug/L		95	58 - 137	4	20
Chloroform	ND		50.0	46.18		ug/L		92	66 - 138	6	18
Chloromethane	0.396	J	50.0	38.49		ug/L		76	10 - 169	0	31
cis-1,2-Dichloroethene	ND		50.0	49.79		ug/L		100	68 - 138	6	17
cis-1,3-Dichloropropene	ND		50.0	48.62		ug/L		97	71 - 141	1	15
Dibromomethane	ND		50.0	43.02		ug/L		86	58 - 140	1	16
Dichlorobromomethane	ND		50.0	45.51		ug/L		91	70 - 140	1	18
1,1-Dichloroethane	ND		50.0	50.50		ug/L		101	71 - 139	3	17
1,2-Dichloroethane	ND		50.0	46.21		ug/L		92	64 - 136	2	17
1,1-Dichloroethene	ND		50.0	48.48		ug/L		97	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	47.84		ug/L		96	67 - 131	2	17
1,1-Dichloropropene	ND		50.0	50.04		ug/L		100	76 - 139	8	17
Ethylbenzene	ND		50.0	49.07		ug/L		98	79 - 139	3	15
2-Hexanone	ND		250	222.9		ug/L		89	50 - 150	5	15
Methylene Chloride	ND		50.0	45.97		ug/L		92	64 - 139	4	17
4-Methyl-2-pentanone (MIBK)	ND		250	208.5		ug/L		83	50 - 147	4	17
m-Xylene & p-Xylene	ND		50.0	48.79		ug/L		98	80 - 153	5	16
o-Xylene	ND		50.0	47.67		ug/L		95	74 - 138	6	14
Styrene	ND		50.0	49.72		ug/L		99	61 - 148	6	24
1,1,1,2-Tetrachloroethane	ND		50.0	48.34		ug/L		97	73 - 141	0	16
Tetrachloroethene	ND		50.0	49.76		ug/L		100	72 - 145	4	16
Toluene	ND		50.0	48.08		ug/L		96	75 - 136	2	15
trans-1,2-Dichloroethene	ND		50.0	48.98		ug/L		98	66 - 143	4	16
trans-1,3-Dichloropropene	ND		50.0	46.94		ug/L		94	59 - 135	0	14
1,3,5-Trichlorobenzene	ND		50.0	46.33		ug/L		93	60 - 140	11	30
1,1,1-Trichloroethane	ND		50.0	48.05		ug/L		96	76 - 149	8	17
1,1,2-Trichloroethane	ND		50.0	42.39		ug/L		85	74 - 134	0	15
Trichloroethene	ND		50.0	48.47		ug/L		97	73 - 144	3	17
Vinyl chloride	ND		50.0	46.67		ug/L		93	56 - 129	2	17
Xylenes, Total	ND		100	96.46		ug/L		96	74 - 141	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-206217/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 17:19	1
Manganese	ND		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 17:19	1

Lab Sample ID: LCS 490-206217/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.04980		mg/L		100	80 - 120
Manganese	0.500	0.5198		mg/L		104	80 - 120

Lab Sample ID: 490-66105-D-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.210		0.0500	0.2723	4	mg/L		126	75 - 125
Manganese	8.29		0.500	8.822	4	mg/L		107	75 - 125

Lab Sample ID: 490-66105-D-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.210		0.0500	0.2712	4	mg/L		123	75 - 125	0	20
Manganese	8.29		0.500	8.860	4	mg/L		115	75 - 125	0	20

Lab Sample ID: MB 490-206792/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206792**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/17/14 13:38	11/19/14 10:33	1
Manganese	ND		0.0150	0.00500	mg/L		11/17/14 13:38	11/19/14 10:33	1

Lab Sample ID: LCS 490-206792/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206792**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.05190		mg/L		104	80 - 120
Manganese	0.500	0.4795		mg/L		96	80 - 120

Lab Sample ID: LCSD 490-206792/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206792**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0500	0.05210		mg/L		104	80 - 120	0	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSD 490-206792/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206792**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese			0.500	0.4818		mg/L		96	80 - 120	0	20

Lab Sample ID: 490-65627-B-10-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206792**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	0.00720	J	0.0500	0.04910		mg/L		84	75 - 125		
Manganese	0.00550	J	0.500	0.4886		mg/L		97	75 - 125		

Lab Sample ID: 490-65627-B-10-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206792**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.00720	J	0.0500	0.05270		mg/L		91	75 - 125	7	20
Manganese	0.00550	J	0.500	0.4973		mg/L		98	75 - 125	2	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

GC/MS VOA

Analysis Batch: 206875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66000-1	MW-306D (185-195)	Total/NA	Water	8260B	
490-66000-1 MS	MW-306D (185-195)	Total/NA	Water	8260B	
490-66000-1 MSD	MW-306D (185-195)	Total/NA	Water	8260B	
490-66000-2	MW-306D (280-300)	Total/NA	Water	8260B	
490-66000-3	MW-406D	Total/NA	Water	8260B	
490-66000-4	52S	Total/NA	Water	8260B	
490-66000-5	EW-3S	Total/NA	Water	8260B	
490-66000-6	103R	Total/NA	Water	8260B	
490-66000-7	203R	Total/NA	Water	8260B	
490-66000-8	MW-306S (130-140)	Total/NA	Water	8260B	
490-66000-9	202R	Total/NA	Water	8260B	
490-66000-10	37D	Total/NA	Water	8260B	
490-66000-11	69R	Total/NA	Water	8260B	
490-66000-12	MW-306S (85-100)	Total/NA	Water	8260B	
490-66000-13	Trip Blank	Total/NA	Water	8260B	
LCS 490-206875/3	Lab Control Sample	Total/NA	Water	8260B	
MB 490-206875/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 207140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-65739-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-65739-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-66000-7 - DL	203R	Total/NA	Water	8260B	
LCS 490-207140/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-207140/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-207140/7	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 206217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66000-2	MW-306D (280-300)	Total/NA	Water	3010A	
490-66000-3	MW-406D	Total/NA	Water	3010A	
490-66000-4	52S	Total/NA	Water	3010A	
490-66000-5	EW-3S	Total/NA	Water	3010A	
490-66000-6	103R	Total/NA	Water	3010A	
490-66000-7	203R	Total/NA	Water	3010A	
490-66000-8	MW-306S (130-140)	Total/NA	Water	3010A	
490-66000-9	202R	Total/NA	Water	3010A	
490-66000-10	37D	Total/NA	Water	3010A	
490-66000-11	69R	Total/NA	Water	3010A	
490-66000-12	MW-306S (85-100)	Total/NA	Water	3010A	
490-66105-D-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-66105-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 490-206217/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-206217/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 206672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66000-2	MW-306D (280-300)	Total/NA	Water	6010B	206217

Metals (Continued)

Analysis Batch: 206672 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66000-3	MW-406D	Total/NA	Water	6010B	206217
490-66000-4	52S	Total/NA	Water	6010B	206217
490-66000-5	EW-3S	Total/NA	Water	6010B	206217
490-66000-6	103R	Total/NA	Water	6010B	206217
490-66000-7	203R	Total/NA	Water	6010B	206217
490-66000-8	MW-306S (130-140)	Total/NA	Water	6010B	206217
490-66000-10	37D	Total/NA	Water	6010B	206217
490-66000-11	69R	Total/NA	Water	6010B	206217
490-66000-12	MW-306S (85-100)	Total/NA	Water	6010B	206217
490-66105-D-1-B MS	Matrix Spike	Total/NA	Water	6010B	206217
490-66105-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	206217
LCS 490-206217/2-A	Lab Control Sample	Total/NA	Water	6010B	206217
MB 490-206217/1-A	Method Blank	Total/NA	Water	6010B	206217

Prep Batch: 206792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-65627-B-10-B MS	Matrix Spike	Total/NA	Water	3010A	
490-65627-B-10-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-66000-1	MW-306D (185-195)	Total/NA	Water	3010A	
LCS 490-206792/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-206792/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-206792/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 207240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66000-9	202R	Total/NA	Water	6010B	206217
490-66000-10	37D	Total/NA	Water	6010B	206217
490-66000-11	69R	Total/NA	Water	6010B	206217

Analysis Batch: 207509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-65627-B-10-B MS	Matrix Spike	Total/NA	Water	6010B	206792
490-65627-B-10-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	206792
490-66000-1	MW-306D (185-195)	Total/NA	Water	6010B	206792
LCS 490-206792/2-A	Lab Control Sample	Total/NA	Water	6010B	206792
LCSD 490-206792/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	206792
MB 490-206792/1-A	Method Blank	Total/NA	Water	6010B	206792

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: MW-306D (185-195)

Lab Sample ID: 490-66000-1
Date Collected: 11/10/14 14:05
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 02:42	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206792	11/17/14 13:38	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207509	11/19/14 13:16	HJM	TAL NSH

Client Sample ID: MW-306D (280-300)

Lab Sample ID: 490-66000-2
Date Collected: 11/10/14 15:15
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 03:08	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 17:51	LTB	TAL NSH

Client Sample ID: MW-406D

Lab Sample ID: 490-66000-3
Date Collected: 11/10/14 16:30
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 03:34	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 17:54	LTB	TAL NSH

Client Sample ID: 52S

Lab Sample ID: 490-66000-4
Date Collected: 11/10/14 09:40
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 03:59	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 17:58	LTB	TAL NSH

Client Sample ID: EW-3S

Lab Sample ID: 490-66000-5
Date Collected: 11/10/14 13:50
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 04:25	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 18:02	LTB	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: 103R

Lab Sample ID: 490-66000-6

Date Collected: 11/10/14 13:50
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 04:50	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 18:06	LTB	TAL NSH

Client Sample ID: 203R

Lab Sample ID: 490-66000-7

Date Collected: 11/10/14 10:50
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 05:16	EML	TAL NSH
Total/NA	Analysis	8260B	DL	5	10 mL	10 mL	207140	11/19/14 04:28	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 18:10	LTB	TAL NSH

Client Sample ID: MW-306S (130-140)

Lab Sample ID: 490-66000-8

Date Collected: 11/10/14 11:30
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 05:41	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 18:14	LTB	TAL NSH

Client Sample ID: 202R

Lab Sample ID: 490-66000-9

Date Collected: 11/10/14 11:00
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 06:06	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 12:06	NLI	TAL NSH

Client Sample ID: 37D

Lab Sample ID: 490-66000-10

Date Collected: 11/10/14 15:05
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 06:32	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 18:30	LTB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 12:11	NLI	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Client Sample ID: 69R

Lab Sample ID: 490-66000-11

Date Collected: 11/10/14 15:30
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 06:57	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 18:34	LTB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 12:17	NLI	TAL NSH

Client Sample ID: MW-306S (85-100)

Lab Sample ID: 490-66000-12

Date Collected: 11/10/14 10:35
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 07:22	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 18:38	LTB	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-66000-13

Date Collected: 11/10/14 00:01
Matrix: Water
Date Received: 11/11/14 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 00:34	EML	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66000-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-66000 Chain of Custody

Cooler Received/Opened On 11/11/2014 @ 0835

1. Tracking # 7238 (last 4 digits, FedEx)

Courier: Fed Ex IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 1.5 *Degrees Celsius*

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

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

   If yes, how many and where: 1 front

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
66000

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

11/21/2014

Client Information	Sampler: MK, JB, TM	Lab PM: Brown, Shali	Carri	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 717-645-6179	E-Mail: shali.brown@testamericainc.com		Page: 1 of 2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Normal			
State, Zip: MA, 01824				
Phone: 717-645-6179	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - (MOD) 6010B As and Mn	8260B_LL - (MOD) New Hampshire Volatiles List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A		
MW-306D (185-195)	11/10/14	1405	G	W			X	X	1	
MW-306D (280-300)	11/10/14	1515	G	W			X	X	2	
MW-406D	11/10/14	1630	G	W			X	X	3	
525	11/10/14	0940	G	W			X	X	4	
EW-35	11/10/14	1350	G	W			X	X	5	
103R	11/10/14	1350	G	W			X	X	6	
203R	11/10/14	1050	G	W			X	X	7	
MW-306S (130-140)	11/10/14	1130	G	W			X	X	8	
202R	11/10/14	1100	G	W			X	X	9	
37D	11/10/14	1505	G	W			X	X	10	
69R	11/10/14	1530	G	W			X	X	11	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/10/14 / 1800	ARCADIS	[signature]	11-11-14 @ 0835	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.5

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
66000
#1
A

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

11/21/2014

Client Information

Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone: 717-645-6179
Email: chuck.castelluccio@arcadis-us.com
Project Name: Tibbetts Road Site E101274
Site:

Sampler: MK, JB, TM
Phone: 717-645-6179
Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Cam

Due Date Requested:
TAT Requested (days): Normal
PO #: Purchase Order Requested
WO #:
Lab Project #: 49002494
Client Project #:

FORD Site E101274
Page: 2/2
Job #:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - (MOD) 6010B As and Mn	8260B_LL - (MOD) New Hampshire Volatiles List										Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A											
MW-3CGS (85-100)	11/10/14	1035	G	W			X	X									-12	4	
TRIP BLANK	11/10/14	—	—	W				X									13	2	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/10/14 / 1800	ARCADIS	[signature]	11.11.14 @ 0835	TAN

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.5c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-66000-1

Login Number: 66000
List Number: 1
Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-66003-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
11/25/2014 2:01:53 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66003-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-66003-1	169R	Water	11/10/14 09:45	11/11/14 08:35

Job ID: 490-66003-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: FORD Tibbetts Road Site E101274

Report Number: 490-66003-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to 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.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 11/11/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.5 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)
Sample 169R (490-66003-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/18/2014.

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

TOTAL METALS (ICP)
Sample 169R (490-66003-1) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 11/14/2014 and analyzed on 11/15/2014 and 11/18/2014.

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

Job ID: 490-66003-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66003-1

Client Sample ID: 169R

Date Collected: 11/10/14 09:45
Date Received: 11/11/14 08:35

Lab Sample ID: 490-66003-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 07:48	1
Benzene	**20.4**		0.500	0.200	ug/L			11/18/14 07:48	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 07:48	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 07:48	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 07:48	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 07:48	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 07:48	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 07:48	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 07:48	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 07:48	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 07:48	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 07:48	1
cis-1,2-Dichloroethene	**16.4**		0.500	0.210	ug/L			11/18/14 07:48	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 07:48	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 07:48	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 07:48	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 07:48	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 07:48	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 07:48	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 07:48	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 07:48	1
Ethylbenzene	**9.87**		0.500	0.190	ug/L			11/18/14 07:48	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 07:48	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 07:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 07:48	1
m-Xylene & p-Xylene	**10.5**		0.500	0.380	ug/L			11/18/14 07:48	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 07:48	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 07:48	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 07:48	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 07:48	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 07:48	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/18/14 07:48	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 07:48	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 07:48	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 07:48	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 07:48	1
Trichloroethene	**0.352**	**J**	0.500	0.200	ug/L			11/18/14 07:48	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 07:48	1
Xylenes, Total	**10.7**		1.50	0.580	ug/L			11/18/14 07:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/18/14 07:48*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*11/18/14 07:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*11/18/14 07:48*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/18/14 07:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0534**		0.0100	0.00720	mg/L		11/14/14 11:59	11/18/14 12:23	1
Manganese	**2.57**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 18:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-206875/6
Matrix: Water
Analysis Batch: 206875

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/18/14 00:09	1
Benzene	ND		0.500	0.200	ug/L			11/18/14 00:09	1
Bromoform	ND		0.500	0.290	ug/L			11/18/14 00:09	1
Bromomethane	ND		0.500	0.350	ug/L			11/18/14 00:09	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/18/14 00:09	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/18/14 00:09	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/18/14 00:09	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/18/14 00:09	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/18/14 00:09	1
Chloroethane	ND		0.500	0.360	ug/L			11/18/14 00:09	1
Chloroform	ND		0.500	0.230	ug/L			11/18/14 00:09	1
Chloromethane	ND		0.500	0.360	ug/L			11/18/14 00:09	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/18/14 00:09	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 00:09	1
Dibromomethane	ND		0.500	0.450	ug/L			11/18/14 00:09	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/18/14 00:09	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/18/14 00:09	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/18/14 00:09	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/18/14 00:09	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/18/14 00:09	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/18/14 00:09	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/18/14 00:09	1
2-Hexanone	ND		5.00	1.28	ug/L			11/18/14 00:09	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/18/14 00:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/18/14 00:09	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/18/14 00:09	1
o-Xylene	ND		0.500	0.200	ug/L			11/18/14 00:09	1
Styrene	ND		0.500	0.280	ug/L			11/18/14 00:09	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/18/14 00:09	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/18/14 00:09	1
Toluene	ND		0.500	0.170	ug/L			11/18/14 00:09	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/18/14 00:09	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/18/14 00:09	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/18/14 00:09	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 00:09	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/18/14 00:09	1
Trichloroethene	ND		0.500	0.200	ug/L			11/18/14 00:09	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/18/14 00:09	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/18/14 00:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/18/14 00:09*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/18/14 00:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*11/18/14 00:09*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/18/14 00:09*	*1*

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

Lab Sample ID: LCS 490-206875/3
Matrix: Water
Analysis Batch: 206875

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	200.4		ug/L		80	54 - 145
Benzene	50.0	49.28		ug/L		99	80 - 121
Bromoform	50.0	46.34		ug/L		93	46 - 145
Bromomethane	50.0	62.32		ug/L		125	41 - 150
2-Butanone (MEK)	250	195.3		ug/L		78	62 - 133
Carbon disulfide	50.0	59.05		ug/L		118	77 - 126
Carbon tetrachloride	50.0	50.35		ug/L		101	64 - 147
Chlorobenzene	50.0	50.60		ug/L		101	80 - 120
Chlorodibromomethane	50.0	49.72		ug/L		99	69 - 133
Chloroethane	50.0	52.86		ug/L		106	72 - 120
Chloroform	50.0	47.46		ug/L		95	73 - 129
Chloromethane	50.0	50.77		ug/L		102	12 - 150
cis-1,2-Dichloroethene	50.0	50.75		ug/L		102	76 - 125
cis-1,3-Dichloropropene	50.0	50.44		ug/L		101	74 - 140
Dibromomethane	50.0	45.08		ug/L		90	71 - 125
Dichlorobromomethane	50.0	45.37		ug/L		91	75 - 129
1,1-Dichloroethane	50.0	50.70		ug/L		101	78 - 125
1,2-Dichloroethane	50.0	47.24		ug/L		94	77 - 121
1,1-Dichloroethene	50.0	49.79		ug/L		100	79 - 124
1,2-Dichloropropane	50.0	48.58		ug/L		97	75 - 120
1,1-Dichloropropene	50.0	51.81		ug/L		104	80 - 122
Ethylbenzene	50.0	49.96		ug/L		100	80 - 130
2-Hexanone	250	209.3		ug/L		84	60 - 142
Methylene Chloride	50.0	49.92		ug/L		100	79 - 123
4-Methyl-2-pentanone (MIBK)	250	204.4		ug/L		82	60 - 137
m-Xylene & p-Xylene	50.0	49.57		ug/L		99	80 - 141
o-Xylene	50.0	48.86		ug/L		98	80 - 127
Styrene	50.0	50.79		ug/L		102	80 - 127
1,1,1,2-Tetrachloroethane	50.0	48.69		ug/L		97	74 - 135
Tetrachloroethene	50.0	52.87		ug/L		106	80 - 126
Toluene	50.0	50.84		ug/L		102	80 - 126
trans-1,2-Dichloroethene	50.0	51.53		ug/L		103	79 - 126
trans-1,3-Dichloropropene	50.0	47.48		ug/L		95	63 - 134
1,3,5-Trichlorobenzene	50.0	52.52		ug/L		105	70 - 130
1,1,1-Trichloroethane	50.0	49.30		ug/L		99	78 - 135
1,1,2-Trichloroethane	50.0	43.58		ug/L		87	80 - 124
Trichloroethene	50.0	49.65		ug/L		99	80 - 123
Vinyl chloride	50.0	55.34		ug/L		111	68 - 120
Xylenes, Total	100	98.43		ug/L		98	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

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

Lab Sample ID: 490-66000-B-1 MS
Matrix: Water
Analysis Batch: 206875

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	143.7		ug/L		57	45 - 141
Benzene	4.37		50.0	51.26		ug/L		94	75 - 133
Bromoform	ND		50.0	38.13		ug/L		76	42 - 147
Bromomethane	ND		50.0	50.39		ug/L		101	16 - 163
2-Butanone (MEK)	ND		250	153.0		ug/L		61	50 - 138
Carbon disulfide	ND		50.0	60.93		ug/L		122	48 - 152
Carbon tetrachloride	ND		50.0	50.97		ug/L		102	62 - 164
Chlorobenzene	ND		50.0	48.45		ug/L		97	80 - 129
Chlorodibromomethane	ND		50.0	43.36		ug/L		87	66 - 140
Chloroethane	ND		50.0	49.69		ug/L		99	58 - 137
Chloroform	ND		50.0	45.60		ug/L		91	66 - 138
Chloromethane	ND		50.0	42.91		ug/L		86	10 - 169
cis-1,2-Dichloroethene	47.4		50.0	96.92		ug/L		99	68 - 138
cis-1,3-Dichloropropene	ND		50.0	47.27		ug/L		95	71 - 141
Dibromomethane	ND		50.0	37.45		ug/L		75	58 - 140
Dichlorobromomethane	ND		50.0	41.42		ug/L		83	70 - 140
1,1-Dichloroethane	ND		50.0	48.77		ug/L		98	71 - 139
1,2-Dichloroethane	ND		50.0	42.49		ug/L		85	64 - 136
1,1-Dichloroethene	ND		50.0	49.93		ug/L		100	70 - 142
1,2-Dichloropropane	ND		50.0	44.47		ug/L		89	67 - 131
1,1-Dichloropropene	ND		50.0	51.83		ug/L		104	76 - 139
Ethylbenzene	0.944		50.0	50.63		ug/L		99	79 - 139
2-Hexanone	ND		250	154.0		ug/L		62	50 - 150
Methylene Chloride	ND		50.0	46.05		ug/L		92	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	159.2		ug/L		64	50 - 147
m-Xylene & p-Xylene	ND		50.0	49.24		ug/L		98	80 - 153
o-Xylene	ND		50.0	46.81		ug/L		94	74 - 138
Styrene	ND		50.0	47.30		ug/L		95	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	45.18		ug/L		90	73 - 141
Tetrachloroethene	ND		50.0	54.52		ug/L		109	72 - 145
Toluene	0.223	J	50.0	51.37		ug/L		102	75 - 136
trans-1,2-Dichloroethene	1.64		50.0	53.00		ug/L		103	66 - 143
trans-1,3-Dichloropropene	ND		50.0	42.82		ug/L		86	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	47.40		ug/L		95	60 - 140
1,1,1-Trichloroethane	ND		50.0	49.28		ug/L		99	76 - 149
1,1,2-Trichloroethane	ND		50.0	38.06		ug/L		76	74 - 134
Trichloroethene	1.24		50.0	49.62		ug/L		97	73 - 144
Vinyl chloride	ND		50.0	50.82		ug/L		102	56 - 129
Xylenes, Total	ND		100	96.05		ug/L		96	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
Toluene-d8 (Surr)	*106*		*70 - 130*

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

Lab Sample ID: 490-66000-C-1 MSD
Matrix: Water
Analysis Batch: 206875

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	176.0		ug/L		70	45 - 141	20	21
Benzene	4.37		50.0	55.62		ug/L		102	75 - 133	8	17
Bromoform	ND		50.0	45.28	F2	ug/L		91	42 - 147	17	16
Bromomethane	ND		50.0	57.84		ug/L		116	16 - 163	14	50
2-Butanone (MEK)	ND		250	179.9		ug/L		72	50 - 138	16	19
Carbon disulfide	ND		50.0	65.09		ug/L		130	48 - 152	7	21
Carbon tetrachloride	ND		50.0	56.41		ug/L		113	62 - 164	10	19
Chlorobenzene	ND		50.0	52.68		ug/L		105	80 - 129	8	14
Chlorodibromomethane	ND		50.0	49.19		ug/L		98	66 - 140	13	15
Chloroethane	ND		50.0	52.38		ug/L		105	58 - 137	5	20
Chloroform	ND		50.0	49.61		ug/L		99	66 - 138	8	18
Chloromethane	ND		50.0	45.13		ug/L		90	10 - 169	5	31
cis-1,2-Dichloroethene	47.4		50.0	102.2		ug/L		110	68 - 138	5	17
cis-1,3-Dichloropropene	ND		50.0	51.60		ug/L		103	71 - 141	9	15
Dibromomethane	ND		50.0	42.46		ug/L		85	58 - 140	13	16
Dichlorobromomethane	ND		50.0	45.64		ug/L		91	70 - 140	10	18
1,1-Dichloroethane	ND		50.0	53.07		ug/L		106	71 - 139	8	17
1,2-Dichloroethane	ND		50.0	47.84		ug/L		96	64 - 136	12	17
1,1-Dichloroethene	ND		50.0	54.11		ug/L		108	70 - 142	8	17
1,2-Dichloropropane	ND		50.0	48.77		ug/L		98	67 - 131	9	17
1,1-Dichloropropene	ND		50.0	55.95		ug/L		112	76 - 139	8	17
Ethylbenzene	0.944		50.0	54.25		ug/L		107	79 - 139	7	15
2-Hexanone	ND		250	189.2	F2	ug/L		76	50 - 150	20	15
Methylene Chloride	ND		50.0	49.99		ug/L		100	64 - 139	8	17
4-Methyl-2-pentanone (MIBK)	ND		250	186.9		ug/L		75	50 - 147	16	17
m-Xylene & p-Xylene	ND		50.0	53.17		ug/L		106	80 - 153	8	16
o-Xylene	ND		50.0	51.50		ug/L		103	74 - 138	10	14
Styrene	ND		50.0	51.73		ug/L		103	61 - 148	9	24
1,1,1,2-Tetrachloroethane	ND		50.0	50.21		ug/L		100	73 - 141	11	16
Tetrachloroethene	ND		50.0	58.03		ug/L		116	72 - 145	6	16
Toluene	0.223	J	50.0	54.58		ug/L		109	75 - 136	6	15
trans-1,2-Dichloroethene	1.64		50.0	56.27		ug/L		109	66 - 143	6	16
trans-1,3-Dichloropropene	ND		50.0	47.65		ug/L		95	59 - 135	11	14
1,3,5-Trichlorobenzene	ND		50.0	53.05		ug/L		106	60 - 140	11	30
1,1,1-Trichloroethane	ND		50.0	53.20		ug/L		106	76 - 149	8	17
1,1,2-Trichloroethane	ND		50.0	42.40		ug/L		85	74 - 134	11	15
Trichloroethene	1.24		50.0	54.53		ug/L		107	73 - 144	9	17
Vinyl chloride	ND		50.0	53.04		ug/L		106	56 - 129	4	17
Xylenes, Total	ND		100	104.7		ug/L		105	74 - 141	9	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66003-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-206217/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 17:19	1
Manganese	ND		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 17:19	1

Lab Sample ID: LCS 490-206217/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.04980		mg/L		100	80 - 120
Manganese	0.500	0.5198		mg/L		104	80 - 120

Lab Sample ID: 490-66105-D-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.210		0.0500	0.2723	4	mg/L		126	75 - 125
Manganese	8.29		0.500	8.822	4	mg/L		107	75 - 125

Lab Sample ID: 490-66105-D-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.210		0.0500	0.2712	4	mg/L		123	75 - 125	0	20
Manganese	8.29		0.500	8.860	4	mg/L		115	75 - 125	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66003-1

GC/MS VOA

Analysis Batch: 206875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66000-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-66000-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-66003-1	169R	Total/NA	Water	8260B	
LCS 490-206875/3	Lab Control Sample	Total/NA	Water	8260B	
MB 490-206875/6	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 206217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66003-1	169R	Total/NA	Water	3010A	
490-66105-D-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-66105-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 490-206217/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-206217/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 206672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66003-1	169R	Total/NA	Water	6010B	206217
490-66105-D-1-B MS	Matrix Spike	Total/NA	Water	6010B	206217
490-66105-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	206217
LCS 490-206217/2-A	Lab Control Sample	Total/NA	Water	6010B	206217
MB 490-206217/1-A	Method Blank	Total/NA	Water	6010B	206217

Analysis Batch: 207240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66003-1	169R	Total/NA	Water	6010B	206217

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66003-1

Client Sample ID: 169R

Date Collected: 11/10/14 09:45
Date Received: 11/11/14 08:35

Lab Sample ID: 490-66003-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	206875	11/18/14 07:48	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 18:42	LTB	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 12:23	NLI	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66003-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66003-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-66003 Chain of Custody

Cooler Received/Opened On 11/11/2014 @ 0835

1. Tracking # 2738 (last 4 digits, FedEx)

Courier: ____Fed Ex_____ IR Gun ID_____97310166_____

2. Temperature of rep. sample or temp blank when opened: 1.5 *Degrees Celsius*

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

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

   If yes, how many and where: 1 front

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
66003

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

11/25/2014

Client Information

Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone: 717-645-6179
Email: chuck.castelluccio@arcadis-us.com
Project Name: Tibbetts Road Site E101274
Site:

Sampler: MK, JB, TM
Phone: 717-645-6179
Due Date Requested:
TAT Requested (days): Normal
PO #: Purchase Order Requested
WO #:
Lab Project #: 49002494
Client Project #:

Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Carrier:

FORD Site E101274
Page: 1/1
Job #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - (MOD) 6010B As and Mn	8260B_LL - (MOD) New Hampshire Volatiles List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A		
169R	11/10/14	0945	G	W			X	X	4	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	11/10/14 / 1800	ARCADIS	[signature]	11-11-14 @ 0835	TAN

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.5c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-66003-1

Login Number: 66003

List Source: TestAmerica Nashville

List Number: 1

Creator: McBride, Mike

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

TestAmerica Job ID: 490-66105-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
11/25/2014 2:13:33 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66105-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-66105-1	S1S	Ground Water	11/11/14 14:00	11/12/14 08:20

Job ID: 490-66105-1

Laboratory: TestAmerica Nashville

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: FORD Tibbetts Road Site E101274

Report Number: 490-66105-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Nashville attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to 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.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 11/12/2014; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.0 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample S1S (490-66105-1) was analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 11/19/2014 and 11/20/2014.

Toluene was detected in method blank MB 490-207677/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

m-Xylene & p-Xylene, Styrene and Xylenes, Total failed the recovery criteria high for the MS of sample S1SMS (490-66105-1) in batch 490-207339.
m-Xylene & p-Xylene, o-Xylene, Styrene and Xylenes, Total failed the recovery criteria high for the MSD of sample S1SMSD (490-66105-1) in batch 490-207339.

Job ID: 490-66105-1 (Continued)

Laboratory: TestAmerica Nashville (Continued)

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

Sample S1S (490-66105-1)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL METALS (ICP)

Sample S1S (490-66105-1) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 11/14/2014 and analyzed on 11/15/2014.

Arsenic failed the recovery criteria high for the MS of sample S1SMS (490-66105-1) in batch 490-206672.

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

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.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery exceeds the control limits

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66105-1

Client Sample ID: S1S

Date Collected: 11/11/14 14:00
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66105-1

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/19/14 16:08	1
Benzene	**0.339**	**J**	0.500	0.200	ug/L			11/19/14 16:08	1
Bromoform	ND		0.500	0.290	ug/L			11/19/14 16:08	1
Bromomethane	ND		0.500	0.350	ug/L			11/19/14 16:08	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/19/14 16:08	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/19/14 16:08	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/19/14 16:08	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/19/14 16:08	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/19/14 16:08	1
Chloroethane	ND		0.500	0.360	ug/L			11/19/14 16:08	1
Chloroform	ND		0.500	0.230	ug/L			11/19/14 16:08	1
Chloromethane	ND		0.500	0.360	ug/L			11/19/14 16:08	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/19/14 16:08	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 16:08	1
Dibromomethane	ND		0.500	0.450	ug/L			11/19/14 16:08	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/19/14 16:08	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/19/14 16:08	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/19/14 16:08	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/19/14 16:08	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/19/14 16:08	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/19/14 16:08	1
2-Hexanone	ND		5.00	1.28	ug/L			11/19/14 16:08	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/19/14 16:08	1
4-Methyl-2-pentanone (MIBK)	**1.73**	**J**	5.00	0.810	ug/L			11/19/14 16:08	1
Styrene	ND		0.500	0.280	ug/L			11/19/14 16:08	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/19/14 16:08	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/19/14 16:08	1
Toluene	**1.55**		0.500	0.170	ug/L			11/19/14 16:08	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/19/14 16:08	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 16:08	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/19/14 16:08	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 16:08	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 16:08	1
Trichloroethene	**0.223**	**J**	0.500	0.200	ug/L			11/19/14 16:08	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/19/14 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/19/14 16:08*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/19/14 16:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/19/14 16:08*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/19/14 16:08*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**834**		10.0	3.80	ug/L			11/20/14 21:01	20
m-Xylene & p-Xylene	**2360**		10.0	7.60	ug/L			11/20/14 21:01	20
o-Xylene	**1060**		10.0	4.00	ug/L			11/20/14 21:01	20
Xylenes, Total	**3430**		30.0	11.6	ug/L			11/20/14 21:01	20

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66105-1

Client Sample ID: S1S

Lab Sample ID: 490-66105-1

Date Collected: 11/11/14 14:00

Matrix: Ground Water

Date Received: 11/12/14 08:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/20/14 21:01*	*20*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/20/14 21:01*	*20*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*11/20/14 21:01*	*20*
Toluene-d8 (Surr)	*96*		*70 - 130*		*11/20/14 21:01*	*20*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.210**		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 17:27	1
Manganese	**8.29**		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 17:27	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-207339/7
Matrix: Water
Analysis Batch: 207339

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/19/14 13:51	1
Benzene	ND		0.500	0.200	ug/L			11/19/14 13:51	1
Bromoform	ND		0.500	0.290	ug/L			11/19/14 13:51	1
Bromomethane	ND		0.500	0.350	ug/L			11/19/14 13:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/19/14 13:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/19/14 13:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/19/14 13:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/19/14 13:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/19/14 13:51	1
Chloroethane	ND		0.500	0.360	ug/L			11/19/14 13:51	1
Chloroform	ND		0.500	0.230	ug/L			11/19/14 13:51	1
Chloromethane	ND		0.500	0.360	ug/L			11/19/14 13:51	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/19/14 13:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 13:51	1
Dibromomethane	ND		0.500	0.450	ug/L			11/19/14 13:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/19/14 13:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/19/14 13:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/19/14 13:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/19/14 13:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/19/14 13:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/19/14 13:51	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/19/14 13:51	1
2-Hexanone	ND		5.00	1.28	ug/L			11/19/14 13:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/19/14 13:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/19/14 13:51	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/19/14 13:51	1
o-Xylene	ND		0.500	0.200	ug/L			11/19/14 13:51	1
Styrene	ND		0.500	0.280	ug/L			11/19/14 13:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/19/14 13:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/19/14 13:51	1
Toluene	ND		0.500	0.170	ug/L			11/19/14 13:51	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/19/14 13:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 13:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/19/14 13:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 13:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 13:51	1
Trichloroethene	ND		0.500	0.200	ug/L			11/19/14 13:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/19/14 13:51	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/19/14 13:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/19/14 13:51*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/19/14 13:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*11/19/14 13:51*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/19/14 13:51*	*1*

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

Lab Sample ID: LCS 490-207339/3
Matrix: Water
Analysis Batch: 207339

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	226.5		ug/L		91	54 - 145
Benzene	50.0	49.22		ug/L		98	80 - 121
Bromoform	50.0	48.67		ug/L		97	46 - 145
Bromomethane	50.0	56.42		ug/L		113	41 - 150
2-Butanone (MEK)	250	220.7		ug/L		88	62 - 133
Carbon disulfide	50.0	61.01		ug/L		122	77 - 126
Carbon tetrachloride	50.0	51.43		ug/L		103	64 - 147
Chlorobenzene	50.0	49.88		ug/L		100	80 - 120
Chlorodibromomethane	50.0	50.99		ug/L		102	69 - 133
Chloroethane	50.0	51.40		ug/L		103	72 - 120
Chloroform	50.0	47.82		ug/L		96	73 - 129
Chloromethane	50.0	50.02		ug/L		100	12 - 150
cis-1,2-Dichloroethene	50.0	50.68		ug/L		101	76 - 125
cis-1,3-Dichloropropene	50.0	50.84		ug/L		102	74 - 140
Dibromomethane	50.0	46.45		ug/L		93	71 - 125
Dichlorobromomethane	50.0	47.02		ug/L		94	75 - 129
1,1-Dichloroethane	50.0	50.80		ug/L		102	78 - 125
1,2-Dichloroethane	50.0	49.95		ug/L		100	77 - 121
1,1-Dichloroethene	50.0	51.54		ug/L		103	79 - 124
1,2-Dichloropropane	50.0	49.73		ug/L		99	75 - 120
1,1-Dichloropropene	50.0	51.95		ug/L		104	80 - 122
Ethylbenzene	50.0	49.22		ug/L		98	80 - 130
2-Hexanone	250	243.3		ug/L		97	60 - 142
Methylene Chloride	50.0	50.40		ug/L		101	79 - 123
4-Methyl-2-pentanone (MIBK)	250	228.2		ug/L		91	60 - 137
m-Xylene & p-Xylene	50.0	49.01		ug/L		98	80 - 141
o-Xylene	50.0	48.37		ug/L		97	80 - 127
Styrene	50.0	50.24		ug/L		100	80 - 127
1,1,1,2-Tetrachloroethane	50.0	49.10		ug/L		98	74 - 135
Tetrachloroethene	50.0	52.85		ug/L		106	80 - 126
Toluene	50.0	50.02		ug/L		100	80 - 126
trans-1,2-Dichloroethene	50.0	51.84		ug/L		104	79 - 126
trans-1,3-Dichloropropene	50.0	49.19		ug/L		98	63 - 134
1,3,5-Trichlorobenzene	50.0	53.52		ug/L		107	70 - 130
1,1,1-Trichloroethane	50.0	49.34		ug/L		99	78 - 135
1,1,2-Trichloroethane	50.0	44.97		ug/L		90	80 - 124
Trichloroethene	50.0	50.16		ug/L		100	80 - 123
Vinyl chloride	50.0	55.16		ug/L		110	68 - 120
Xylenes, Total	100	97.38		ug/L		97	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: LCSD 490-207339/4
Matrix: Water
Analysis Batch: 207339

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
Acetone	250	220.3		ug/L		88	54 - 145	3	21
Benzene	50.0	48.51		ug/L		97	80 - 121	1	17
Bromoform	50.0	47.28		ug/L		95	46 - 145	3	16
Bromomethane	50.0	57.24		ug/L		114	41 - 150	1	50
2-Butanone (MEK)	250	219.5		ug/L		88	62 - 133	1	19
Carbon disulfide	50.0	59.12		ug/L		118	77 - 126	3	21
Carbon tetrachloride	50.0	49.63		ug/L		99	64 - 147	4	19
Chlorobenzene	50.0	48.85		ug/L		98	80 - 120	2	14
Chlorodibromomethane	50.0	49.88		ug/L		100	69 - 133	2	15
Chloroethane	50.0	51.40		ug/L		103	72 - 120	0	20
Chloroform	50.0	46.55		ug/L		93	73 - 129	3	18
Chloromethane	50.0	49.64		ug/L		99	12 - 150	1	31
cis-1,2-Dichloroethene	50.0	49.94		ug/L		100	76 - 125	1	17
cis-1,3-Dichloropropene	50.0	49.98		ug/L		100	74 - 140	2	15
Dibromomethane	50.0	44.73		ug/L		89	71 - 125	4	16
Dichlorobromomethane	50.0	45.85		ug/L		92	75 - 129	3	18
1,1-Dichloroethane	50.0	50.24		ug/L		100	78 - 125	1	17
1,2-Dichloroethane	50.0	47.92		ug/L		96	77 - 121	4	17
1,1-Dichloroethene	50.0	50.14		ug/L		100	79 - 124	3	17
1,2-Dichloropropane	50.0	47.93		ug/L		96	75 - 120	4	17
1,1-Dichloropropene	50.0	50.86		ug/L		102	80 - 122	2	17
Ethylbenzene	50.0	48.36		ug/L		97	80 - 130	2	15
2-Hexanone	250	236.9		ug/L		95	60 - 142	3	15
Methylene Chloride	50.0	50.12		ug/L		100	79 - 123	1	17
4-Methyl-2-pentanone (MIBK)	250	220.1		ug/L		88	60 - 137	4	17
m-Xylene & p-Xylene	50.0	47.89		ug/L		96	80 - 141	2	16
o-Xylene	50.0	46.48		ug/L		93	80 - 127	4	14
Styrene	50.0	49.19		ug/L		98	80 - 127	2	24
1,1,1,2-Tetrachloroethane	50.0	48.05		ug/L		96	74 - 135	2	16
Tetrachloroethene	50.0	51.83		ug/L		104	80 - 126	2	16
Toluene	50.0	48.14		ug/L		96	80 - 126	4	15
trans-1,2-Dichloroethene	50.0	50.54		ug/L		101	79 - 126	3	16
trans-1,3-Dichloropropene	50.0	48.09		ug/L		96	63 - 134	2	14
1,3,5-Trichlorobenzene	50.0	51.64		ug/L		103	70 - 130	4	30
1,1,1-Trichloroethane	50.0	47.90		ug/L		96	78 - 135	3	17
1,1,2-Trichloroethane	50.0	43.49		ug/L		87	80 - 124	3	15
Trichloroethene	50.0	49.05		ug/L		98	80 - 123	2	17
Vinyl chloride	50.0	53.96		ug/L		108	68 - 120	2	17
Xylenes, Total	100	94.37		ug/L		94	80 - 132	3	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-66105-1 MS
Matrix: Ground Water
Analysis Batch: 207339

Client Sample ID: S1S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	207.8		ug/L		83	45 - 141
Benzene	0.339	J	50.0	49.02		ug/L		97	75 - 133
Bromoform	ND		50.0	50.94		ug/L		102	42 - 147
Bromomethane	ND		50.0	35.90		ug/L		72	16 - 163
2-Butanone (MEK)	ND		250	212.1		ug/L		85	50 - 138
Carbon disulfide	ND		50.0	52.88		ug/L		106	48 - 152
Carbon tetrachloride	ND		50.0	52.70		ug/L		105	62 - 164
Chlorobenzene	ND		50.0	50.43		ug/L		101	80 - 129
Chlorodibromomethane	ND		50.0	51.84		ug/L		104	66 - 140
Chloroethane	ND		50.0	50.39		ug/L		101	58 - 137
Chloroform	ND		50.0	48.20		ug/L		96	66 - 138
Chloromethane	ND		50.0	44.92		ug/L		90	10 - 169
cis-1,2-Dichloroethene	ND		50.0	50.11		ug/L		100	68 - 138
cis-1,3-Dichloropropene	ND		50.0	49.66		ug/L		99	71 - 141
Dibromomethane	ND		50.0	46.28		ug/L		93	58 - 140
Dichlorobromomethane	ND		50.0	47.54		ug/L		95	70 - 140
1,1-Dichloroethane	ND		50.0	50.25		ug/L		101	71 - 139
1,2-Dichloroethane	ND		50.0	49.35		ug/L		99	64 - 136
1,1-Dichloroethene	ND		50.0	49.01		ug/L		98	70 - 142
1,2-Dichloropropane	ND		50.0	48.71		ug/L		97	67 - 131
1,1-Dichloropropene	ND		50.0	51.31		ug/L		103	76 - 139
Ethylbenzene	554	E	50.0	594.2	E 4	ug/L		80	79 - 139
2-Hexanone	ND		250	261.7		ug/L		105	50 - 150
Methylene Chloride	ND		50.0	48.84		ug/L		98	64 - 139
4-Methyl-2-pentanone (MIBK)	1.73	J	250	241.8		ug/L		96	50 - 147
m-Xylene & p-Xylene	1120	E	50.0	1204	E 4	ug/L		177	80 - 153
o-Xylene	697	E	50.0	759.4	E 4	ug/L		126	74 - 138
Styrene	ND		50.0	78.02	F1	ug/L		156	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	50.22		ug/L		100	73 - 141
Tetrachloroethene	ND		50.0	53.71		ug/L		107	72 - 145
Toluene	1.55		50.0	51.46		ug/L		100	75 - 136
trans-1,2-Dichloroethene	ND		50.0	49.70		ug/L		99	66 - 143
trans-1,3-Dichloropropene	ND		50.0	48.98		ug/L		98	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	54.36		ug/L		109	60 - 140
1,1,1-Trichloroethane	ND		50.0	50.23		ug/L		100	76 - 149
1,1,2-Trichloroethane	ND		50.0	46.77		ug/L		94	74 - 134
Trichloroethene	0.223	J	50.0	50.83		ug/L		101	73 - 144
Vinyl chloride	ND		50.0	50.83		ug/L		102	56 - 129
Xylenes, Total	1810		100	1963	4	ug/L		151	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-66105-1 MSD
Matrix: Ground Water
Analysis Batch: 207339

Client Sample ID: S1S
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	194.1		ug/L		78	45 - 141	7	21
Benzene	0.339	J	50.0	49.09		ug/L		97	75 - 133	0	17
Bromoform	ND		50.0	50.14		ug/L		100	42 - 147	2	16
Bromomethane	ND		50.0	41.00		ug/L		82	16 - 163	13	50
2-Butanone (MEK)	ND		250	213.4		ug/L		85	50 - 138	1	19
Carbon disulfide	ND		50.0	53.48		ug/L		107	48 - 152	1	21
Carbon tetrachloride	ND		50.0	53.03		ug/L		106	62 - 164	1	19
Chlorobenzene	ND		50.0	50.70		ug/L		101	80 - 129	1	14
Chlorodibromomethane	ND		50.0	51.08		ug/L		102	66 - 140	1	15
Chloroethane	ND		50.0	50.19		ug/L		100	58 - 137	0	20
Chloroform	ND		50.0	48.08		ug/L		96	66 - 138	0	18
Chloromethane	ND		50.0	46.17		ug/L		92	10 - 169	3	31
cis-1,2-Dichloroethene	ND		50.0	50.62		ug/L		101	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	50.15		ug/L		100	71 - 141	1	15
Dibromomethane	ND		50.0	46.18		ug/L		92	58 - 140	0	16
Dichlorobromomethane	ND		50.0	47.95		ug/L		96	70 - 140	1	18
1,1-Dichloroethane	ND		50.0	50.22		ug/L		100	71 - 139	0	17
1,2-Dichloroethane	ND		50.0	49.12		ug/L		98	64 - 136	0	17
1,1-Dichloroethene	ND		50.0	50.48		ug/L		101	70 - 142	3	17
1,2-Dichloropropane	ND		50.0	48.84		ug/L		98	67 - 131	0	17
1,1-Dichloropropene	ND		50.0	51.94		ug/L		104	76 - 139	1	17
Ethylbenzene	554	E	50.0	613.1	E 4	ug/L		117	79 - 139	3	15
2-Hexanone	ND		250	252.6		ug/L		101	50 - 150	4	15
Methylene Chloride	ND		50.0	48.81		ug/L		98	64 - 139	0	17
4-Methyl-2-pentanone (MIBK)	1.73	J	250	243.4		ug/L		97	50 - 147	1	17
m-Xylene & p-Xylene	1120	E	50.0	1230	E 4	ug/L		229	80 - 153	2	16
o-Xylene	697	E	50.0	794.3	E 4	ug/L		195	74 - 138	4	14
Styrene	ND		50.0	80.31	F1	ug/L		161	61 - 148	3	24
1,1,1,2-Tetrachloroethane	ND		50.0	49.63		ug/L		99	73 - 141	1	16
Tetrachloroethene	ND		50.0	53.37		ug/L		107	72 - 145	1	16
Toluene	1.55		50.0	51.74		ug/L		100	75 - 136	1	15
trans-1,2-Dichloroethene	ND		50.0	49.51		ug/L		99	66 - 143	0	16
trans-1,3-Dichloropropene	ND		50.0	48.56		ug/L		97	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	55.29		ug/L		111	60 - 140	2	30
1,1,1-Trichloroethane	ND		50.0	50.13		ug/L		100	76 - 149	0	17
1,1,2-Trichloroethane	ND		50.0	46.12		ug/L		92	74 - 134	1	15
Trichloroethene	0.223	J	50.0	51.10		ug/L		102	73 - 144	1	17
Vinyl chloride	ND		50.0	52.21		ug/L		104	56 - 129	3	17
Xylenes, Total	1810		100	2024	4	ug/L		212	74 - 141	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: MB 490-207677/7
Matrix: Water
Analysis Batch: 207677

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 14:04	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 14:04	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 14:04	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 14:04	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 14:04	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 14:04	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 14:04	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 14:04	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 14:04	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 14:04	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 14:04	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 14:04	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 14:04	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 14:04	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 14:04	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 14:04	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 14:04	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 14:04	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 14:04	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 14:04	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 14:04	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 14:04	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 14:04	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 14:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 14:04	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 14:04	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 14:04	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 14:04	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 14:04	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 14:04	1
Toluene	0.1833	J	0.500	0.170	ug/L			11/20/14 14:04	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 14:04	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 14:04	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 14:04	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 14:04	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 14:04	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 14:04	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 14:04	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/20/14 14:04*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/20/14 14:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/20/14 14:04*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*11/20/14 14:04*	*1*

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

Lab Sample ID: LCS 490-207677/3
Matrix: Water
Analysis Batch: 207677

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	212.3		ug/L		85	54 - 145
Benzene	50.0	46.61		ug/L		93	80 - 121
Bromoform	50.0	49.00		ug/L		98	46 - 145
Bromomethane	50.0	53.77		ug/L		108	41 - 150
2-Butanone (MEK)	250	225.1		ug/L		90	62 - 133
Carbon disulfide	50.0	53.42		ug/L		107	77 - 126
Carbon tetrachloride	50.0	48.81		ug/L		98	64 - 147
Chlorobenzene	50.0	47.38		ug/L		95	80 - 120
Chlorodibromomethane	50.0	49.82		ug/L		100	69 - 133
Chloroethane	50.0	47.94		ug/L		96	72 - 120
Chloroform	50.0	46.35		ug/L		93	73 - 129
Chloromethane	50.0	46.21		ug/L		92	12 - 150
cis-1,2-Dichloroethene	50.0	48.11		ug/L		96	76 - 125
cis-1,3-Dichloropropene	50.0	45.37		ug/L		91	74 - 140
Dibromomethane	50.0	46.24		ug/L		92	71 - 125
Dichlorobromomethane	50.0	46.11		ug/L		92	75 - 129
1,1-Dichloroethane	50.0	47.50		ug/L		95	78 - 125
1,2-Dichloroethane	50.0	48.08		ug/L		96	77 - 121
1,1-Dichloroethene	50.0	46.21		ug/L		92	79 - 124
1,2-Dichloropropane	50.0	47.10		ug/L		94	75 - 120
1,1-Dichloropropene	50.0	48.04		ug/L		96	80 - 122
Ethylbenzene	50.0	46.10		ug/L		92	80 - 130
2-Hexanone	250	234.4		ug/L		94	60 - 142
Methylene Chloride	50.0	46.91		ug/L		94	79 - 123
4-Methyl-2-pentanone (MIBK)	250	209.0		ug/L		84	60 - 137
m-Xylene & p-Xylene	50.0	45.90		ug/L		92	80 - 141
o-Xylene	50.0	45.64		ug/L		91	80 - 127
Styrene	50.0	47.57		ug/L		95	80 - 127
1,1,1,2-Tetrachloroethane	50.0	46.66		ug/L		93	74 - 135
Tetrachloroethene	50.0	47.62		ug/L		95	80 - 126
Toluene	50.0	44.20		ug/L		88	80 - 126
trans-1,2-Dichloroethene	50.0	47.21		ug/L		94	79 - 126
trans-1,3-Dichloropropene	50.0	45.19		ug/L		90	63 - 134
1,3,5-Trichlorobenzene	50.0	49.70		ug/L		99	70 - 130
1,1,1-Trichloroethane	50.0	47.52		ug/L		95	78 - 135
1,1,2-Trichloroethane	50.0	42.25		ug/L		85	80 - 124
Trichloroethene	50.0	48.28		ug/L		97	80 - 123
Vinyl chloride	50.0	48.54		ug/L		97	68 - 120
Xylenes, Total	100	91.54		ug/L		92	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

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

Lab Sample ID: LCSD 490-207677/4
Matrix: Water
Analysis Batch: 207677

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
Acetone	250	213.5		ug/L		85	54 - 145	1	21
Benzene	50.0	43.90		ug/L		88	80 - 121	6	17
Bromoform	50.0	48.32		ug/L		97	46 - 145	1	16
Bromomethane	50.0	53.99		ug/L		108	41 - 150	0	50
2-Butanone (MEK)	250	207.5		ug/L		83	62 - 133	8	19
Carbon disulfide	50.0	51.83		ug/L		104	77 - 126	3	21
Carbon tetrachloride	50.0	45.66		ug/L		91	64 - 147	7	19
Chlorobenzene	50.0	46.64		ug/L		93	80 - 120	2	14
Chlorodibromomethane	50.0	49.86		ug/L		100	69 - 133	0	15
Chloroethane	50.0	45.08		ug/L		90	72 - 120	6	20
Chloroform	50.0	44.13		ug/L		88	73 - 129	5	18
Chloromethane	50.0	43.49		ug/L		87	12 - 150	6	31
cis-1,2-Dichloroethene	50.0	45.87		ug/L		92	76 - 125	5	17
cis-1,3-Dichloropropene	50.0	48.19		ug/L		96	74 - 140	6	15
Dibromomethane	50.0	44.26		ug/L		89	71 - 125	4	16
Dichlorobromomethane	50.0	43.89		ug/L		88	75 - 129	5	18
1,1-Dichloroethane	50.0	45.20		ug/L		90	78 - 125	5	17
1,2-Dichloroethane	50.0	47.00		ug/L		94	77 - 121	2	17
1,1-Dichloroethene	50.0	44.06		ug/L		88	79 - 124	5	17
1,2-Dichloropropane	50.0	44.14		ug/L		88	75 - 120	6	17
1,1-Dichloropropene	50.0	44.72		ug/L		89	80 - 122	7	17
Ethylbenzene	50.0	45.42		ug/L		91	80 - 130	1	15
2-Hexanone	250	234.7		ug/L		94	60 - 142	0	15
Methylene Chloride	50.0	46.54		ug/L		93	79 - 123	1	17
4-Methyl-2-pentanone (MIBK)	250	219.6		ug/L		88	60 - 137	5	17
m-Xylene & p-Xylene	50.0	44.99		ug/L		90	80 - 141	2	16
o-Xylene	50.0	44.78		ug/L		90	80 - 127	2	14
Styrene	50.0	46.94		ug/L		94	80 - 127	1	24
1,1,1,2-Tetrachloroethane	50.0	46.51		ug/L		93	74 - 135	0	16
Tetrachloroethene	50.0	47.83		ug/L		96	80 - 126	0	16
Toluene	50.0	45.85		ug/L		92	80 - 126	4	15
trans-1,2-Dichloroethene	50.0	45.12		ug/L		90	79 - 126	5	16
trans-1,3-Dichloropropene	50.0	47.01		ug/L		94	63 - 134	4	14
1,3,5-Trichlorobenzene	50.0	51.33		ug/L		103	70 - 130	3	30
1,1,1-Trichloroethane	50.0	43.99		ug/L		88	78 - 135	8	17
1,1,2-Trichloroethane	50.0	44.07		ug/L		88	80 - 124	4	15
Trichloroethene	50.0	45.18		ug/L		90	80 - 123	7	17
Vinyl chloride	50.0	46.96		ug/L		94	68 - 120	3	17
Xylenes, Total	100	89.77		ug/L		90	80 - 132	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

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

Lab Sample ID: 490-66330-B-2 MS
Matrix: Water
Analysis Batch: 207677

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	198.5		ug/L		79	45 - 141
Benzene	ND		50.0	49.51		ug/L		99	75 - 133
Bromoform	ND		50.0	47.73		ug/L		95	42 - 147
Bromomethane	ND		50.0	35.55		ug/L		71	16 - 163
2-Butanone (MEK)	ND		250	205.3		ug/L		82	50 - 138
Carbon disulfide	ND		50.0	59.34		ug/L		119	48 - 152
Carbon tetrachloride	ND		50.0	56.13		ug/L		112	62 - 164
Chlorobenzene	ND		50.0	50.46		ug/L		101	80 - 129
Chlorodibromomethane	ND		50.0	51.17		ug/L		102	66 - 140
Chloroethane	ND		50.0	50.57		ug/L		101	58 - 137
Chloroform	2.88		50.0	52.30		ug/L		99	66 - 138
Chloromethane	ND		50.0	46.49		ug/L		93	10 - 169
cis-1,2-Dichloroethene	32.1		50.0	82.41		ug/L		101	68 - 138
cis-1,3-Dichloropropene	ND		50.0	49.70		ug/L		99	71 - 141
Dibromomethane	ND		50.0	46.32		ug/L		93	58 - 140
Dichlorobromomethane	ND		50.0	46.94		ug/L		94	70 - 140
1,1-Dichloroethane	12.7		50.0	63.64		ug/L		102	71 - 139
1,2-Dichloroethane	2.48		50.0	52.70		ug/L		100	64 - 136
1,1-Dichloroethene	83.5		50.0	135.8		ug/L		105	70 - 142
1,2-Dichloropropane	ND		50.0	47.82		ug/L		96	67 - 131
1,1-Dichloropropene	ND		50.0	53.87		ug/L		108	76 - 139
Ethylbenzene	ND		50.0	49.76		ug/L		100	79 - 139
2-Hexanone	ND		250	223.6		ug/L		89	50 - 150
Methylene Chloride	0.690	J	50.0	50.57		ug/L		100	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	213.9		ug/L		86	50 - 147
m-Xylene & p-Xylene	ND		50.0	49.51		ug/L		99	80 - 153
o-Xylene	ND		50.0	48.45		ug/L		97	74 - 138
Styrene	ND		50.0	49.82		ug/L		100	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	49.12		ug/L		98	73 - 141
Tetrachloroethene	105		50.0	165.9		ug/L		122	72 - 145
Toluene	ND		50.0	50.50		ug/L		101	75 - 136
trans-1,2-Dichloroethene	0.424	J	50.0	52.67		ug/L		105	66 - 143
trans-1,3-Dichloropropene	ND		50.0	47.88		ug/L		96	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	49.53		ug/L		99	60 - 140
1,1,1-Trichloroethane	ND		50.0	52.98		ug/L		106	76 - 149
1,1,2-Trichloroethane	ND		50.0	44.45		ug/L		89	74 - 134
Trichloroethene	132		50.0	186.2		ug/L		109	73 - 144
Vinyl chloride	1.60		50.0	55.04		ug/L		107	56 - 129
Xylenes, Total	ND		100	97.96		ug/L		98	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-66330-C-2 MSD
Matrix: Water
Analysis Batch: 207677

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	207.1		ug/L		83	45 - 141	4	21
Benzene	ND		50.0	50.09		ug/L		100	75 - 133	1	17
Bromoform	ND		50.0	49.07		ug/L		98	42 - 147	3	16
Bromomethane	ND		50.0	44.38		ug/L		89	16 - 163	22	50
2-Butanone (MEK)	ND		250	208.4		ug/L		83	50 - 138	2	19
Carbon disulfide	ND		50.0	59.29		ug/L		119	48 - 152	0	21
Carbon tetrachloride	ND		50.0	56.41		ug/L		113	62 - 164	0	19
Chlorobenzene	ND		50.0	51.03		ug/L		102	80 - 129	1	14
Chlorodibromomethane	ND		50.0	51.70		ug/L		103	66 - 140	1	15
Chloroethane	ND		50.0	50.16		ug/L		100	58 - 137	1	20
Chloroform	2.88		50.0	51.98		ug/L		98	66 - 138	1	18
Chloromethane	ND		50.0	45.38		ug/L		91	10 - 169	2	31
cis-1,2-Dichloroethene	32.1		50.0	85.09		ug/L		106	68 - 138	3	17
cis-1,3-Dichloropropene	ND		50.0	50.41		ug/L		101	71 - 141	1	15
Dibromomethane	ND		50.0	45.11		ug/L		90	58 - 140	3	16
Dichlorobromomethane	ND		50.0	48.27		ug/L		97	70 - 140	3	18
1,1-Dichloroethane	12.7		50.0	63.69		ug/L		102	71 - 139	0	17
1,2-Dichloroethane	2.48		50.0	52.59		ug/L		100	64 - 136	0	17
1,1-Dichloroethene	83.5		50.0	134.1		ug/L		101	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	48.54		ug/L		97	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	53.34		ug/L		107	76 - 139	1	17
Ethylbenzene	ND		50.0	50.21		ug/L		100	79 - 139	1	15
2-Hexanone	ND		250	224.4		ug/L		90	50 - 150	0	15
Methylene Chloride	0.690	J	50.0	51.17		ug/L		101	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	214.8		ug/L		86	50 - 147	0	17
m-Xylene & p-Xylene	ND		50.0	50.06		ug/L		100	80 - 153	1	16
o-Xylene	ND		50.0	49.20		ug/L		98	74 - 138	2	14
Styrene	ND		50.0	50.39		ug/L		101	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	50.63		ug/L		101	73 - 141	3	16
Tetrachloroethene	105		50.0	167.2		ug/L		125	72 - 145	1	16
Toluene	ND		50.0	50.81		ug/L		102	75 - 136	1	15
trans-1,2-Dichloroethene	0.424	J	50.0	52.60		ug/L		104	66 - 143	0	16
trans-1,3-Dichloropropene	ND		50.0	48.28		ug/L		97	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	51.06		ug/L		102	60 - 140	3	30
1,1,1-Trichloroethane	ND		50.0	53.16		ug/L		106	76 - 149	0	17
1,1,2-Trichloroethane	ND		50.0	44.24		ug/L		88	74 - 134	0	15
Trichloroethene	132		50.0	185.1		ug/L		107	73 - 144	1	17
Vinyl chloride	1.60		50.0	54.95		ug/L		107	56 - 129	0	17
Xylenes, Total	ND		100	99.25		ug/L		99	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66105-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-206217/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/14/14 11:59	11/15/14 17:19	1
Manganese	ND		0.0150	0.00500	mg/L		11/14/14 11:59	11/15/14 17:19	1

Lab Sample ID: LCS 490-206217/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.04980		mg/L		100	80 - 120
Manganese	0.500	0.5198		mg/L		104	80 - 120

Lab Sample ID: 490-66105-1 MS — **Client Sample ID: S1S**
Matrix: Ground Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.210		0.0500	0.2723	4	mg/L		126	75 - 125
Manganese	8.29		0.500	8.822	4	mg/L		107	75 - 125

Lab Sample ID: 490-66105-1 MSD — **Client Sample ID: S1S**
Matrix: Ground Water — **Prep Type: Total/NA**
Analysis Batch: 206672 — **Prep Batch: 206217**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.210		0.0500	0.2712	4	mg/L		123	75 - 125	0	20
Manganese	8.29		0.500	8.860	4	mg/L		115	75 - 125	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66105-1

GC/MS VOA

Analysis Batch: 207339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66105-1	S1S	Total/NA	Ground Water	8260B	
490-66105-1 MS	S1S	Total/NA	Ground Water	8260B	
490-66105-1 MSD	S1S	Total/NA	Ground Water	8260B	
LCS 490-207339/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-207339/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-207339/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 207677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66105-1 - DL	S1S	Total/NA	Ground Water	8260B	
490-66330-B-2 MS	Matrix Spike	Total/NA	Water	8260B	
490-66330-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-207677/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-207677/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-207677/7	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 206217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66105-1	S1S	Total/NA	Ground Water	3010A	
490-66105-1 MS	S1S	Total/NA	Ground Water	3010A	
490-66105-1 MSD	S1S	Total/NA	Ground Water	3010A	
LCS 490-206217/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-206217/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 206672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66105-1	S1S	Total/NA	Ground Water	6010B	206217
490-66105-1 MS	S1S	Total/NA	Ground Water	6010B	206217
490-66105-1 MSD	S1S	Total/NA	Ground Water	6010B	206217
LCS 490-206217/2-A	Lab Control Sample	Total/NA	Water	6010B	206217
MB 490-206217/1-A	Method Blank	Total/NA	Water	6010B	206217

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66105-1

Client Sample ID: S1S

Date Collected: 11/11/14 14:00
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66105-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207339	11/19/14 16:08	EML	TAL NSH
Total/NA	Analysis	8260B	DL	20	10 mL	10 mL	207677	11/20/14 21:01	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206217	11/14/14 11:59	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	206672	11/15/14 17:27	LTB	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66105-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66105-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-66105 Chain of Custody

Cooler Received/Opened On : 11/12/2014 @ 0820

1. Tracking # 7705 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 18290455

2. Temperature of rep. sample or temp blank when opened: 3.0 *Degrees Celsius*

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

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

   If yes, how many and where: 1 Front

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

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

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

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

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

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

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

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

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

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

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

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

14. Was there a Trip Blank in this cooler? YES...NO...NA (mdm 11/12/14) If multiple coolers, sequence #_____

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
66105

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

11/25/2014

Client Information
Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone: 717-645-6179
Email: chuck.castelluccio@arcadis-us.com
Project Name: Tibbetts Road Site E101274
Site:

Sampler: MK, JB, JM
Phone: 717-645-6179
Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Due Date Requested:
TAT Requested (days): standard
PO #: Purchase Order Requested
WO #:
Lab Project #: 49002494
Client Project #:

FORD Site E101274
Page: 1/1
Job #:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - (MOD) 6010B As and Mn	8260B_LL - (MOD) New Hampshire Volatiles List	Total Number of containers	Special Instructions/Note:
			Preservation Code				D	A		
S15 *	11/11/14	1400	G	GW	N	Y	X	X	12	* MS/MSD

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)
Other:

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/11/14 1645	ARCADIS	[signature]	11-12-14 @ 0820	TAN

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 3.0c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-66105-1

Login Number: 66105

List Number: 1

Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-66109-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
11/25/2014 4:43:06 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-66109-1	MW-307S (80-90)	Water	11/11/14 09:55	11/12/14 08:20
490-66109-2	MW-307S (172-187)	Water	11/11/14 11:05	11/12/14 08:20
490-66109-3	MW-303 (55-65)	Water	11/11/14 09:55	11/12/14 08:20
490-66109-4	MW-307D (200-210)	Water	11/11/14 14:00	11/12/14 08:20
490-66109-5	MW-303 (115-125)	Water	11/11/14 11:10	11/12/14 08:20
490-66109-6	106R	Water	11/11/14 09:55	11/12/14 08:20
490-66109-7	201R	Water	11/11/14 11:05	11/12/14 08:20
490-66109-8	61R (183-198)	Water	11/11/14 13:50	11/12/14 08:20
490-66109-9	61R (75-90)	Water	11/11/14 14:55	11/12/14 08:20
490-66109-10	EW-10S	Water	11/11/14 15:30	11/12/14 08:20
490-66109-11	405R	Water	11/11/14 16:30	11/12/14 08:20
490-66109-12	205R	Water	11/11/14 15:30	11/12/14 08:20
490-66109-13	Trip Blank	Water	11/11/14 00:01	11/12/14 08:20

Job ID: 490-66109-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-66109-1

Comments
No additional comments.

Receipt
The samples were received on 11/12/2014 8:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.0º C.

GC/MS VOA
Method(s) 8260B: Surrogate recovery for the following sample(s) was outside control limits: EW-10S (490-66109-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260B: The method blank for batch 207677 contained toluene 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 was not performed.

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

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

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery 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.
B	Compound was found in the blank and sample.
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: MW-307S (80-90)

Date Collected: 11/11/14 09:55
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66109-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 17:06	1
Benzene	**1.51**		0.500	0.200	ug/L			11/20/14 17:06	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 17:06	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 17:06	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 17:06	1
Carbon disulfide	**2.40**		0.500	0.220	ug/L			11/20/14 17:06	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 17:06	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 17:06	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 17:06	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 17:06	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 17:06	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 17:06	1
cis-1,2-Dichloroethene	**9.69**		0.500	0.210	ug/L			11/20/14 17:06	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 17:06	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 17:06	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 17:06	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 17:06	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 17:06	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 17:06	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 17:06	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 17:06	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 17:06	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 17:06	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 17:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 17:06	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 17:06	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 17:06	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 17:06	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 17:06	1
Tetrachloroethene	**0.222**	**J**	0.500	0.140	ug/L			11/20/14 17:06	1
Toluene	**0.197**	**J B**	0.500	0.170	ug/L			11/20/14 17:06	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 17:06	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 17:06	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 17:06	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 17:06	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 17:06	1
Trichloroethene	**7.47**		0.500	0.200	ug/L			11/20/14 17:06	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 17:06	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*		*11/20/14 17:06*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*11/20/14 17:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*11/20/14 17:06*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/20/14 17:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00800**	**J**	0.0100	0.00720	mg/L		11/16/14 15:51	11/18/14 14:16	1
Manganese	**1.30**		0.0150	0.00500	mg/L		11/16/14 15:51	11/18/14 14:16	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: MW-307S (172-187)

Lab Sample ID: 490-66109-2

Date Collected: 11/11/14 11:05
Date Received: 11/12/14 08:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/19/14 17:00	1
Benzene	ND		0.500	0.200	ug/L			11/19/14 17:00	1
Bromoform	ND		0.500	0.290	ug/L			11/19/14 17:00	1
Bromomethane	ND		0.500	0.350	ug/L			11/19/14 17:00	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/19/14 17:00	1
Carbon disulfide	**2.87**		0.500	0.220	ug/L			11/19/14 17:00	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/19/14 17:00	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/19/14 17:00	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/19/14 17:00	1
Chloroethane	ND		0.500	0.360	ug/L			11/19/14 17:00	1
Chloroform	ND		0.500	0.230	ug/L			11/19/14 17:00	1
Chloromethane	ND		0.500	0.360	ug/L			11/19/14 17:00	1
cis-1,2-Dichloroethene	**4.52**		0.500	0.210	ug/L			11/19/14 17:00	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 17:00	1
Dibromomethane	ND		0.500	0.450	ug/L			11/19/14 17:00	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/19/14 17:00	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/19/14 17:00	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/19/14 17:00	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/19/14 17:00	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/19/14 17:00	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/19/14 17:00	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/19/14 17:00	1
2-Hexanone	ND		5.00	1.28	ug/L			11/19/14 17:00	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/19/14 17:00	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/19/14 17:00	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/19/14 17:00	1
o-Xylene	ND		0.500	0.200	ug/L			11/19/14 17:00	1
Styrene	ND		0.500	0.280	ug/L			11/19/14 17:00	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/19/14 17:00	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/19/14 17:00	1
Toluene	ND		0.500	0.170	ug/L			11/19/14 17:00	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/19/14 17:00	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 17:00	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/19/14 17:00	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 17:00	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 17:00	1
Trichloroethene	**1.28**		0.500	0.200	ug/L			11/19/14 17:00	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/19/14 17:00	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/19/14 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*11/19/14 17:00*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/19/14 17:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*11/19/14 17:00*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/19/14 17:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00790**	**J**	0.0100	0.00720	mg/L		11/16/14 15:51	11/18/14 14:20	1
Manganese	**0.227**		0.0150	0.00500	mg/L		11/16/14 15:51	11/18/14 14:20	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: MW-303 (55-65)

Lab Sample ID: 490-66109-3

Date Collected: 11/11/14 09:55
Date Received: 11/12/14 08:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/19/14 17:26	1
Benzene	**2.05**		0.500	0.200	ug/L			11/19/14 17:26	1
Bromoform	ND		0.500	0.290	ug/L			11/19/14 17:26	1
Bromomethane	ND		0.500	0.350	ug/L			11/19/14 17:26	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/19/14 17:26	1
Carbon disulfide	**2.50**		0.500	0.220	ug/L			11/19/14 17:26	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/19/14 17:26	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/19/14 17:26	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/19/14 17:26	1
Chloroethane	ND		0.500	0.360	ug/L			11/19/14 17:26	1
Chloroform	ND		0.500	0.230	ug/L			11/19/14 17:26	1
Chloromethane	ND		0.500	0.360	ug/L			11/19/14 17:26	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/19/14 17:26	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 17:26	1
Dibromomethane	ND		0.500	0.450	ug/L			11/19/14 17:26	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/19/14 17:26	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/19/14 17:26	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/19/14 17:26	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/19/14 17:26	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/19/14 17:26	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/19/14 17:26	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/19/14 17:26	1
2-Hexanone	ND		5.00	1.28	ug/L			11/19/14 17:26	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/19/14 17:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/19/14 17:26	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/19/14 17:26	1
o-Xylene	ND		0.500	0.200	ug/L			11/19/14 17:26	1
Styrene	ND		0.500	0.280	ug/L			11/19/14 17:26	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/19/14 17:26	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/19/14 17:26	1
Toluene	ND		0.500	0.170	ug/L			11/19/14 17:26	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/19/14 17:26	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 17:26	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/19/14 17:26	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 17:26	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 17:26	1
Trichloroethene	ND		0.500	0.200	ug/L			11/19/14 17:26	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/19/14 17:26	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/19/14 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*		*11/19/14 17:26*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/19/14 17:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*11/19/14 17:26*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*11/19/14 17:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0244**		0.0100	0.00720	mg/L		11/16/14 15:51	11/18/14 14:24	1
Manganese	**0.0413**		0.0150	0.00500	mg/L		11/16/14 15:51	11/18/14 14:24	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: MW-307D (200-210)

Lab Sample ID: 490-66109-4

Date Collected: 11/11/14 14:00
Date Received: 11/12/14 08:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 07:21	1
Benzene	**0.400**	**J**	0.500	0.200	ug/L			11/20/14 07:21	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 07:21	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 07:21	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 07:21	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 07:21	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 07:21	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 07:21	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 07:21	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 07:21	1
Chloroform	**0.457**	**J**	0.500	0.230	ug/L			11/20/14 07:21	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 07:21	1
cis-1,2-Dichloroethene	**25.9**		0.500	0.210	ug/L			11/20/14 07:21	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 07:21	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 07:21	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 07:21	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 07:21	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 07:21	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 07:21	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 07:21	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 07:21	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 07:21	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 07:21	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 07:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 07:21	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 07:21	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 07:21	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 07:21	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 07:21	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 07:21	1
Toluene	**0.981**		0.500	0.170	ug/L			11/20/14 07:21	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 07:21	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 07:21	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 07:21	1
1,1,1-Trichloroethane	**0.320**	**J**	0.500	0.190	ug/L			11/20/14 07:21	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 07:21	1
Trichloroethene	**5.41**		0.500	0.200	ug/L			11/20/14 07:21	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 07:21	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 07:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/20/14 07:21*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/20/14 07:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*11/20/14 07:21*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/20/14 07:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/16/14 15:51	11/18/14 14:27	1
Manganese	**0.0473**		0.0150	0.00500	mg/L		11/16/14 15:51	11/18/14 14:27	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: MW-303 (115-125)

Lab Sample ID: 490-66109-5

Date Collected: 11/11/14 11:10
Date Received: 11/12/14 08:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 07:47	1
Benzene	**0.522**		0.500	0.200	ug/L			11/20/14 07:47	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 07:47	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 07:47	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 07:47	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 07:47	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 07:47	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 07:47	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 07:47	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 07:47	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 07:47	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 07:47	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 07:47	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 07:47	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 07:47	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 07:47	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 07:47	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 07:47	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 07:47	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 07:47	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 07:47	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 07:47	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 07:47	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 07:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 07:47	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 07:47	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 07:47	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 07:47	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 07:47	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 07:47	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 07:47	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 07:47	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 07:47	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 07:47	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 07:47	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 07:47	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 07:47	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 07:47	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 07:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/20/14 07:47*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/20/14 07:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*11/20/14 07:47*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*11/20/14 07:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0162**		0.0100	0.00720	mg/L		11/16/14 15:51	11/18/14 14:31	1
Manganese	**0.0639**		0.0150	0.00500	mg/L		11/16/14 15:51	11/18/14 14:31	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: 106R

Date Collected: 11/11/14 09:55
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66109-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 08:13	1
Benzene	**4.80**		0.500	0.200	ug/L			11/20/14 08:13	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 08:13	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 08:13	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 08:13	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 08:13	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 08:13	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 08:13	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 08:13	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 08:13	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 08:13	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 08:13	1
cis-1,2-Dichloroethene	**0.963**		0.500	0.210	ug/L			11/20/14 08:13	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 08:13	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 08:13	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 08:13	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 08:13	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 08:13	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 08:13	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 08:13	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 08:13	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 08:13	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 08:13	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 08:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 08:13	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 08:13	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 08:13	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 08:13	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 08:13	1
Tetrachloroethene	**0.252**	**J**	0.500	0.140	ug/L			11/20/14 08:13	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 08:13	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 08:13	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 08:13	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 08:13	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 08:13	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 08:13	1
Trichloroethene	**0.824**		0.500	0.200	ug/L			11/20/14 08:13	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 08:13	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 08:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*11/20/14 08:13*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/20/14 08:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*11/20/14 08:13*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*11/20/14 08:13*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/16/14 15:51	11/18/14 14:35	1
Manganese	**0.0268**		0.0150	0.00500	mg/L		11/16/14 15:51	11/18/14 14:35	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: 201R

Date Collected: 11/11/14 11:05
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66109-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 08:39	1
Benzene	**2.74**		0.500	0.200	ug/L			11/20/14 08:39	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 08:39	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 08:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 08:39	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 08:39	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 08:39	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 08:39	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 08:39	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 08:39	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 08:39	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 08:39	1
cis-1,2-Dichloroethene	**24.4**		0.500	0.210	ug/L			11/20/14 08:39	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 08:39	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 08:39	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 08:39	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 08:39	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 08:39	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 08:39	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 08:39	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 08:39	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 08:39	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 08:39	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 08:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 08:39	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 08:39	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 08:39	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 08:39	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 08:39	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 08:39	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 08:39	1
trans-1,2-Dichloroethene	**2.09**		0.500	0.230	ug/L			11/20/14 08:39	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 08:39	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 08:39	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 08:39	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 08:39	1
Trichloroethene	**0.558**		0.500	0.200	ug/L			11/20/14 08:39	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 08:39	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 08:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/20/14 08:39*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*11/20/14 08:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/20/14 08:39*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/20/14 08:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/16/14 15:51	11/18/14 14:49	1
Manganese	**0.680**		0.0150	0.00500	mg/L		11/16/14 15:51	11/18/14 14:49	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: 61R (183-198)

Date Collected: 11/11/14 13:50
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66109-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 09:05	1
Benzene	**1.60**		0.500	0.200	ug/L			11/20/14 09:05	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 09:05	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 09:05	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 09:05	1
Carbon disulfide	**0.337**	**J**	0.500	0.220	ug/L			11/20/14 09:05	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 09:05	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 09:05	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 09:05	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 09:05	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 09:05	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 09:05	1
cis-1,2-Dichloroethene	**13.4**		0.500	0.210	ug/L			11/20/14 09:05	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 09:05	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 09:05	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 09:05	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 09:05	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 09:05	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 09:05	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 09:05	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 09:05	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 09:05	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 09:05	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 09:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 09:05	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 09:05	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 09:05	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 09:05	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 09:05	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 09:05	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 09:05	1
trans-1,2-Dichloroethene	**11.4**		0.500	0.230	ug/L			11/20/14 09:05	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 09:05	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 09:05	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 09:05	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 09:05	1
Trichloroethene	**15.6**		0.500	0.200	ug/L			11/20/14 09:05	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 09:05	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 09:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/20/14 09:05*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/20/14 09:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/20/14 09:05*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*11/20/14 09:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0144**		0.0100	0.00720	mg/L		11/16/14 15:51	11/18/14 14:53	1
Manganese	**0.146**		0.0150	0.00500	mg/L		11/16/14 15:51	11/18/14 14:53	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: 61R (75-90)

Date Collected: 11/11/14 14:55
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66109-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 09:31	1
Benzene	**0.640**		0.500	0.200	ug/L			11/20/14 09:31	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 09:31	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 09:31	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 09:31	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 09:31	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 09:31	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 09:31	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 09:31	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 09:31	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 09:31	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 09:31	1
cis-1,2-Dichloroethene	**3.77**		0.500	0.210	ug/L			11/20/14 09:31	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 09:31	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 09:31	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 09:31	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 09:31	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 09:31	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 09:31	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 09:31	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 09:31	1
Ethylbenzene	**0.217**	**J**	0.500	0.190	ug/L			11/20/14 09:31	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 09:31	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 09:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 09:31	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 09:31	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 09:31	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 09:31	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 09:31	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 09:31	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 09:31	1
trans-1,2-Dichloroethene	**0.661**		0.500	0.230	ug/L			11/20/14 09:31	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 09:31	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 09:31	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 09:31	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 09:31	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 09:31	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 09:31	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 09:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/20/14 09:31*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/20/14 09:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/20/14 09:31*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*11/20/14 09:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0127**		0.0100	0.00720	mg/L		11/17/14 14:21	11/19/14 15:56	1
Manganese	ND		0.0150	0.00500	mg/L		11/17/14 14:21	11/19/14 15:56	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: EW-10S

Date Collected: 11/11/14 15:30
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66109-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 09:57	1
Benzene	**1.17**		0.500	0.200	ug/L			11/20/14 09:57	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 09:57	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 09:57	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 09:57	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 09:57	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 09:57	1
Chlorobenzene	**0.824**		0.500	0.180	ug/L			11/20/14 09:57	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 09:57	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 09:57	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 09:57	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 09:57	1
cis-1,2-Dichloroethene	**0.242**	**J**	0.500	0.210	ug/L			11/20/14 09:57	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 09:57	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 09:57	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 09:57	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 09:57	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 09:57	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 09:57	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 09:57	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 09:57	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 09:57	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 09:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 09:57	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 09:57	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 09:57	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 09:57	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 09:57	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 09:57	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 09:57	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 09:57	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 09:57	1
Trichloroethene	**12.9**		0.500	0.200	ug/L			11/20/14 09:57	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 09:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/20/14 09:57*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/20/14 09:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*11/20/14 09:57*	*1*
Toluene-d8 (Surr)	*57*	*X*	*70 - 130*		*11/20/14 09:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	**2340**		10.0	3.80	ug/L			11/20/14 21:27	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/20/14 21:27*	*20*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/20/14 21:27*	*20*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*11/20/14 21:27*	*20*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/20/14 21:27*	*20*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: EW-10S

Date Collected: 11/11/14 15:30
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66109-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	8420		100	76.0	ug/L			11/20/14 21:53	200
o-Xylene	4520		100	40.0	ug/L			11/20/14 21:53	200
Toluene	31400	B	100	34.0	ug/L			11/20/14 21:53	200
Xylenes, Total	12900		300	116	ug/L			11/20/14 21:53	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*11/20/14 21:53*	*200*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/20/14 21:53*	*200*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/20/14 21:53*	*200*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/20/14 21:53*	*200*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.127		0.0100	0.00720	mg/L		11/17/14 14:21	11/19/14 16:00	1
Manganese	14.0		0.0750	0.0250	mg/L		11/17/14 14:21	11/21/14 20:28	5

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: 405R

Date Collected: 11/11/14 16:30
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66109-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 15:48	1
Benzene	**44.8**		0.500	0.200	ug/L			11/20/14 15:48	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 15:48	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 15:48	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 15:48	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 15:48	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 15:48	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 15:48	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 15:48	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 15:48	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 15:48	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 15:48	1
cis-1,2-Dichloroethene	**20.5**		0.500	0.210	ug/L			11/20/14 15:48	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 15:48	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 15:48	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 15:48	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 15:48	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 15:48	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 15:48	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 15:48	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 15:48	1
Ethylbenzene	**11.2**		0.500	0.190	ug/L			11/20/14 15:48	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 15:48	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 15:48	1
4-Methyl-2-pentanone (MIBK)	**16.0**		5.00	0.810	ug/L			11/20/14 15:48	1
m-Xylene & p-Xylene	**7.58**		0.500	0.380	ug/L			11/20/14 15:48	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 15:48	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 15:48	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 15:48	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 15:48	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 15:48	1
trans-1,2-Dichloroethene	**3.07**		0.500	0.230	ug/L			11/20/14 15:48	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 15:48	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 15:48	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 15:48	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 15:48	1
Trichloroethene	**1.98**		0.500	0.200	ug/L			11/20/14 15:48	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 15:48	1
Xylenes, Total	**7.73**		1.50	0.580	ug/L			11/20/14 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/20/14 15:48*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/20/14 15:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*11/20/14 15:48*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*11/20/14 15:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0408**		0.0100	0.00720	mg/L		11/17/14 14:21	11/19/14 16:03	1
Manganese	**0.707**		0.0150	0.00500	mg/L		11/17/14 14:21	11/19/14 16:03	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: 205R

Date Collected: 11/11/14 15:30
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66109-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 16:14	1
Benzene	**44.8**		0.500	0.200	ug/L			11/20/14 16:14	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 16:14	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 16:14	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 16:14	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 16:14	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 16:14	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 16:14	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 16:14	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 16:14	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 16:14	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 16:14	1
cis-1,2-Dichloroethene	**20.5**		0.500	0.210	ug/L			11/20/14 16:14	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 16:14	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 16:14	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 16:14	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 16:14	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 16:14	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 16:14	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 16:14	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 16:14	1
Ethylbenzene	**11.5**		0.500	0.190	ug/L			11/20/14 16:14	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 16:14	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 16:14	1
4-Methyl-2-pentanone (MIBK)	**16.2**		5.00	0.810	ug/L			11/20/14 16:14	1
m-Xylene & p-Xylene	**7.66**		0.500	0.380	ug/L			11/20/14 16:14	1
o-Xylene	**0.204**	**J**	0.500	0.200	ug/L			11/20/14 16:14	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 16:14	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 16:14	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 16:14	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 16:14	1
trans-1,2-Dichloroethene	**3.18**		0.500	0.230	ug/L			11/20/14 16:14	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 16:14	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 16:14	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 16:14	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 16:14	1
Trichloroethene	**1.90**		0.500	0.200	ug/L			11/20/14 16:14	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 16:14	1
Xylenes, Total	**7.87**		1.50	0.580	ug/L			11/20/14 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/20/14 16:14*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/20/14 16:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*11/20/14 16:14*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*11/20/14 16:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0339**		0.0100	0.00720	mg/L		11/17/14 14:21	11/19/14 16:06	1
Manganese	**0.664**		0.0150	0.00500	mg/L		11/17/14 14:21	11/19/14 16:06	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: Trip Blank

Date Collected: 11/11/14 00:01
Date Received: 11/12/14 08:20

Lab Sample ID: 490-66109-13

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/19/14 15:42	1
Benzene	ND		0.500	0.200	ug/L			11/19/14 15:42	1
Bromoform	ND		0.500	0.290	ug/L			11/19/14 15:42	1
Bromomethane	ND		0.500	0.350	ug/L			11/19/14 15:42	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/19/14 15:42	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/19/14 15:42	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/19/14 15:42	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/19/14 15:42	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/19/14 15:42	1
Chloroethane	ND		0.500	0.360	ug/L			11/19/14 15:42	1
Chloroform	ND		0.500	0.230	ug/L			11/19/14 15:42	1
Chloromethane	ND		0.500	0.360	ug/L			11/19/14 15:42	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/19/14 15:42	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 15:42	1
Dibromomethane	ND		0.500	0.450	ug/L			11/19/14 15:42	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/19/14 15:42	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/19/14 15:42	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/19/14 15:42	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/19/14 15:42	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/19/14 15:42	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/19/14 15:42	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/19/14 15:42	1
2-Hexanone	ND		5.00	1.28	ug/L			11/19/14 15:42	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/19/14 15:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/19/14 15:42	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/19/14 15:42	1
o-Xylene	ND		0.500	0.200	ug/L			11/19/14 15:42	1
Styrene	ND		0.500	0.280	ug/L			11/19/14 15:42	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/19/14 15:42	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/19/14 15:42	1
Toluene	ND		0.500	0.170	ug/L			11/19/14 15:42	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/19/14 15:42	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 15:42	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/19/14 15:42	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 15:42	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 15:42	1
Trichloroethene	ND		0.500	0.200	ug/L			11/19/14 15:42	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/19/14 15:42	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/19/14 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/19/14 15:42*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/19/14 15:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*11/19/14 15:42*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*11/19/14 15:42*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-207339/7
Matrix: Water
Analysis Batch: 207339

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/19/14 13:51	1
Benzene	ND		0.500	0.200	ug/L			11/19/14 13:51	1
Bromoform	ND		0.500	0.290	ug/L			11/19/14 13:51	1
Bromomethane	ND		0.500	0.350	ug/L			11/19/14 13:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/19/14 13:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/19/14 13:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/19/14 13:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/19/14 13:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/19/14 13:51	1
Chloroethane	ND		0.500	0.360	ug/L			11/19/14 13:51	1
Chloroform	ND		0.500	0.230	ug/L			11/19/14 13:51	1
Chloromethane	ND		0.500	0.360	ug/L			11/19/14 13:51	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/19/14 13:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 13:51	1
Dibromomethane	ND		0.500	0.450	ug/L			11/19/14 13:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/19/14 13:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/19/14 13:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/19/14 13:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/19/14 13:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/19/14 13:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/19/14 13:51	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/19/14 13:51	1
2-Hexanone	ND		5.00	1.28	ug/L			11/19/14 13:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/19/14 13:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/19/14 13:51	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/19/14 13:51	1
o-Xylene	ND		0.500	0.200	ug/L			11/19/14 13:51	1
Styrene	ND		0.500	0.280	ug/L			11/19/14 13:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/19/14 13:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/19/14 13:51	1
Toluene	ND		0.500	0.170	ug/L			11/19/14 13:51	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/19/14 13:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/19/14 13:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/19/14 13:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 13:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/19/14 13:51	1
Trichloroethene	ND		0.500	0.200	ug/L			11/19/14 13:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/19/14 13:51	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/19/14 13:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/19/14 13:51*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/19/14 13:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*11/19/14 13:51*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/19/14 13:51*	*1*

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

Lab Sample ID: LCS 490-207339/3
Matrix: Water
Analysis Batch: 207339

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	226.5		ug/L		91	54 - 145
Benzene	50.0	49.22		ug/L		98	80 - 121
Bromoform	50.0	48.67		ug/L		97	46 - 145
Bromomethane	50.0	56.42		ug/L		113	41 - 150
2-Butanone (MEK)	250	220.7		ug/L		88	62 - 133
Carbon disulfide	50.0	61.01		ug/L		122	77 - 126
Carbon tetrachloride	50.0	51.43		ug/L		103	64 - 147
Chlorobenzene	50.0	49.88		ug/L		100	80 - 120
Chlorodibromomethane	50.0	50.99		ug/L		102	69 - 133
Chloroethane	50.0	51.40		ug/L		103	72 - 120
Chloroform	50.0	47.82		ug/L		96	73 - 129
Chloromethane	50.0	50.02		ug/L		100	12 - 150
cis-1,2-Dichloroethene	50.0	50.68		ug/L		101	76 - 125
cis-1,3-Dichloropropene	50.0	50.84		ug/L		102	74 - 140
Dibromomethane	50.0	46.45		ug/L		93	71 - 125
Dichlorobromomethane	50.0	47.02		ug/L		94	75 - 129
1,1-Dichloroethane	50.0	50.80		ug/L		102	78 - 125
1,2-Dichloroethane	50.0	49.95		ug/L		100	77 - 121
1,1-Dichloroethene	50.0	51.54		ug/L		103	79 - 124
1,2-Dichloropropane	50.0	49.73		ug/L		99	75 - 120
1,1-Dichloropropene	50.0	51.95		ug/L		104	80 - 122
Ethylbenzene	50.0	49.22		ug/L		98	80 - 130
2-Hexanone	250	243.3		ug/L		97	60 - 142
Methylene Chloride	50.0	50.40		ug/L		101	79 - 123
4-Methyl-2-pentanone (MIBK)	250	228.2		ug/L		91	60 - 137
m-Xylene & p-Xylene	50.0	49.01		ug/L		98	80 - 141
o-Xylene	50.0	48.37		ug/L		97	80 - 127
Styrene	50.0	50.24		ug/L		100	80 - 127
1,1,1,2-Tetrachloroethane	50.0	49.10		ug/L		98	74 - 135
Tetrachloroethene	50.0	52.85		ug/L		106	80 - 126
Toluene	50.0	50.02		ug/L		100	80 - 126
trans-1,2-Dichloroethene	50.0	51.84		ug/L		104	79 - 126
trans-1,3-Dichloropropene	50.0	49.19		ug/L		98	63 - 134
1,3,5-Trichlorobenzene	50.0	53.52		ug/L		107	70 - 130
1,1,1-Trichloroethane	50.0	49.34		ug/L		99	78 - 135
1,1,2-Trichloroethane	50.0	44.97		ug/L		90	80 - 124
Trichloroethene	50.0	50.16		ug/L		100	80 - 123
Vinyl chloride	50.0	55.16		ug/L		110	68 - 120
Xylenes, Total	100	97.38		ug/L		97	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: LCSD 490-207339/4
Matrix: Water
Analysis Batch: 207339

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
Acetone	250	220.3		ug/L		88	54 - 145	3	21
Benzene	50.0	48.51		ug/L		97	80 - 121	1	17
Bromoform	50.0	47.28		ug/L		95	46 - 145	3	16
Bromomethane	50.0	57.24		ug/L		114	41 - 150	1	50
2-Butanone (MEK)	250	219.5		ug/L		88	62 - 133	1	19
Carbon disulfide	50.0	59.12		ug/L		118	77 - 126	3	21
Carbon tetrachloride	50.0	49.63		ug/L		99	64 - 147	4	19
Chlorobenzene	50.0	48.85		ug/L		98	80 - 120	2	14
Chlorodibromomethane	50.0	49.88		ug/L		100	69 - 133	2	15
Chloroethane	50.0	51.40		ug/L		103	72 - 120	0	20
Chloroform	50.0	46.55		ug/L		93	73 - 129	3	18
Chloromethane	50.0	49.64		ug/L		99	12 - 150	1	31
cis-1,2-Dichloroethene	50.0	49.94		ug/L		100	76 - 125	1	17
cis-1,3-Dichloropropene	50.0	49.98		ug/L		100	74 - 140	2	15
Dibromomethane	50.0	44.73		ug/L		89	71 - 125	4	16
Dichlorobromomethane	50.0	45.85		ug/L		92	75 - 129	3	18
1,1-Dichloroethane	50.0	50.24		ug/L		100	78 - 125	1	17
1,2-Dichloroethane	50.0	47.92		ug/L		96	77 - 121	4	17
1,1-Dichloroethene	50.0	50.14		ug/L		100	79 - 124	3	17
1,2-Dichloropropane	50.0	47.93		ug/L		96	75 - 120	4	17
1,1-Dichloropropene	50.0	50.86		ug/L		102	80 - 122	2	17
Ethylbenzene	50.0	48.36		ug/L		97	80 - 130	2	15
2-Hexanone	250	236.9		ug/L		95	60 - 142	3	15
Methylene Chloride	50.0	50.12		ug/L		100	79 - 123	1	17
4-Methyl-2-pentanone (MIBK)	250	220.1		ug/L		88	60 - 137	4	17
m-Xylene & p-Xylene	50.0	47.89		ug/L		96	80 - 141	2	16
o-Xylene	50.0	46.48		ug/L		93	80 - 127	4	14
Styrene	50.0	49.19		ug/L		98	80 - 127	2	24
1,1,1,2-Tetrachloroethane	50.0	48.05		ug/L		96	74 - 135	2	16
Tetrachloroethene	50.0	51.83		ug/L		104	80 - 126	2	16
Toluene	50.0	48.14		ug/L		96	80 - 126	4	15
trans-1,2-Dichloroethene	50.0	50.54		ug/L		101	79 - 126	3	16
trans-1,3-Dichloropropene	50.0	48.09		ug/L		96	63 - 134	2	14
1,3,5-Trichlorobenzene	50.0	51.64		ug/L		103	70 - 130	4	30
1,1,1-Trichloroethane	50.0	47.90		ug/L		96	78 - 135	3	17
1,1,2-Trichloroethane	50.0	43.49		ug/L		87	80 - 124	3	15
Trichloroethene	50.0	49.05		ug/L		98	80 - 123	2	17
Vinyl chloride	50.0	53.96		ug/L		108	68 - 120	2	17
Xylenes, Total	100	94.37		ug/L		94	80 - 132	3	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-66105-A-1 MS
Matrix: Water
Analysis Batch: 207339

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	207.8		ug/L		83	45 - 141
Benzene	0.339	J	50.0	49.02		ug/L		97	75 - 133
Bromoform	ND		50.0	50.94		ug/L		102	42 - 147
Bromomethane	ND		50.0	35.90		ug/L		72	16 - 163
2-Butanone (MEK)	ND		250	212.1		ug/L		85	50 - 138
Carbon disulfide	ND		50.0	52.88		ug/L		106	48 - 152
Carbon tetrachloride	ND		50.0	52.70		ug/L		105	62 - 164
Chlorobenzene	ND		50.0	50.43		ug/L		101	80 - 129
Chlorodibromomethane	ND		50.0	51.84		ug/L		104	66 - 140
Chloroethane	ND		50.0	50.39		ug/L		101	58 - 137
Chloroform	ND		50.0	48.20		ug/L		96	66 - 138
Chloromethane	ND		50.0	44.92		ug/L		90	10 - 169
cis-1,2-Dichloroethene	ND		50.0	50.11		ug/L		100	68 - 138
cis-1,3-Dichloropropene	ND		50.0	49.66		ug/L		99	71 - 141
Dibromomethane	ND		50.0	46.28		ug/L		93	58 - 140
Dichlorobromomethane	ND		50.0	47.54		ug/L		95	70 - 140
1,1-Dichloroethane	ND		50.0	50.25		ug/L		101	71 - 139
1,2-Dichloroethane	ND		50.0	49.35		ug/L		99	64 - 136
1,1-Dichloroethene	ND		50.0	49.01		ug/L		98	70 - 142
1,2-Dichloropropane	ND		50.0	48.71		ug/L		97	67 - 131
1,1-Dichloropropene	ND		50.0	51.31		ug/L		103	76 - 139
Ethylbenzene	554	E	50.0	594.2	E 4	ug/L		80	79 - 139
2-Hexanone	ND		250	261.7		ug/L		105	50 - 150
Methylene Chloride	ND		50.0	48.84		ug/L		98	64 - 139
4-Methyl-2-pentanone (MIBK)	1.73	J	250	241.8		ug/L		96	50 - 147
m-Xylene & p-Xylene	1120	E	50.0	1204	E 4	ug/L		177	80 - 153
o-Xylene	697	E	50.0	759.4	E 4	ug/L		126	74 - 138
Styrene	ND		50.0	78.02	F1	ug/L		156	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	50.22		ug/L		100	73 - 141
Tetrachloroethene	ND		50.0	53.71		ug/L		107	72 - 145
Toluene	1.55		50.0	51.46		ug/L		100	75 - 136
trans-1,2-Dichloroethene	ND		50.0	49.70		ug/L		99	66 - 143
trans-1,3-Dichloropropene	ND		50.0	48.98		ug/L		98	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	54.36		ug/L		109	60 - 140
1,1,1-Trichloroethane	ND		50.0	50.23		ug/L		100	76 - 149
1,1,2-Trichloroethane	ND		50.0	46.77		ug/L		94	74 - 134
Trichloroethene	0.223	J	50.0	50.83		ug/L		101	73 - 144
Vinyl chloride	ND		50.0	50.83		ug/L		102	56 - 129
Xylenes, Total	1810		100	1963	4	ug/L		151	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-66105-A-1 MSD
Matrix: Water
Analysis Batch: 207339

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	194.1		ug/L		78	45 - 141	7	21
Benzene	0.339	J	50.0	49.09		ug/L		97	75 - 133	0	17
Bromoform	ND		50.0	50.14		ug/L		100	42 - 147	2	16
Bromomethane	ND		50.0	41.00		ug/L		82	16 - 163	13	50
2-Butanone (MEK)	ND		250	213.4		ug/L		85	50 - 138	1	19
Carbon disulfide	ND		50.0	53.48		ug/L		107	48 - 152	1	21
Carbon tetrachloride	ND		50.0	53.03		ug/L		106	62 - 164	1	19
Chlorobenzene	ND		50.0	50.70		ug/L		101	80 - 129	1	14
Chlorodibromomethane	ND		50.0	51.08		ug/L		102	66 - 140	1	15
Chloroethane	ND		50.0	50.19		ug/L		100	58 - 137	0	20
Chloroform	ND		50.0	48.08		ug/L		96	66 - 138	0	18
Chloromethane	ND		50.0	46.17		ug/L		92	10 - 169	3	31
cis-1,2-Dichloroethene	ND		50.0	50.62		ug/L		101	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	50.15		ug/L		100	71 - 141	1	15
Dibromomethane	ND		50.0	46.18		ug/L		92	58 - 140	0	16
Dichlorobromomethane	ND		50.0	47.95		ug/L		96	70 - 140	1	18
1,1-Dichloroethane	ND		50.0	50.22		ug/L		100	71 - 139	0	17
1,2-Dichloroethane	ND		50.0	49.12		ug/L		98	64 - 136	0	17
1,1-Dichloroethene	ND		50.0	50.48		ug/L		101	70 - 142	3	17
1,2-Dichloropropane	ND		50.0	48.84		ug/L		98	67 - 131	0	17
1,1-Dichloropropene	ND		50.0	51.94		ug/L		104	76 - 139	1	17
Ethylbenzene	554	E	50.0	613.1	E 4	ug/L		117	79 - 139	3	15
2-Hexanone	ND		250	252.6		ug/L		101	50 - 150	4	15
Methylene Chloride	ND		50.0	48.81		ug/L		98	64 - 139	0	17
4-Methyl-2-pentanone (MIBK)	1.73	J	250	243.4		ug/L		97	50 - 147	1	17
m-Xylene & p-Xylene	1120	E	50.0	1230	E 4	ug/L		229	80 - 153	2	16
o-Xylene	697	E	50.0	794.3	E 4	ug/L		195	74 - 138	4	14
Styrene	ND		50.0	80.31	F1	ug/L		161	61 - 148	3	24
1,1,1,2-Tetrachloroethane	ND		50.0	49.63		ug/L		99	73 - 141	1	16
Tetrachloroethene	ND		50.0	53.37		ug/L		107	72 - 145	1	16
Toluene	1.55		50.0	51.74		ug/L		100	75 - 136	1	15
trans-1,2-Dichloroethene	ND		50.0	49.51		ug/L		99	66 - 143	0	16
trans-1,3-Dichloropropene	ND		50.0	48.56		ug/L		97	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	55.29		ug/L		111	60 - 140	2	30
1,1,1-Trichloroethane	ND		50.0	50.13		ug/L		100	76 - 149	0	17
1,1,2-Trichloroethane	ND		50.0	46.12		ug/L		92	74 - 134	1	15
Trichloroethene	0.223	J	50.0	51.10		ug/L		102	73 - 144	1	17
Vinyl chloride	ND		50.0	52.21		ug/L		104	56 - 129	3	17
Xylenes, Total	1810		100	2024	4	ug/L		212	74 - 141	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: MB 490-207504/7
Matrix: Water
Analysis Batch: 207504

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 02:09	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 02:09	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 02:09	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 02:09	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 02:09	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 02:09	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 02:09	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 02:09	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 02:09	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 02:09	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 02:09	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 02:09	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 02:09	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 02:09	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 02:09	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 02:09	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 02:09	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 02:09	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 02:09	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 02:09	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 02:09	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 02:09	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 02:09	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 02:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 02:09	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 02:09	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 02:09	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 02:09	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 02:09	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 02:09	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 02:09	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 02:09	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 02:09	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 02:09	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 02:09	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 02:09	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 02:09	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 02:09	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 02:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/20/14 02:09*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/20/14 02:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*11/20/14 02:09*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*11/20/14 02:09*	*1*

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

Lab Sample ID: LCS 490-207504/3
Matrix: Water
Analysis Batch: 207504

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	203.3		ug/L		81	54 - 145
Benzene	50.0	48.47		ug/L		97	80 - 121
Bromoform	50.0	49.70		ug/L		99	46 - 145
Bromomethane	50.0	53.49		ug/L		107	41 - 150
2-Butanone (MEK)	250	213.0		ug/L		85	62 - 133
Carbon disulfide	50.0	59.62		ug/L		119	77 - 126
Carbon tetrachloride	50.0	50.89		ug/L		102	64 - 147
Chlorobenzene	50.0	49.35		ug/L		99	80 - 120
Chlorodibromomethane	50.0	50.48		ug/L		101	69 - 133
Chloroethane	50.0	51.10		ug/L		102	72 - 120
Chloroform	50.0	48.39		ug/L		97	73 - 129
Chloromethane	50.0	51.54		ug/L		103	12 - 150
cis-1,2-Dichloroethene	50.0	50.00		ug/L		100	76 - 125
cis-1,3-Dichloropropene	50.0	51.16		ug/L		102	74 - 140
Dibromomethane	50.0	46.76		ug/L		94	71 - 125
Dichlorobromomethane	50.0	45.56		ug/L		91	75 - 129
1,1-Dichloroethane	50.0	50.86		ug/L		102	78 - 125
1,2-Dichloroethane	50.0	49.33		ug/L		99	77 - 121
1,1-Dichloroethene	50.0	50.14		ug/L		100	79 - 124
1,2-Dichloropropane	50.0	49.08		ug/L		98	75 - 120
1,1-Dichloropropene	50.0	50.52		ug/L		101	80 - 122
Ethylbenzene	50.0	48.30		ug/L		97	80 - 130
2-Hexanone	250	227.1		ug/L		91	60 - 142
Methylene Chloride	50.0	51.07		ug/L		102	79 - 123
4-Methyl-2-pentanone (MIBK)	250	220.3		ug/L		88	60 - 137
m-Xylene & p-Xylene	50.0	48.44		ug/L		97	80 - 141
o-Xylene	50.0	48.56		ug/L		97	80 - 127
Styrene	50.0	50.22		ug/L		100	80 - 127
1,1,1,2-Tetrachloroethane	50.0	49.06		ug/L		98	74 - 135
Tetrachloroethene	50.0	50.73		ug/L		101	80 - 126
Toluene	50.0	50.86		ug/L		102	80 - 126
trans-1,2-Dichloroethene	50.0	51.83		ug/L		104	79 - 126
trans-1,3-Dichloropropene	50.0	46.93		ug/L		94	63 - 134
1,3,5-Trichlorobenzene	50.0	51.80		ug/L		104	70 - 130
1,1,1-Trichloroethane	50.0	48.50		ug/L		97	78 - 135
1,1,2-Trichloroethane	50.0	43.71		ug/L		87	80 - 124
Trichloroethene	50.0	49.55		ug/L		99	80 - 123
Vinyl chloride	50.0	54.58		ug/L		109	68 - 120
Xylenes, Total	100	97.00		ug/L		97	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

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

Lab Sample ID: LCSD 490-207504/4
Matrix: Water
Analysis Batch: 207504

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
Acetone	250	218.8		ug/L		88	54 - 145	7	21
Benzene	50.0	48.22		ug/L		96	80 - 121	1	17
Bromoform	50.0	48.05		ug/L		96	46 - 145	3	16
Bromomethane	50.0	58.71		ug/L		117	41 - 150	9	50
2-Butanone (MEK)	250	212.3		ug/L		85	62 - 133	0	19
Carbon disulfide	50.0	62.38		ug/L		125	77 - 126	5	21
Carbon tetrachloride	50.0	51.16		ug/L		102	64 - 147	1	19
Chlorobenzene	50.0	49.89		ug/L		100	80 - 120	1	14
Chlorodibromomethane	50.0	50.00		ug/L		100	69 - 133	1	15
Chloroethane	50.0	53.10		ug/L		106	72 - 120	4	20
Chloroform	50.0	49.09		ug/L		98	73 - 129	1	18
Chloromethane	50.0	51.31		ug/L		103	12 - 150	0	31
cis-1,2-Dichloroethene	50.0	51.47		ug/L		103	76 - 125	3	17
cis-1,3-Dichloropropene	50.0	49.11		ug/L		98	74 - 140	4	15
Dibromomethane	50.0	46.37		ug/L		93	71 - 125	1	16
Dichlorobromomethane	50.0	46.66		ug/L		93	75 - 129	2	18
1,1-Dichloroethane	50.0	52.48		ug/L		105	78 - 125	3	17
1,2-Dichloroethane	50.0	49.03		ug/L		98	77 - 121	1	17
1,1-Dichloroethene	50.0	51.43		ug/L		103	79 - 124	3	17
1,2-Dichloropropane	50.0	47.94		ug/L		96	75 - 120	2	17
1,1-Dichloropropene	50.0	50.20		ug/L		100	80 - 122	1	17
Ethylbenzene	50.0	49.16		ug/L		98	80 - 130	2	15
2-Hexanone	250	223.0		ug/L		89	60 - 142	2	15
Methylene Chloride	50.0	52.47		ug/L		105	79 - 123	3	17
4-Methyl-2-pentanone (MIBK)	250	213.8		ug/L		86	60 - 137	3	17
m-Xylene & p-Xylene	50.0	48.75		ug/L		98	80 - 141	1	16
o-Xylene	50.0	48.19		ug/L		96	80 - 127	1	14
Styrene	50.0	50.24		ug/L		100	80 - 127	0	24
1,1,1,2-Tetrachloroethane	50.0	48.76		ug/L		98	74 - 135	1	16
Tetrachloroethene	50.0	51.63		ug/L		103	80 - 126	2	16
Toluene	50.0	49.33		ug/L		99	80 - 126	3	15
trans-1,2-Dichloroethene	50.0	52.48		ug/L		105	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	47.50		ug/L		95	63 - 134	1	14
1,3,5-Trichlorobenzene	50.0	50.92		ug/L		102	70 - 130	2	30
1,1,1-Trichloroethane	50.0	48.55		ug/L		97	78 - 135	0	17
1,1,2-Trichloroethane	50.0	44.16		ug/L		88	80 - 124	1	15
Trichloroethene	50.0	50.16		ug/L		100	80 - 123	1	17
Vinyl chloride	50.0	56.42		ug/L		113	68 - 120	3	17
Xylenes, Total	100	96.94		ug/L		97	80 - 132	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-66109-4 MS
Matrix: Water
Analysis Batch: 207504

Client Sample ID: MW-307D (200-210)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	194.8		ug/L		78	45 - 141
Benzene	0.400	J	50.0	44.84		ug/L		89	75 - 133
Bromoform	ND		50.0	48.06		ug/L		96	42 - 147
Bromomethane	ND		50.0	30.56		ug/L		61	16 - 163
2-Butanone (MEK)	ND		250	204.7		ug/L		82	50 - 138
Carbon disulfide	ND		50.0	32.74		ug/L		65	48 - 152
Carbon tetrachloride	ND		50.0	48.46		ug/L		97	62 - 164
Chlorobenzene	ND		50.0	48.98		ug/L		98	80 - 129
Chlorodibromomethane	ND		50.0	51.52		ug/L		103	66 - 140
Chloroethane	ND		50.0	38.71		ug/L		77	58 - 137
Chloroform	0.457	J	50.0	46.45		ug/L		92	66 - 138
Chloromethane	ND		50.0	26.75		ug/L		54	10 - 169
cis-1,2-Dichloroethene	25.9		50.0	70.81		ug/L		90	68 - 138
cis-1,3-Dichloropropene	ND		50.0	51.72		ug/L		103	71 - 141
Dibromomethane	ND		50.0	44.00		ug/L		88	58 - 140
Dichlorobromomethane	ND		50.0	46.40		ug/L		93	70 - 140
1,1-Dichloroethane	ND		50.0	45.92		ug/L		92	71 - 139
1,2-Dichloroethane	ND		50.0	46.26		ug/L		93	64 - 136
1,1-Dichloroethene	ND		50.0	41.92		ug/L		84	70 - 142
1,2-Dichloropropane	ND		50.0	46.73		ug/L		93	67 - 131
1,1-Dichloropropene	ND		50.0	45.71		ug/L		91	76 - 139
Ethylbenzene	ND		50.0	49.48		ug/L		99	79 - 139
2-Hexanone	ND		250	247.8		ug/L		99	50 - 150
Methylene Chloride	ND		50.0	43.31		ug/L		87	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	235.7		ug/L		94	50 - 147
m-Xylene & p-Xylene	ND		50.0	49.35		ug/L		99	80 - 153
o-Xylene	ND		50.0	48.36		ug/L		97	74 - 138
Styrene	ND		50.0	50.00		ug/L		100	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	49.51		ug/L		99	73 - 141
Tetrachloroethene	ND		50.0	54.17		ug/L		108	72 - 145
Toluene	0.981		50.0	57.27		ug/L		113	75 - 136
trans-1,2-Dichloroethene	ND		50.0	41.11		ug/L		82	66 - 143
trans-1,3-Dichloropropene	ND		50.0	51.02		ug/L		102	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	52.03		ug/L		104	60 - 140
1,1,1-Trichloroethane	0.320	J	50.0	47.75		ug/L		95	76 - 149
1,1,2-Trichloroethane	ND		50.0	48.37		ug/L		97	74 - 134
Trichloroethene	5.41		50.0	52.53		ug/L		94	73 - 144
Vinyl chloride	ND		50.0	34.18		ug/L		68	56 - 129
Xylenes, Total	ND		100	97.71		ug/L		98	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*110*		*70 - 130*

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

Lab Sample ID: 490-66109-4 MSD
Matrix: Water
Analysis Batch: 207504

Client Sample ID: MW-307D (200-210)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	210.8		ug/L		84	45 - 141	8	21
Benzene	0.400	J	50.0	43.20		ug/L		86	75 - 133	4	17
Bromoform	ND		50.0	47.47		ug/L		95	42 - 147	1	16
Bromomethane	ND		50.0	35.46		ug/L		71	16 - 163	15	50
2-Butanone (MEK)	ND		250	187.1		ug/L		75	50 - 138	9	19
Carbon disulfide	ND		50.0	35.25		ug/L		71	48 - 152	7	21
Carbon tetrachloride	ND		50.0	46.37		ug/L		93	62 - 164	4	19
Chlorobenzene	ND		50.0	49.31		ug/L		99	80 - 129	1	14
Chlorodibromomethane	ND		50.0	50.44		ug/L		101	66 - 140	2	15
Chloroethane	ND		50.0	41.42		ug/L		83	58 - 137	7	20
Chloroform	0.457	J	50.0	43.39		ug/L		86	66 - 138	7	18
Chloromethane	ND		50.0	29.10		ug/L		58	10 - 169	8	31
cis-1,2-Dichloroethene	25.9		50.0	66.05		ug/L		80	68 - 138	7	17
cis-1,3-Dichloropropene	ND		50.0	45.82		ug/L		92	71 - 141	12	15
Dibromomethane	ND		50.0	42.67		ug/L		85	58 - 140	3	16
Dichlorobromomethane	ND		50.0	46.80		ug/L		94	70 - 140	1	18
1,1-Dichloroethane	ND		50.0	44.06		ug/L		88	71 - 139	4	17
1,2-Dichloroethane	ND		50.0	44.43		ug/L		89	64 - 136	4	17
1,1-Dichloroethene	ND		50.0	44.92		ug/L		90	70 - 142	7	17
1,2-Dichloropropane	ND		50.0	45.24		ug/L		90	67 - 131	3	17
1,1-Dichloropropene	ND		50.0	42.47		ug/L		85	76 - 139	7	17
Ethylbenzene	ND		50.0	48.44		ug/L		97	79 - 139	2	15
2-Hexanone	ND		250	222.3		ug/L		89	50 - 150	11	15
Methylene Chloride	ND		50.0	44.94		ug/L		90	64 - 139	4	17
4-Methyl-2-pentanone (MIBK)	ND		250	200.8		ug/L		80	50 - 147	16	17
m-Xylene & p-Xylene	ND		50.0	48.44		ug/L		97	80 - 153	2	16
o-Xylene	ND		50.0	47.82		ug/L		96	74 - 138	1	14
Styrene	ND		50.0	49.76		ug/L		100	61 - 148	0	24
1,1,1,2-Tetrachloroethane	ND		50.0	49.42		ug/L		99	73 - 141	0	16
Tetrachloroethene	ND		50.0	47.30		ug/L		95	72 - 145	14	16
Toluene	0.981		50.0	46.56	F2	ug/L		91	75 - 136	21	15
trans-1,2-Dichloroethene	ND		50.0	41.54		ug/L		83	66 - 143	1	16
trans-1,3-Dichloropropene	ND		50.0	44.89		ug/L		90	59 - 135	13	14
1,3,5-Trichlorobenzene	ND		50.0	50.97		ug/L		102	60 - 140	2	30
1,1,1-Trichloroethane	0.320	J	50.0	45.36		ug/L		90	76 - 149	5	17
1,1,2-Trichloroethane	ND		50.0	41.53		ug/L		83	74 - 134	15	15
Trichloroethene	5.41		50.0	50.47		ug/L		90	73 - 144	4	17
Vinyl chloride	ND		50.0	37.50		ug/L		75	56 - 129	9	17
Xylenes, Total	ND		100	96.26		ug/L		96	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 490-207677/7
Matrix: Water
Analysis Batch: 207677

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 14:04	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 14:04	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 14:04	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 14:04	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 14:04	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 14:04	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 14:04	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 14:04	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 14:04	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 14:04	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 14:04	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 14:04	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 14:04	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 14:04	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 14:04	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 14:04	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 14:04	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 14:04	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 14:04	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 14:04	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 14:04	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 14:04	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 14:04	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 14:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 14:04	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 14:04	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 14:04	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 14:04	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 14:04	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 14:04	1
Toluene	0.1833	J	0.500	0.170	ug/L			11/20/14 14:04	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 14:04	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 14:04	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 14:04	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 14:04	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 14:04	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 14:04	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 14:04	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 14:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/20/14 14:04*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/20/14 14:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/20/14 14:04*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*11/20/14 14:04*	*1*

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

Lab Sample ID: LCS 490-207677/3
Matrix: Water
Analysis Batch: 207677

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	212.3		ug/L		85	54 - 145
Benzene	50.0	46.61		ug/L		93	80 - 121
Bromoform	50.0	49.00		ug/L		98	46 - 145
Bromomethane	50.0	53.77		ug/L		108	41 - 150
2-Butanone (MEK)	250	225.1		ug/L		90	62 - 133
Carbon disulfide	50.0	53.42		ug/L		107	77 - 126
Carbon tetrachloride	50.0	48.81		ug/L		98	64 - 147
Chlorobenzene	50.0	47.38		ug/L		95	80 - 120
Chlorodibromomethane	50.0	49.82		ug/L		100	69 - 133
Chloroethane	50.0	47.94		ug/L		96	72 - 120
Chloroform	50.0	46.35		ug/L		93	73 - 129
Chloromethane	50.0	46.21		ug/L		92	12 - 150
cis-1,2-Dichloroethene	50.0	48.11		ug/L		96	76 - 125
cis-1,3-Dichloropropene	50.0	45.37		ug/L		91	74 - 140
Dibromomethane	50.0	46.24		ug/L		92	71 - 125
Dichlorobromomethane	50.0	46.11		ug/L		92	75 - 129
1,1-Dichloroethane	50.0	47.50		ug/L		95	78 - 125
1,2-Dichloroethane	50.0	48.08		ug/L		96	77 - 121
1,1-Dichloroethene	50.0	46.21		ug/L		92	79 - 124
1,2-Dichloropropane	50.0	47.10		ug/L		94	75 - 120
1,1-Dichloropropene	50.0	48.04		ug/L		96	80 - 122
Ethylbenzene	50.0	46.10		ug/L		92	80 - 130
2-Hexanone	250	234.4		ug/L		94	60 - 142
Methylene Chloride	50.0	46.91		ug/L		94	79 - 123
4-Methyl-2-pentanone (MIBK)	250	209.0		ug/L		84	60 - 137
m-Xylene & p-Xylene	50.0	45.90		ug/L		92	80 - 141
o-Xylene	50.0	45.64		ug/L		91	80 - 127
Styrene	50.0	47.57		ug/L		95	80 - 127
1,1,1,2-Tetrachloroethane	50.0	46.66		ug/L		93	74 - 135
Tetrachloroethene	50.0	47.62		ug/L		95	80 - 126
Toluene	50.0	44.20		ug/L		88	80 - 126
trans-1,2-Dichloroethene	50.0	47.21		ug/L		94	79 - 126
trans-1,3-Dichloropropene	50.0	45.19		ug/L		90	63 - 134
1,3,5-Trichlorobenzene	50.0	49.70		ug/L		99	70 - 130
1,1,1-Trichloroethane	50.0	47.52		ug/L		95	78 - 135
1,1,2-Trichloroethane	50.0	42.25		ug/L		85	80 - 124
Trichloroethene	50.0	48.28		ug/L		97	80 - 123
Vinyl chloride	50.0	48.54		ug/L		97	68 - 120
Xylenes, Total	100	91.54		ug/L		92	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*94*		*70 - 130*

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

Lab Sample ID: LCSD 490-207677/4
Matrix: Water
Analysis Batch: 207677

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
Acetone	250	213.5		ug/L		85	54 - 145	1	21
Benzene	50.0	43.90		ug/L		88	80 - 121	6	17
Bromoform	50.0	48.32		ug/L		97	46 - 145	1	16
Bromomethane	50.0	53.99		ug/L		108	41 - 150	0	50
2-Butanone (MEK)	250	207.5		ug/L		83	62 - 133	8	19
Carbon disulfide	50.0	51.83		ug/L		104	77 - 126	3	21
Carbon tetrachloride	50.0	45.66		ug/L		91	64 - 147	7	19
Chlorobenzene	50.0	46.64		ug/L		93	80 - 120	2	14
Chlorodibromomethane	50.0	49.86		ug/L		100	69 - 133	0	15
Chloroethane	50.0	45.08		ug/L		90	72 - 120	6	20
Chloroform	50.0	44.13		ug/L		88	73 - 129	5	18
Chloromethane	50.0	43.49		ug/L		87	12 - 150	6	31
cis-1,2-Dichloroethene	50.0	45.87		ug/L		92	76 - 125	5	17
cis-1,3-Dichloropropene	50.0	48.19		ug/L		96	74 - 140	6	15
Dibromomethane	50.0	44.26		ug/L		89	71 - 125	4	16
Dichlorobromomethane	50.0	43.89		ug/L		88	75 - 129	5	18
1,1-Dichloroethane	50.0	45.20		ug/L		90	78 - 125	5	17
1,2-Dichloroethane	50.0	47.00		ug/L		94	77 - 121	2	17
1,1-Dichloroethene	50.0	44.06		ug/L		88	79 - 124	5	17
1,2-Dichloropropane	50.0	44.14		ug/L		88	75 - 120	6	17
1,1-Dichloropropene	50.0	44.72		ug/L		89	80 - 122	7	17
Ethylbenzene	50.0	45.42		ug/L		91	80 - 130	1	15
2-Hexanone	250	234.7		ug/L		94	60 - 142	0	15
Methylene Chloride	50.0	46.54		ug/L		93	79 - 123	1	17
4-Methyl-2-pentanone (MIBK)	250	219.6		ug/L		88	60 - 137	5	17
m-Xylene & p-Xylene	50.0	44.99		ug/L		90	80 - 141	2	16
o-Xylene	50.0	44.78		ug/L		90	80 - 127	2	14
Styrene	50.0	46.94		ug/L		94	80 - 127	1	24
1,1,1,2-Tetrachloroethane	50.0	46.51		ug/L		93	74 - 135	0	16
Tetrachloroethene	50.0	47.83		ug/L		96	80 - 126	0	16
Toluene	50.0	45.85		ug/L		92	80 - 126	4	15
trans-1,2-Dichloroethene	50.0	45.12		ug/L		90	79 - 126	5	16
trans-1,3-Dichloropropene	50.0	47.01		ug/L		94	63 - 134	4	14
1,3,5-Trichlorobenzene	50.0	51.33		ug/L		103	70 - 130	3	30
1,1,1-Trichloroethane	50.0	43.99		ug/L		88	78 - 135	8	17
1,1,2-Trichloroethane	50.0	44.07		ug/L		88	80 - 124	4	15
Trichloroethene	50.0	45.18		ug/L		90	80 - 123	7	17
Vinyl chloride	50.0	46.96		ug/L		94	68 - 120	3	17
Xylenes, Total	100	89.77		ug/L		90	80 - 132	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

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

Lab Sample ID: 490-66330-B-2 MS
Matrix: Water
Analysis Batch: 207677

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	198.5		ug/L		79	45 - 141
Benzene	ND		50.0	49.51		ug/L		99	75 - 133
Bromoform	ND		50.0	47.73		ug/L		95	42 - 147
Bromomethane	ND		50.0	35.55		ug/L		71	16 - 163
2-Butanone (MEK)	ND		250	205.3		ug/L		82	50 - 138
Carbon disulfide	ND		50.0	59.34		ug/L		119	48 - 152
Carbon tetrachloride	ND		50.0	56.13		ug/L		112	62 - 164
Chlorobenzene	ND		50.0	50.46		ug/L		101	80 - 129
Chlorodibromomethane	ND		50.0	51.17		ug/L		102	66 - 140
Chloroethane	ND		50.0	50.57		ug/L		101	58 - 137
Chloroform	2.88		50.0	52.30		ug/L		99	66 - 138
Chloromethane	ND		50.0	46.49		ug/L		93	10 - 169
cis-1,2-Dichloroethene	32.1		50.0	82.41		ug/L		101	68 - 138
cis-1,3-Dichloropropene	ND		50.0	49.70		ug/L		99	71 - 141
Dibromomethane	ND		50.0	46.32		ug/L		93	58 - 140
Dichlorobromomethane	ND		50.0	46.94		ug/L		94	70 - 140
1,1-Dichloroethane	12.7		50.0	63.64		ug/L		102	71 - 139
1,2-Dichloroethane	2.48		50.0	52.70		ug/L		100	64 - 136
1,1-Dichloroethene	83.5		50.0	135.8		ug/L		105	70 - 142
1,2-Dichloropropane	ND		50.0	47.82		ug/L		96	67 - 131
1,1-Dichloropropene	ND		50.0	53.87		ug/L		108	76 - 139
Ethylbenzene	ND		50.0	49.76		ug/L		100	79 - 139
2-Hexanone	ND		250	223.6		ug/L		89	50 - 150
Methylene Chloride	0.690	J	50.0	50.57		ug/L		100	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	213.9		ug/L		86	50 - 147
m-Xylene & p-Xylene	ND		50.0	49.51		ug/L		99	80 - 153
o-Xylene	ND		50.0	48.45		ug/L		97	74 - 138
Styrene	ND		50.0	49.82		ug/L		100	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	49.12		ug/L		98	73 - 141
Tetrachloroethene	105		50.0	165.9		ug/L		122	72 - 145
Toluene	ND		50.0	50.50		ug/L		101	75 - 136
trans-1,2-Dichloroethene	0.424	J	50.0	52.67		ug/L		105	66 - 143
trans-1,3-Dichloropropene	ND		50.0	47.88		ug/L		96	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	49.53		ug/L		99	60 - 140
1,1,1-Trichloroethane	ND		50.0	52.98		ug/L		106	76 - 149
1,1,2-Trichloroethane	ND		50.0	44.45		ug/L		89	74 - 134
Trichloroethene	132		50.0	186.2		ug/L		109	73 - 144
Vinyl chloride	1.60		50.0	55.04		ug/L		107	56 - 129
Xylenes, Total	ND		100	97.96		ug/L		98	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-66330-C-2 MSD
Matrix: Water
Analysis Batch: 207677

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	207.1		ug/L		83	45 - 141	4	21
Benzene	ND		50.0	50.09		ug/L		100	75 - 133	1	17
Bromoform	ND		50.0	49.07		ug/L		98	42 - 147	3	16
Bromomethane	ND		50.0	44.38		ug/L		89	16 - 163	22	50
2-Butanone (MEK)	ND		250	208.4		ug/L		83	50 - 138	2	19
Carbon disulfide	ND		50.0	59.29		ug/L		119	48 - 152	0	21
Carbon tetrachloride	ND		50.0	56.41		ug/L		113	62 - 164	0	19
Chlorobenzene	ND		50.0	51.03		ug/L		102	80 - 129	1	14
Chlorodibromomethane	ND		50.0	51.70		ug/L		103	66 - 140	1	15
Chloroethane	ND		50.0	50.16		ug/L		100	58 - 137	1	20
Chloroform	2.88		50.0	51.98		ug/L		98	66 - 138	1	18
Chloromethane	ND		50.0	45.38		ug/L		91	10 - 169	2	31
cis-1,2-Dichloroethene	32.1		50.0	85.09		ug/L		106	68 - 138	3	17
cis-1,3-Dichloropropene	ND		50.0	50.41		ug/L		101	71 - 141	1	15
Dibromomethane	ND		50.0	45.11		ug/L		90	58 - 140	3	16
Dichlorobromomethane	ND		50.0	48.27		ug/L		97	70 - 140	3	18
1,1-Dichloroethane	12.7		50.0	63.69		ug/L		102	71 - 139	0	17
1,2-Dichloroethane	2.48		50.0	52.59		ug/L		100	64 - 136	0	17
1,1-Dichloroethene	83.5		50.0	134.1		ug/L		101	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	48.54		ug/L		97	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	53.34		ug/L		107	76 - 139	1	17
Ethylbenzene	ND		50.0	50.21		ug/L		100	79 - 139	1	15
2-Hexanone	ND		250	224.4		ug/L		90	50 - 150	0	15
Methylene Chloride	0.690	J	50.0	51.17		ug/L		101	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	214.8		ug/L		86	50 - 147	0	17
m-Xylene & p-Xylene	ND		50.0	50.06		ug/L		100	80 - 153	1	16
o-Xylene	ND		50.0	49.20		ug/L		98	74 - 138	2	14
Styrene	ND		50.0	50.39		ug/L		101	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	50.63		ug/L		101	73 - 141	3	16
Tetrachloroethene	105		50.0	167.2		ug/L		125	72 - 145	1	16
Toluene	ND		50.0	50.81		ug/L		102	75 - 136	1	15
trans-1,2-Dichloroethene	0.424	J	50.0	52.60		ug/L		104	66 - 143	0	16
trans-1,3-Dichloropropene	ND		50.0	48.28		ug/L		97	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	51.06		ug/L		102	60 - 140	3	30
1,1,1-Trichloroethane	ND		50.0	53.16		ug/L		106	76 - 149	0	17
1,1,2-Trichloroethane	ND		50.0	44.24		ug/L		88	74 - 134	0	15
Trichloroethene	132		50.0	185.1		ug/L		107	73 - 144	1	17
Vinyl chloride	1.60		50.0	54.95		ug/L		107	56 - 129	0	17
Xylenes, Total	ND		100	99.25		ug/L		99	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-206644/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207240 — **Prep Batch: 206644**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/16/14 15:51	11/18/14 12:34	1
Manganese	ND		0.0150	0.00500	mg/L		11/16/14 15:51	11/18/14 12:34	1

Lab Sample ID: LCS 490-206644/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207240 — **Prep Batch: 206644**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.04760		mg/L		95	80 - 120
Manganese	0.500	0.4962		mg/L		99	80 - 120

Lab Sample ID: LCSD 490-206644/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207240 — **Prep Batch: 206644**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0500	0.05000		mg/L		100	80 - 120	5	20
Manganese	0.500	0.5121		mg/L		102	80 - 120	3	20

Lab Sample ID: MB 490-206812/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/17/14 14:21	11/19/14 15:29	1
Manganese	ND		0.0150	0.00500	mg/L		11/17/14 14:21	11/19/14 15:29	1

Lab Sample ID: LCS 490-206812/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.05730		mg/L		115	80 - 120
Manganese	0.500	0.5026		mg/L		101	80 - 120

Lab Sample ID: LCSD 490-206812/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0500	0.05000		mg/L		100	80 - 120	14	20
Manganese	0.500	0.4728		mg/L		95	80 - 120	6	20

Lab Sample ID: 490-66142-B-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.0500	0.05390		mg/L		108	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 490-66142-B-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Manganese	0.417		0.500	0.8616		mg/L		89	75 - 125		

Lab Sample ID: 490-66142-B-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 208339 — **Prep Batch: 206812**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	ND		0.0500	0.04630		mg/L		93	75 - 125		
Manganese	0.432		0.500	0.9107		mg/L		96	75 - 125		

Lab Sample ID: 490-66142-B-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.0500	0.05150		mg/L		103	75 - 125	5	20
Manganese	0.417		0.500	0.9305		mg/L		103	75 - 125	8	20

Lab Sample ID: 490-66142-B-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 208339 — **Prep Batch: 206812**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.0500	0.04560		mg/L		91	75 - 125	2	20
Manganese	0.432		0.500	0.9366		mg/L		101	75 - 125	3	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

GC/MS VOA

Analysis Batch: 207339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66105-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-66105-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-66109-2	MW-307S (172-187)	Total/NA	Water	8260B	
490-66109-3	MW-303 (55-65)	Total/NA	Water	8260B	
490-66109-13	Trip Blank	Total/NA	Water	8260B	
LCS 490-207339/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-207339/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-207339/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 207504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66109-4	MW-307D (200-210)	Total/NA	Water	8260B	
490-66109-4 MS	MW-307D (200-210)	Total/NA	Water	8260B	
490-66109-4 MSD	MW-307D (200-210)	Total/NA	Water	8260B	
490-66109-5	MW-303 (115-125)	Total/NA	Water	8260B	
490-66109-6	106R	Total/NA	Water	8260B	
490-66109-7	201R	Total/NA	Water	8260B	
490-66109-8	61R (183-198)	Total/NA	Water	8260B	
490-66109-9	61R (75-90)	Total/NA	Water	8260B	
490-66109-10	EW-10S	Total/NA	Water	8260B	
LCS 490-207504/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-207504/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-207504/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 207677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66109-1	MW-307S (80-90)	Total/NA	Water	8260B	
490-66109-10 - DL	EW-10S	Total/NA	Water	8260B	
490-66109-10 - DL2	EW-10S	Total/NA	Water	8260B	
490-66109-11	405R	Total/NA	Water	8260B	
490-66109-12	205R	Total/NA	Water	8260B	
490-66330-B-2 MS	Matrix Spike	Total/NA	Water	8260B	
490-66330-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-207677/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-207677/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-207677/7	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 206644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66109-1	MW-307S (80-90)	Total/NA	Water	3010A	
490-66109-2	MW-307S (172-187)	Total/NA	Water	3010A	
490-66109-3	MW-303 (55-65)	Total/NA	Water	3010A	
490-66109-4	MW-307D (200-210)	Total/NA	Water	3010A	
490-66109-5	MW-303 (115-125)	Total/NA	Water	3010A	
490-66109-6	106R	Total/NA	Water	3010A	
490-66109-7	201R	Total/NA	Water	3010A	
490-66109-8	61R (183-198)	Total/NA	Water	3010A	
LCS 490-206644/2-A	Lab Control Sample	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 206644 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 490-206644/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-206644/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 206812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66109-9	61R (75-90)	Total/NA	Water	3010A	
490-66109-10	EW-10S	Total/NA	Water	3010A	
490-66109-11	405R	Total/NA	Water	3010A	
490-66109-12	205R	Total/NA	Water	3010A	
490-66142-B-2-B MS	Matrix Spike	Total/NA	Water	3010A	
490-66142-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
LCS 490-206812/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-206812/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-206812/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 207240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66109-1	MW-307S (80-90)	Total/NA	Water	6010B	206644
490-66109-2	MW-307S (172-187)	Total/NA	Water	6010B	206644
490-66109-3	MW-303 (55-65)	Total/NA	Water	6010B	206644
490-66109-4	MW-307D (200-210)	Total/NA	Water	6010B	206644
490-66109-5	MW-303 (115-125)	Total/NA	Water	6010B	206644
490-66109-6	106R	Total/NA	Water	6010B	206644
490-66109-7	201R	Total/NA	Water	6010B	206644
490-66109-8	61R (183-198)	Total/NA	Water	6010B	206644
LCS 490-206644/2-A	Lab Control Sample	Total/NA	Water	6010B	206644
LCSD 490-206644/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	206644
MB 490-206644/1-A	Method Blank	Total/NA	Water	6010B	206644

Analysis Batch: 207509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66109-9	61R (75-90)	Total/NA	Water	6010B	206812
490-66109-10	EW-10S	Total/NA	Water	6010B	206812
490-66109-11	405R	Total/NA	Water	6010B	206812
490-66109-12	205R	Total/NA	Water	6010B	206812
490-66142-B-2-B MS	Matrix Spike	Total/NA	Water	6010B	206812
490-66142-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	206812
LCS 490-206812/2-A	Lab Control Sample	Total/NA	Water	6010B	206812
LCSD 490-206812/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	206812
MB 490-206812/1-A	Method Blank	Total/NA	Water	6010B	206812

Analysis Batch: 208339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66109-10	EW-10S	Total/NA	Water	6010B	206812
490-66142-B-2-B MS	Matrix Spike	Total/NA	Water	6010B	206812
490-66142-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	206812

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: MW-307S (80-90)

Lab Sample ID: 490-66109-1
Date Collected: 11/11/14 09:55
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207677	11/20/14 17:06	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206644	11/16/14 15:51	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 14:16	NLI	TAL NSH

Client Sample ID: MW-307S (172-187)

Lab Sample ID: 490-66109-2
Date Collected: 11/11/14 11:05
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207339	11/19/14 17:00	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206644	11/16/14 15:51	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 14:20	NLI	TAL NSH

Client Sample ID: MW-303 (55-65)

Lab Sample ID: 490-66109-3
Date Collected: 11/11/14 09:55
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207339	11/19/14 17:26	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206644	11/16/14 15:51	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 14:24	NLI	TAL NSH

Client Sample ID: MW-307D (200-210)

Lab Sample ID: 490-66109-4
Date Collected: 11/11/14 14:00
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207504	11/20/14 07:21	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206644	11/16/14 15:51	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 14:27	NLI	TAL NSH

Client Sample ID: MW-303 (115-125)

Lab Sample ID: 490-66109-5
Date Collected: 11/11/14 11:10
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207504	11/20/14 07:47	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206644	11/16/14 15:51	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 14:31	NLI	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: 106R

Lab Sample ID: 490-66109-6

Date Collected: 11/11/14 09:55
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207504	11/20/14 08:13	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206644	11/16/14 15:51	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 14:35	NLI	TAL NSH

Client Sample ID: 201R

Lab Sample ID: 490-66109-7

Date Collected: 11/11/14 11:05
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207504	11/20/14 08:39	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206644	11/16/14 15:51	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 14:49	NLI	TAL NSH

Client Sample ID: 61R (183-198)

Lab Sample ID: 490-66109-8

Date Collected: 11/11/14 13:50
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207504	11/20/14 09:05	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206644	11/16/14 15:51	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207240	11/18/14 14:53	NLI	TAL NSH

Client Sample ID: 61R (75-90)

Lab Sample ID: 490-66109-9

Date Collected: 11/11/14 14:55
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207504	11/20/14 09:31	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207509	11/19/14 15:56	HJM	TAL NSH

Client Sample ID: EW-10S

Lab Sample ID: 490-66109-10

Date Collected: 11/11/14 15:30
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207504	11/20/14 09:57	EML	TAL NSH
Total/NA	Analysis	8260B	DL	20	10 mL	10 mL	207677	11/20/14 21:27	EML	TAL NSH
Total/NA	Analysis	8260B	DL2	200	10 mL	10 mL	207677	11/20/14 21:53	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207509	11/19/14 16:00	HJM	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Client Sample ID: EW-10S

Lab Sample ID: 490-66109-10

Date Collected: 11/11/14 15:30
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		5	50 mL	50 mL	208339	11/21/14 20:28	CME	TAL NSH

Client Sample ID: 405R

Lab Sample ID: 490-66109-11

Date Collected: 11/11/14 16:30
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207677	11/20/14 15:48	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207509	11/19/14 16:03	HJM	TAL NSH

Client Sample ID: 205R

Lab Sample ID: 490-66109-12

Date Collected: 11/11/14 15:30
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207677	11/20/14 16:14	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	207509	11/19/14 16:06	HJM	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-66109-13

Date Collected: 11/11/14 00:01
Matrix: Water
Date Received: 11/12/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207339	11/19/14 15:42	EML	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66109-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-66109 Chain of Custody

Cooler Received/Opened On : 11/12/2014 @ 0820

1. Tracking # 2705 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 18290455

2. Temperature of rep. sample or temp blank when opened: 3.0 *Degrees Celsius*

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

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

   If yes, how many and where: 1 front

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
66109

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

11/25/2014

Client Information	Sampler: MK, JB, TM	Lab PM: Brown, Shali	Carrier T	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 717-645-6179	E-Mail: shali.brown@testamericainc.com		Page: 1/2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): standard			
State, Zip: MA, 01824				
Phone: 717-645-6179	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - (MOD) 6010B As and Mn	8260B_LL - (MOD) New Hampshire Volatiles List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A		
MW-307S (80-90)	11/11/14	955	G	GW	N		X	X	4	-1
MW-307S (172-187)	11/11/14	1105	G	GW	N		X	X	4	2
MW-303 (55-65)	11/11/14	955	G	GW	N		X	X	4	3
MW-307D (200-210)	11/11/14	1400	G	GW	N		X	X	4	4
MW-303 (115-125)	11/11/14	1110	G	GW	N		X	X	4	5
106R	11/11/14	955	G	GW	N		X	X	4	6
201R	11/11/14	1105	G	GW	N		X	X	4	7
61R (183-198)	11/11/14	1350	G	GW	N		X	X	4	8
61R (75-90)	11/11/14	1455	G	GW	N		X	X	4	9
EW-10S	11/11/14	1530	G	GW	N		X	X	4	10
405R	11/11/14	1630	G	GW	N		X	X	4	11

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 11/11/14 1645	Company: ARCADIS	Received by: [signature]	Date/Time: 11-12-14 @ 0820	Company: TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 3.0°c

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
66109
#1
A

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

11/25/2014

Client Information

Sampler: MK, TM, JB
Lab PM: Brown, Shali
Carrier:
FORD Site E101274

Client Contact: Chuck Castelluccio
Phone: 717-645-6179
E-Mail: shali.brown@testamericainc.com
Page: 2/2

Company: ARCADIS U.S., Inc.
Job #:

Address: 1 Executive Drive Suite 303
Due Date Requested:

City: Chelmsford
TAT Requested (days): standard

State, Zip: MA, 01824

Phone: 717-645-6179
PO #: Purchase Order Requested

Email: chuck.castelluccio@arcadis-us.com
WO #:

Project Name: Tibbetts Road Site E101274
Lab Project #: 49002494

Site:
Client Project #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - (MOD) 6010B As and Mn	8260B_LL - (MOD) New Hampshire Volatiles List	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	A	X	
205R	11/11/14	1530	G	GW	N		X	X	4	-12
TRIP BLANK	11/11/14	—	—	GW			X	X	2	Just 8260B 13
							TM			

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/11/14 1645	ARCADIS	[signature]	11-12-14 @ 0830	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 3.0°c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-66109-1

Login Number: 66109

List Source: TestAmerica Nashville

List Number: 1

Creator: McBride, Mike

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-66350-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
12/2/2014 5:22:25 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-66350-1	MW-301 (145-155)	Water	11/13/14 12:30	11/14/14 08:40
490-66350-2	70S	Water	11/13/14 09:25	11/14/14 08:40
490-66350-3	75D	Water	11/13/14 10:45	11/14/14 08:40
490-66350-4	175D	Water	11/13/14 16:30	11/14/14 08:40
490-66350-5	MW-305 (285-300)	Water	11/13/14 15:00	11/14/14 08:40
490-66350-6	MW-300 (20-30)	Water	11/13/14 09:30	11/14/14 08:40
490-66350-7	MW-300 (120-130)	Water	11/13/14 11:00	11/14/14 08:40
490-66350-8	MW-300 (80-90)	Water	11/13/14 11:10	11/14/14 08:40
490-66350-9	108R	Water	11/13/14 14:20	11/14/14 08:40
490-66350-10	MW-301 (115-125)	Water	11/13/14 12:00	11/14/14 08:40
490-66350-11	MW-300 (40-50)	Water	11/13/14 09:20	11/14/14 08:40
490-66350-12	MW-301 (240-250)	Water	11/13/14 12:50	11/14/14 08:40
490-66350-13	MW-305 (233-243)	Water	11/13/14 14:20	11/14/14 08:40
490-66350-14	MW-301 (290-300)	Water	11/13/14 13:05	11/14/14 08:40
490-66350-15	MW-305 (35-45)	Water	11/13/14 13:20	11/14/14 08:40
490-66350-16	MW-305 (265-275)	Water	11/13/14 14:40	11/14/14 08:40
490-66350-17	MW-305 (145-155)	Water	11/13/14 14:00	11/14/14 08:40
490-66350-18	MW-305 (62-72)	Water	11/13/14 13:40	11/14/14 08:40
490-66350-19	MW-301 (35-45)	Water	11/13/14 13:40	11/14/14 08:40
490-66350-20	Trip Blank	Water	11/13/14 01:01	11/14/14 08:40

Job ID: 490-66350-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-66350-1

Comments
No additional comments.

Receipt
The samples were received on 11/14/2014 8:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.6º C.

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

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

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

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.

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-301 (145-155)

Date Collected: 11/13/14 12:30
Date Received: 11/14/14 08:40

Lab Sample ID: 490-66350-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 14:49	1
Benzene	**11.9**		0.500	0.200	ug/L			11/21/14 14:49	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 14:49	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 14:49	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 14:49	1
Carbon disulfide	**0.779**		0.500	0.220	ug/L			11/21/14 14:49	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 14:49	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 14:49	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 14:49	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 14:49	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 14:49	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 14:49	1
cis-1,2-Dichloroethene	**33.2**		0.500	0.210	ug/L			11/21/14 14:49	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 14:49	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 14:49	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 14:49	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 14:49	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 14:49	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 14:49	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 14:49	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 14:49	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 14:49	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 14:49	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 14:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 14:49	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 14:49	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 14:49	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 14:49	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 14:49	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 14:49	1
Toluene	**0.952**		0.500	0.170	ug/L			11/21/14 14:49	1
trans-1,2-Dichloroethene	**0.621**		0.500	0.230	ug/L			11/21/14 14:49	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 14:49	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 14:49	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 14:49	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 14:49	1
Trichloroethene	**0.737**		0.500	0.200	ug/L			11/21/14 14:49	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 14:49	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*		*11/21/14 14:49*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*11/21/14 14:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*11/21/14 14:49*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/21/14 14:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 17:45	1
Manganese	**1.53**		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 17:45	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: 70S

Date Collected: 11/13/14 09:25
Date Received: 11/14/14 08:40

Lab Sample ID: 490-66350-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 03:56	1
Benzene	ND		0.500	0.200	ug/L			11/21/14 03:56	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 03:56	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 03:56	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 03:56	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 03:56	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 03:56	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 03:56	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 03:56	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 03:56	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 03:56	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 03:56	1
cis-1,2-Dichloroethene	**0.544**		0.500	0.210	ug/L			11/21/14 03:56	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 03:56	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 03:56	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 03:56	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 03:56	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 03:56	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 03:56	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 03:56	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 03:56	1
Ethylbenzene	**0.439**	**J**	0.500	0.190	ug/L			11/21/14 03:56	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 03:56	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 03:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 03:56	1
m-Xylene & p-Xylene	**0.386**	**J**	0.500	0.380	ug/L			11/21/14 03:56	1
o-Xylene	**1.47**		0.500	0.200	ug/L			11/21/14 03:56	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 03:56	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 03:56	1
Tetrachloroethene	**0.305**	**J**	0.500	0.140	ug/L			11/21/14 03:56	1
Toluene	ND		0.500	0.170	ug/L			11/21/14 03:56	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 03:56	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 03:56	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 03:56	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 03:56	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 03:56	1
Trichloroethene	**0.265**	**J**	0.500	0.200	ug/L			11/21/14 03:56	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 03:56	1
Xylenes, Total	**1.85**		1.50	0.580	ug/L			11/21/14 03:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/21/14 03:56*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/21/14 03:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*11/21/14 03:56*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/21/14 03:56*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 17:49	1
Manganese	**8.36**		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 17:49	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: 75D

Date Collected: 11/13/14 10:45
Date Received: 11/14/14 08:40

Lab Sample ID: 490-66350-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 04:22	1
Benzene	ND		0.500	0.200	ug/L			11/21/14 04:22	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 04:22	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 04:22	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 04:22	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 04:22	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 04:22	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 04:22	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 04:22	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 04:22	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 04:22	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 04:22	1
cis-1,2-Dichloroethene	**1.51**		0.500	0.210	ug/L			11/21/14 04:22	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 04:22	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 04:22	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 04:22	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 04:22	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 04:22	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 04:22	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 04:22	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 04:22	1
Ethylbenzene	**0.355**	**J**	0.500	0.190	ug/L			11/21/14 04:22	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 04:22	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 04:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 04:22	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 04:22	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 04:22	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 04:22	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 04:22	1
Tetrachloroethene	**0.195**	**J**	0.500	0.140	ug/L			11/21/14 04:22	1
Toluene	**0.251**	**J**	0.500	0.170	ug/L			11/21/14 04:22	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 04:22	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 04:22	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 04:22	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 04:22	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 04:22	1
Trichloroethene	**0.270**	**J**	0.500	0.200	ug/L			11/21/14 04:22	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 04:22	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 04:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/21/14 04:22*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/21/14 04:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*11/21/14 04:22*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*11/21/14 04:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 17:54	1
Manganese	**2.25**		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 17:54	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: 175D

Date Collected: 11/13/14 16:30
Date Received: 11/14/14 08:40

Lab Sample ID: 490-66350-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 04:48	1
Benzene	ND		0.500	0.200	ug/L			11/21/14 04:48	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 04:48	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 04:48	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 04:48	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 04:48	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 04:48	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 04:48	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 04:48	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 04:48	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 04:48	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 04:48	1
cis-1,2-Dichloroethene	**1.41**		0.500	0.210	ug/L			11/21/14 04:48	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 04:48	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 04:48	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 04:48	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 04:48	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 04:48	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 04:48	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 04:48	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 04:48	1
Ethylbenzene	**0.269**	**J**	0.500	0.190	ug/L			11/21/14 04:48	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 04:48	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 04:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 04:48	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 04:48	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 04:48	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 04:48	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 04:48	1
Tetrachloroethene	**0.194**	**J**	0.500	0.140	ug/L			11/21/14 04:48	1
Toluene	ND		0.500	0.170	ug/L			11/21/14 04:48	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 04:48	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 04:48	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 04:48	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 04:48	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 04:48	1
Trichloroethene	**0.315**	**J**	0.500	0.200	ug/L			11/21/14 04:48	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 04:48	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 04:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/21/14 04:48*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/21/14 04:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*11/21/14 04:48*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/21/14 04:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 17:59	1
Manganese	**2.18**		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 17:59	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-305 (285-300)

Lab Sample ID: 490-66350-5

Date Collected: 11/13/14 15:00
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.71**		5.00	2.66	ug/L			11/21/14 05:14	1
Benzene	**0.402**	**J**	0.500	0.200	ug/L			11/21/14 05:14	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 05:14	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 05:14	1
2-Butanone (MEK)	**3.88**	**J**	50.0	2.64	ug/L			11/21/14 05:14	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 05:14	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 05:14	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 05:14	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 05:14	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 05:14	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 05:14	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 05:14	1
cis-1,2-Dichloroethene	**2.62**		0.500	0.210	ug/L			11/21/14 05:14	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 05:14	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 05:14	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 05:14	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 05:14	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 05:14	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 05:14	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 05:14	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 05:14	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 05:14	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 05:14	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 05:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 05:14	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 05:14	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 05:14	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 05:14	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 05:14	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 05:14	1
Toluene	**1.27**		0.500	0.170	ug/L			11/21/14 05:14	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 05:14	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 05:14	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 05:14	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 05:14	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 05:14	1
Trichloroethene	ND		0.500	0.200	ug/L			11/21/14 05:14	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 05:14	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 05:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*		*11/21/14 05:14*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/21/14 05:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/21/14 05:14*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*11/21/14 05:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00810**	**J**	0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 18:04	1
Manganese	**2.42**		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 18:04	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-300 (20-30)

Lab Sample ID: 490-66350-6

Date Collected: 11/13/14 09:30
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 05:40	1
Benzene	**0.369**	**J**	0.500	0.200	ug/L			11/21/14 05:40	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 05:40	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 05:40	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 05:40	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 05:40	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 05:40	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 05:40	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 05:40	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 05:40	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 05:40	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 05:40	1
cis-1,2-Dichloroethene	**1.93**		0.500	0.210	ug/L			11/21/14 05:40	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 05:40	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 05:40	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 05:40	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 05:40	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 05:40	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 05:40	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 05:40	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 05:40	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 05:40	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 05:40	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 05:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 05:40	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 05:40	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 05:40	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 05:40	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 05:40	1
Tetrachloroethene	**0.176**	**J**	0.500	0.140	ug/L			11/21/14 05:40	1
Toluene	ND		0.500	0.170	ug/L			11/21/14 05:40	1
trans-1,2-Dichloroethene	**0.310**	**J**	0.500	0.230	ug/L			11/21/14 05:40	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 05:40	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 05:40	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 05:40	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 05:40	1
Trichloroethene	**0.790**		0.500	0.200	ug/L			11/21/14 05:40	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 05:40	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 05:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/21/14 05:40*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/21/14 05:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/21/14 05:40*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/21/14 05:40*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0224**		0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 18:09	1
Manganese	**0.356**		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 18:09	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-300 (120-130)

Lab Sample ID: 490-66350-7

Date Collected: 11/13/14 11:00
Matrix: Water
Date Received: 11/14/14 08:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.32**	**J**	5.00	2.66	ug/L			11/21/14 06:06	1
Benzene	**4.01**		0.500	0.200	ug/L			11/21/14 06:06	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 06:06	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 06:06	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 06:06	1
Carbon disulfide	**0.244**	**J**	0.500	0.220	ug/L			11/21/14 06:06	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 06:06	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 06:06	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 06:06	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 06:06	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 06:06	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 06:06	1
cis-1,2-Dichloroethene	**5.51**		0.500	0.210	ug/L			11/21/14 06:06	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 06:06	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 06:06	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 06:06	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 06:06	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 06:06	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 06:06	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 06:06	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 06:06	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 06:06	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 06:06	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 06:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 06:06	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 06:06	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 06:06	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 06:06	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 06:06	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 06:06	1
Toluene	**1.98**		0.500	0.170	ug/L			11/21/14 06:06	1
trans-1,2-Dichloroethene	**0.632**		0.500	0.230	ug/L			11/21/14 06:06	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 06:06	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 06:06	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 06:06	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 06:06	1
Trichloroethene	**0.819**		0.500	0.200	ug/L			11/21/14 06:06	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 06:06	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 06:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*		*11/21/14 06:06*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/21/14 06:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*11/21/14 06:06*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/21/14 06:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 18:14	1
Manganese	**0.160**		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 18:14	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-300 (80-90)

Lab Sample ID: 490-66350-8

Date Collected: 11/13/14 11:10
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 06:32	1
Benzene	**9.06**		0.500	0.200	ug/L			11/21/14 06:32	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 06:32	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 06:32	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 06:32	1
Carbon disulfide	**0.275**	**J**	0.500	0.220	ug/L			11/21/14 06:32	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 06:32	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 06:32	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 06:32	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 06:32	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 06:32	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 06:32	1
cis-1,2-Dichloroethene	**6.44**		0.500	0.210	ug/L			11/21/14 06:32	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 06:32	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 06:32	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 06:32	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 06:32	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 06:32	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 06:32	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 06:32	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 06:32	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 06:32	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 06:32	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 06:32	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 06:32	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 06:32	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 06:32	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 06:32	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 06:32	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 06:32	1
Toluene	**1.19**		0.500	0.170	ug/L			11/21/14 06:32	1
trans-1,2-Dichloroethene	**0.779**		0.500	0.230	ug/L			11/21/14 06:32	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 06:32	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 06:32	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 06:32	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 06:32	1
Trichloroethene	**1.76**		0.500	0.200	ug/L			11/21/14 06:32	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 06:32	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 06:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/21/14 06:32*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/21/14 06:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*11/21/14 06:32*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/21/14 06:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 18:18	1
Manganese	**0.817**		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 18:18	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: 108R

Date Collected: 11/13/14 14:20
Date Received: 11/14/14 08:40

Lab Sample ID: 490-66350-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 06:58	1
Benzene	ND		0.500	0.200	ug/L			11/21/14 06:58	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 06:58	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 06:58	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 06:58	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 06:58	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 06:58	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 06:58	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 06:58	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 06:58	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 06:58	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 06:58	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/21/14 06:58	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 06:58	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 06:58	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 06:58	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 06:58	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 06:58	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 06:58	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 06:58	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 06:58	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 06:58	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 06:58	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 06:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 06:58	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 06:58	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 06:58	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 06:58	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 06:58	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 06:58	1
Toluene	ND		0.500	0.170	ug/L			11/21/14 06:58	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 06:58	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 06:58	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 06:58	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 06:58	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 06:58	1
Trichloroethene	ND		0.500	0.200	ug/L			11/21/14 06:58	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 06:58	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 06:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*		*11/21/14 06:58*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*11/21/14 06:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*11/21/14 06:58*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/21/14 06:58*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0288**		0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 18:23	1
Manganese	**0.150**		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 18:23	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-301 (115-125)

Lab Sample ID: 490-66350-10

Date Collected: 11/13/14 12:00
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 07:24	1
Benzene	**1.58**		0.500	0.200	ug/L			11/21/14 07:24	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 07:24	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 07:24	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 07:24	1
Carbon disulfide	**0.634**		0.500	0.220	ug/L			11/21/14 07:24	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 07:24	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 07:24	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 07:24	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 07:24	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 07:24	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 07:24	1
cis-1,2-Dichloroethene	**7.40**		0.500	0.210	ug/L			11/21/14 07:24	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 07:24	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 07:24	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 07:24	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 07:24	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 07:24	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 07:24	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 07:24	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 07:24	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 07:24	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 07:24	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 07:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 07:24	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 07:24	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 07:24	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 07:24	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 07:24	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 07:24	1
Toluene	**0.254**	**J**	0.500	0.170	ug/L			11/21/14 07:24	1
trans-1,2-Dichloroethene	**0.422**	**J**	0.500	0.230	ug/L			11/21/14 07:24	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 07:24	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 07:24	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 07:24	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 07:24	1
Trichloroethene	**1.70**		0.500	0.200	ug/L			11/21/14 07:24	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 07:24	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 07:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*		*11/21/14 07:24*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/21/14 07:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*11/21/14 07:24*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/21/14 07:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 18:28	1
Manganese	**0.444**		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 18:28	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-300 (40-50)

Lab Sample ID: 490-66350-11

Date Collected: 11/13/14 09:20
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 07:50	1
Benzene	**2.26**		0.500	0.200	ug/L			11/21/14 07:50	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 07:50	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 07:50	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 07:50	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 07:50	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 07:50	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 07:50	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 07:50	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 07:50	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 07:50	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 07:50	1
cis-1,2-Dichloroethene	**13.0**		0.500	0.210	ug/L			11/21/14 07:50	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 07:50	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 07:50	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 07:50	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 07:50	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 07:50	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 07:50	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 07:50	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 07:50	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 07:50	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 07:50	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 07:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 07:50	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 07:50	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 07:50	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 07:50	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 07:50	1
Tetrachloroethene	**0.728**		0.500	0.140	ug/L			11/21/14 07:50	1
Toluene	**0.365**	**J**	0.500	0.170	ug/L			11/21/14 07:50	1
trans-1,2-Dichloroethene	**2.24**		0.500	0.230	ug/L			11/21/14 07:50	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 07:50	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 07:50	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 07:50	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 07:50	1
Trichloroethene	**5.12**		0.500	0.200	ug/L			11/21/14 07:50	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 07:50	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 07:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/21/14 07:50*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/21/14 07:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*11/21/14 07:50*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/21/14 07:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00920**	**J**	0.0100	0.00720	mg/L		11/21/14 12:24	11/26/14 01:16	1
Manganese	**0.0951**		0.0150	0.00500	mg/L		11/21/14 12:24	11/26/14 01:16	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-301 (240-250)

Lab Sample ID: 490-66350-12

Date Collected: 11/13/14 12:50
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**15.3**		5.00	2.66	ug/L			11/21/14 08:16	1
Benzene	**8.19**		0.500	0.200	ug/L			11/21/14 08:16	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 08:16	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 08:16	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 08:16	1
Carbon disulfide	**0.710**		0.500	0.220	ug/L			11/21/14 08:16	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 08:16	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 08:16	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 08:16	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 08:16	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 08:16	1
Chloromethane	**0.665**		0.500	0.360	ug/L			11/21/14 08:16	1
cis-1,2-Dichloroethene	**22.2**		0.500	0.210	ug/L			11/21/14 08:16	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 08:16	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 08:16	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 08:16	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 08:16	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 08:16	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 08:16	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 08:16	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 08:16	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 08:16	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 08:16	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 08:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 08:16	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 08:16	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 08:16	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 08:16	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 08:16	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 08:16	1
Toluene	**1.02**		0.500	0.170	ug/L			11/21/14 08:16	1
trans-1,2-Dichloroethene	**0.457**	**J**	0.500	0.230	ug/L			11/21/14 08:16	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 08:16	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 08:16	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 08:16	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 08:16	1
Trichloroethene	**0.444**	**J**	0.500	0.200	ug/L			11/21/14 08:16	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 08:16	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 08:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/21/14 08:16*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*11/21/14 08:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/21/14 08:16*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/21/14 08:16*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:24	11/26/14 01:30	1
Manganese	**0.933**		0.0150	0.00500	mg/L		11/21/14 12:24	11/26/14 01:30	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-305 (233-243)

Lab Sample ID: 490-66350-13

Date Collected: 11/13/14 14:20
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 08:42	1
Benzene	**0.789**		0.500	0.200	ug/L			11/21/14 08:42	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 08:42	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 08:42	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 08:42	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 08:42	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 08:42	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 08:42	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 08:42	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 08:42	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 08:42	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 08:42	1
cis-1,2-Dichloroethene	**6.41**		0.500	0.210	ug/L			11/21/14 08:42	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 08:42	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 08:42	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 08:42	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 08:42	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 08:42	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 08:42	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 08:42	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 08:42	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 08:42	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 08:42	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 08:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 08:42	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 08:42	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 08:42	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 08:42	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 08:42	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 08:42	1
Toluene	**1.64**		0.500	0.170	ug/L			11/21/14 08:42	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 08:42	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 08:42	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 08:42	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 08:42	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 08:42	1
Trichloroethene	**0.338**	**J**	0.500	0.200	ug/L			11/21/14 08:42	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 08:42	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 08:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*		*11/21/14 08:42*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*11/21/14 08:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*11/21/14 08:42*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*11/21/14 08:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:24	11/26/14 01:34	1
Manganese	**0.998**		0.0150	0.00500	mg/L		11/21/14 12:24	11/26/14 01:34	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-301 (290-300)

Lab Sample ID: 490-66350-14

Date Collected: 11/13/14 13:05
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 09:08	1
Benzene	**3.55**		0.500	0.200	ug/L			11/21/14 09:08	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 09:08	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 09:08	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 09:08	1
Carbon disulfide	**1.07**		0.500	0.220	ug/L			11/21/14 09:08	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 09:08	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 09:08	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 09:08	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 09:08	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 09:08	1
Chloromethane	**0.718**		0.500	0.360	ug/L			11/21/14 09:08	1
cis-1,2-Dichloroethene	**24.8**		0.500	0.210	ug/L			11/21/14 09:08	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 09:08	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 09:08	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 09:08	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 09:08	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 09:08	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 09:08	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 09:08	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 09:08	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 09:08	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 09:08	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 09:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 09:08	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 09:08	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 09:08	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 09:08	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 09:08	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 09:08	1
Toluene	**0.629**		0.500	0.170	ug/L			11/21/14 09:08	1
trans-1,2-Dichloroethene	**0.399**	**J**	0.500	0.230	ug/L			11/21/14 09:08	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 09:08	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 09:08	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 09:08	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 09:08	1
Trichloroethene	**0.278**	**J**	0.500	0.200	ug/L			11/21/14 09:08	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 09:08	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 09:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*		*11/21/14 09:08*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*11/21/14 09:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*11/21/14 09:08*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*11/21/14 09:08*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:24	11/26/14 01:39	1
Manganese	**0.926**		0.0150	0.00500	mg/L		11/21/14 12:24	11/26/14 01:39	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-305 (35-45)

Lab Sample ID: 490-66350-15

Date Collected: 11/13/14 13:20
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 09:34	1
Benzene	**0.592**		0.500	0.200	ug/L			11/21/14 09:34	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 09:34	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 09:34	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 09:34	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 09:34	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 09:34	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 09:34	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 09:34	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 09:34	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 09:34	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 09:34	1
cis-1,2-Dichloroethene	**1.33**		0.500	0.210	ug/L			11/21/14 09:34	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 09:34	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 09:34	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 09:34	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 09:34	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 09:34	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 09:34	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 09:34	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 09:34	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 09:34	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 09:34	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 09:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 09:34	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 09:34	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 09:34	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 09:34	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 09:34	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 09:34	1
Toluene	**1.17**		0.500	0.170	ug/L			11/21/14 09:34	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 09:34	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 09:34	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 09:34	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 09:34	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 09:34	1
Trichloroethene	ND		0.500	0.200	ug/L			11/21/14 09:34	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 09:34	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 09:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*		*11/21/14 09:34*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*11/21/14 09:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/21/14 09:34*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/21/14 09:34*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0111**		0.0100	0.00720	mg/L		11/21/14 12:24	11/26/14 01:44	1
Manganese	**1.10**		0.0150	0.00500	mg/L		11/21/14 12:24	11/26/14 01:44	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-305 (265-275)

Lab Sample ID: 490-66350-16

Date Collected: 11/13/14 14:40
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 15:41	1
Benzene	**0.962**		0.500	0.200	ug/L			11/21/14 15:41	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 15:41	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 15:41	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 15:41	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 15:41	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 15:41	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 15:41	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 15:41	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 15:41	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 15:41	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 15:41	1
cis-1,2-Dichloroethene	**11.8**		0.500	0.210	ug/L			11/21/14 15:41	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 15:41	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 15:41	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 15:41	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 15:41	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 15:41	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 15:41	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 15:41	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 15:41	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 15:41	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 15:41	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 15:41	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 15:41	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 15:41	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 15:41	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 15:41	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 15:41	1
Toluene	**0.589**		0.500	0.170	ug/L			11/21/14 15:41	1
trans-1,2-Dichloroethene	**0.330**	**J**	0.500	0.230	ug/L			11/21/14 15:41	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 15:41	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 15:41	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 15:41	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 15:41	1
Trichloroethene	**0.869**		0.500	0.200	ug/L			11/21/14 15:41	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 15:41	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*		*11/21/14 15:41*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*11/21/14 15:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*11/21/14 15:41*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/21/14 15:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:24	11/26/14 01:59	1
Manganese	**0.482**		0.0150	0.00500	mg/L		11/21/14 12:24	11/26/14 01:59	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-305 (145-155)

Lab Sample ID: 490-66350-17

Date Collected: 11/13/14 14:00
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 16:07	1
Benzene	**0.297**	**J**	0.500	0.200	ug/L			11/21/14 16:07	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 16:07	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 16:07	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 16:07	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 16:07	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 16:07	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 16:07	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 16:07	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 16:07	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 16:07	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 16:07	1
cis-1,2-Dichloroethene	**0.694**		0.500	0.210	ug/L			11/21/14 16:07	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 16:07	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 16:07	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 16:07	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 16:07	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 16:07	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 16:07	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 16:07	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 16:07	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 16:07	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 16:07	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 16:07	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 16:07	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 16:07	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 16:07	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 16:07	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 16:07	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 16:07	1
Toluene	**1.42**		0.500	0.170	ug/L			11/21/14 16:07	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 16:07	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 16:07	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 16:07	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 16:07	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 16:07	1
Trichloroethene	ND		0.500	0.200	ug/L			11/21/14 16:07	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 16:07	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*		*11/21/14 16:07*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*11/21/14 16:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*11/21/14 16:07*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*		*11/21/14 16:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00760**	**J**	0.0100	0.00720	mg/L		11/21/14 12:24	11/26/14 02:04	1
Manganese	**0.711**		0.0150	0.00500	mg/L		11/21/14 12:24	11/26/14 02:04	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-305 (62-72)

Lab Sample ID: 490-66350-18

Date Collected: 11/13/14 13:40
Matrix: Water
Date Received: 11/14/14 08:40

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 16:33	1
Benzene	ND		0.500	0.200	ug/L			11/21/14 16:33	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 16:33	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 16:33	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 16:33	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 16:33	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 16:33	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 16:33	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 16:33	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 16:33	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 16:33	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 16:33	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/21/14 16:33	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 16:33	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 16:33	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 16:33	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 16:33	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 16:33	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 16:33	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 16:33	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 16:33	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 16:33	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 16:33	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 16:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 16:33	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 16:33	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 16:33	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 16:33	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 16:33	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 16:33	1
Toluene	ND		0.500	0.170	ug/L			11/21/14 16:33	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 16:33	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 16:33	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 16:33	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 16:33	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 16:33	1
Trichloroethene	ND		0.500	0.200	ug/L			11/21/14 16:33	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 16:33	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*		*11/21/14 16:33*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*11/21/14 16:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*11/21/14 16:33*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*11/21/14 16:33*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00960**	**J**	0.0100	0.00720	mg/L		11/21/14 12:24	11/26/14 02:08	1
Manganese	**0.796**		0.0150	0.00500	mg/L		11/21/14 12:24	11/26/14 02:08	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-301 (35-45)

Lab Sample ID: 490-66350-19

Date Collected: 11/13/14 13:40
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 15:15	1
Benzene	**64.8**		0.500	0.200	ug/L			11/21/14 15:15	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 15:15	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 15:15	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 15:15	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 15:15	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 15:15	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 15:15	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 15:15	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 15:15	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 15:15	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 15:15	1
cis-1,2-Dichloroethene	**29.5**		0.500	0.210	ug/L			11/21/14 15:15	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 15:15	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 15:15	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 15:15	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 15:15	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 15:15	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 15:15	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 15:15	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 15:15	1
Ethylbenzene	**25.2**		0.500	0.190	ug/L			11/21/14 15:15	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 15:15	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 15:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 15:15	1
m-Xylene & p-Xylene	**21.6**		0.500	0.380	ug/L			11/21/14 15:15	1
o-Xylene	**0.300**	**J**	0.500	0.200	ug/L			11/21/14 15:15	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 15:15	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 15:15	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 15:15	1
Toluene	**0.853**		0.500	0.170	ug/L			11/21/14 15:15	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 15:15	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 15:15	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 15:15	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 15:15	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 15:15	1
Trichloroethene	ND		0.500	0.200	ug/L			11/21/14 15:15	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 15:15	1
Xylenes, Total	**21.9**		1.50	0.580	ug/L			11/21/14 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*		*11/21/14 15:15*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/21/14 15:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/21/14 15:15*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*11/21/14 15:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0588**		0.0100	0.00720	mg/L		11/21/14 12:24	11/26/14 02:13	1
Manganese	**1.35**		0.0150	0.00500	mg/L		11/21/14 12:24	11/26/14 02:13	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-66350-20

Date Collected: 11/13/14 01:01
Date Received: 11/14/14 08:40

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 14:22	1
Benzene	ND		0.500	0.200	ug/L			11/21/14 14:22	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 14:22	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 14:22	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 14:22	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 14:22	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 14:22	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 14:22	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 14:22	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 14:22	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 14:22	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 14:22	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/21/14 14:22	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 14:22	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 14:22	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 14:22	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 14:22	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 14:22	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 14:22	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 14:22	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 14:22	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 14:22	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 14:22	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 14:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 14:22	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 14:22	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 14:22	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 14:22	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 14:22	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 14:22	1
Toluene	ND		0.500	0.170	ug/L			11/21/14 14:22	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 14:22	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 14:22	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 14:22	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 14:22	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 14:22	1
Trichloroethene	ND		0.500	0.200	ug/L			11/21/14 14:22	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 14:22	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/21/14 14:22*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/21/14 14:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*11/21/14 14:22*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*11/21/14 14:22*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-207839/7
Matrix: Water
Analysis Batch: 207839

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 01:47	1
Benzene	ND		0.500	0.200	ug/L			11/21/14 01:47	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 01:47	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 01:47	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 01:47	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 01:47	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 01:47	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 01:47	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 01:47	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 01:47	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 01:47	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 01:47	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/21/14 01:47	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 01:47	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 01:47	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 01:47	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 01:47	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 01:47	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 01:47	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 01:47	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 01:47	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 01:47	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 01:47	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 01:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 01:47	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 01:47	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 01:47	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 01:47	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 01:47	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 01:47	1
Toluene	ND		0.500	0.170	ug/L			11/21/14 01:47	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 01:47	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 01:47	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 01:47	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 01:47	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 01:47	1
Trichloroethene	ND		0.500	0.200	ug/L			11/21/14 01:47	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 01:47	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 01:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/21/14 01:47*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/21/14 01:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*11/21/14 01:47*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/21/14 01:47*	*1*

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

Lab Sample ID: LCS 490-207839/3
Matrix: Water
Analysis Batch: 207839

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	209.3		ug/L		84	54 - 145
Benzene	50.0	48.16		ug/L		96	80 - 121
Bromoform	50.0	49.58		ug/L		99	46 - 145
Bromomethane	50.0	56.27		ug/L		113	41 - 150
2-Butanone (MEK)	250	204.0		ug/L		82	62 - 133
Carbon disulfide	50.0	59.16		ug/L		118	77 - 126
Carbon tetrachloride	50.0	51.87		ug/L		104	64 - 147
Chlorobenzene	50.0	49.41		ug/L		99	80 - 120
Chlorodibromomethane	50.0	50.08		ug/L		100	69 - 133
Chloroethane	50.0	48.79		ug/L		98	72 - 120
Chloroform	50.0	48.01		ug/L		96	73 - 129
Chloromethane	50.0	46.02		ug/L		92	12 - 150
cis-1,2-Dichloroethene	50.0	49.15		ug/L		98	76 - 125
cis-1,3-Dichloropropene	50.0	48.83		ug/L		98	74 - 140
Dibromomethane	50.0	44.68		ug/L		89	71 - 125
Dichlorobromomethane	50.0	46.84		ug/L		94	75 - 129
1,1-Dichloroethane	50.0	49.68		ug/L		99	78 - 125
1,2-Dichloroethane	50.0	49.12		ug/L		98	77 - 121
1,1-Dichloroethene	50.0	49.45		ug/L		99	79 - 124
1,2-Dichloropropane	50.0	47.41		ug/L		95	75 - 120
1,1-Dichloropropene	50.0	50.44		ug/L		101	80 - 122
Ethylbenzene	50.0	48.63		ug/L		97	80 - 130
2-Hexanone	250	217.8		ug/L		87	60 - 142
Methylene Chloride	50.0	49.21		ug/L		98	79 - 123
4-Methyl-2-pentanone (MIBK)	250	207.5		ug/L		83	60 - 137
m-Xylene & p-Xylene	50.0	47.75		ug/L		96	80 - 141
o-Xylene	50.0	47.10		ug/L		94	80 - 127
Styrene	50.0	48.97		ug/L		98	80 - 127
1,1,1,2-Tetrachloroethane	50.0	48.91		ug/L		98	74 - 135
Tetrachloroethene	50.0	52.41		ug/L		105	80 - 126
Toluene	50.0	49.41		ug/L		99	80 - 126
trans-1,2-Dichloroethene	50.0	50.05		ug/L		100	79 - 126
trans-1,3-Dichloropropene	50.0	47.09		ug/L		94	63 - 134
1,3,5-Trichlorobenzene	50.0	51.26		ug/L		103	70 - 130
1,1,1-Trichloroethane	50.0	50.35		ug/L		101	78 - 135
1,1,2-Trichloroethane	50.0	43.72		ug/L		87	80 - 124
Trichloroethene	50.0	50.41		ug/L		101	80 - 123
Vinyl chloride	50.0	51.49		ug/L		103	68 - 120
Xylenes, Total	100	94.85		ug/L		95	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: LCSD 490-207839/4
Matrix: Water
Analysis Batch: 207839

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
Acetone	250	204.0		ug/L		82	54 - 145	3	21
Benzene	50.0	48.48		ug/L		97	80 - 121	1	17
Bromoform	50.0	49.37		ug/L		99	46 - 145	0	16
Bromomethane	50.0	57.76		ug/L		116	41 - 150	3	50
2-Butanone (MEK)	250	203.7		ug/L		81	62 - 133	0	19
Carbon disulfide	50.0	58.97		ug/L		118	77 - 126	0	21
Carbon tetrachloride	50.0	52.23		ug/L		104	64 - 147	1	19
Chlorobenzene	50.0	49.44		ug/L		99	80 - 120	0	14
Chlorodibromomethane	50.0	50.65		ug/L		101	69 - 133	1	15
Chloroethane	50.0	48.94		ug/L		98	72 - 120	0	20
Chloroform	50.0	48.06		ug/L		96	73 - 129	0	18
Chloromethane	50.0	46.40		ug/L		93	12 - 150	1	31
cis-1,2-Dichloroethene	50.0	48.43		ug/L		97	76 - 125	1	17
cis-1,3-Dichloropropene	50.0	48.97		ug/L		98	74 - 140	0	15
Dibromomethane	50.0	45.19		ug/L		90	71 - 125	1	16
Dichlorobromomethane	50.0	46.47		ug/L		93	75 - 129	1	18
1,1-Dichloroethane	50.0	49.24		ug/L		98	78 - 125	1	17
1,2-Dichloroethane	50.0	49.82		ug/L		100	77 - 121	1	17
1,1-Dichloroethene	50.0	49.00		ug/L		98	79 - 124	1	17
1,2-Dichloropropane	50.0	46.78		ug/L		94	75 - 120	1	17
1,1-Dichloropropene	50.0	49.88		ug/L		100	80 - 122	1	17
Ethylbenzene	50.0	48.65		ug/L		97	80 - 130	0	15
2-Hexanone	250	218.3		ug/L		87	60 - 142	0	15
Methylene Chloride	50.0	49.01		ug/L		98	79 - 123	0	17
4-Methyl-2-pentanone (MIBK)	250	206.8		ug/L		83	60 - 137	0	17
m-Xylene & p-Xylene	50.0	47.70		ug/L		95	80 - 141	0	16
o-Xylene	50.0	47.70		ug/L		95	80 - 127	1	14
Styrene	50.0	49.19		ug/L		98	80 - 127	0	24
1,1,1,2-Tetrachloroethane	50.0	48.98		ug/L		98	74 - 135	0	16
Tetrachloroethene	50.0	52.81		ug/L		106	80 - 126	1	16
Toluene	50.0	49.22		ug/L		98	80 - 126	0	15
trans-1,2-Dichloroethene	50.0	49.47		ug/L		99	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	46.86		ug/L		94	63 - 134	0	14
1,3,5-Trichlorobenzene	50.0	49.65		ug/L		99	70 - 130	3	30
1,1,1-Trichloroethane	50.0	49.64		ug/L		99	78 - 135	1	17
1,1,2-Trichloroethane	50.0	44.15		ug/L		88	80 - 124	1	15
Trichloroethene	50.0	50.84		ug/L		102	80 - 123	1	17
Vinyl chloride	50.0	49.68		ug/L		99	68 - 120	4	17
Xylenes, Total	100	95.39		ug/L		95	80 - 132	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

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

Lab Sample ID: 490-66350-8 MS
Matrix: Water
Analysis Batch: 207839

Client Sample ID: MW-300 (80-90)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	171.7		ug/L		69	45 - 141
Benzene	9.06		50.0	56.00		ug/L		94	75 - 133
Bromoform	ND		50.0	48.06		ug/L		96	42 - 147
Bromomethane	ND		50.0	33.01		ug/L		66	16 - 163
2-Butanone (MEK)	ND		250	189.0		ug/L		76	50 - 138
Carbon disulfide	0.275	J	50.0	54.42		ug/L		108	48 - 152
Carbon tetrachloride	ND		50.0	57.32		ug/L		115	62 - 164
Chlorobenzene	ND		50.0	49.59		ug/L		99	80 - 129
Chlorodibromomethane	ND		50.0	49.66		ug/L		99	66 - 140
Chloroethane	ND		50.0	49.63		ug/L		99	58 - 137
Chloroform	ND		50.0	49.45		ug/L		99	66 - 138
Chloromethane	ND		50.0	44.60		ug/L		89	10 - 169
cis-1,2-Dichloroethene	6.44		50.0	57.23		ug/L		102	68 - 138
cis-1,3-Dichloropropene	ND		50.0	47.16		ug/L		94	71 - 141
Dibromomethane	ND		50.0	45.99		ug/L		92	58 - 140
Dichlorobromomethane	ND		50.0	48.40		ug/L		97	70 - 140
1,1-Dichloroethane	ND		50.0	50.15		ug/L		100	71 - 139
1,2-Dichloroethane	ND		50.0	51.35		ug/L		103	64 - 136
1,1-Dichloroethene	ND		50.0	51.12		ug/L		102	70 - 142
1,2-Dichloropropane	ND		50.0	46.09		ug/L		92	67 - 131
1,1-Dichloropropene	ND		50.0	51.49		ug/L		103	76 - 139
Ethylbenzene	ND		50.0	48.55		ug/L		97	79 - 139
2-Hexanone	ND		250	203.3		ug/L		81	50 - 150
Methylene Chloride	ND		50.0	48.95		ug/L		98	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	195.3		ug/L		78	50 - 147
m-Xylene & p-Xylene	ND		50.0	47.89		ug/L		96	80 - 153
o-Xylene	ND		50.0	47.74		ug/L		95	74 - 138
Styrene	ND		50.0	49.08		ug/L		98	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	49.25		ug/L		99	73 - 141
Tetrachloroethene	ND		50.0	55.11		ug/L		110	72 - 145
Toluene	1.19		50.0	49.43		ug/L		96	75 - 136
trans-1,2-Dichloroethene	0.779		50.0	51.01		ug/L		100	66 - 143
trans-1,3-Dichloropropene	ND		50.0	47.31		ug/L		95	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	50.89		ug/L		102	60 - 140
1,1,1-Trichloroethane	ND		50.0	54.20		ug/L		108	76 - 149
1,1,2-Trichloroethane	ND		50.0	43.36		ug/L		87	74 - 134
Trichloroethene	1.76		50.0	53.91		ug/L		104	73 - 144
Vinyl chloride	ND		50.0	50.23		ug/L		100	56 - 129
Xylenes, Total	ND		100	95.62		ug/L		96	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: 490-66350-8 MSD
Matrix: Water
Analysis Batch: 207839

Client Sample ID: MW-300 (80-90)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	193.9		ug/L		78	45 - 141	12	21
Benzene	9.06		50.0	56.03		ug/L		94	75 - 133	0	17
Bromoform	ND		50.0	49.83		ug/L		100	42 - 147	4	16
Bromomethane	ND		50.0	37.27		ug/L		75	16 - 163	12	50
2-Butanone (MEK)	ND		250	205.7		ug/L		82	50 - 138	8	19
Carbon disulfide	0.275	J	50.0	54.90		ug/L		109	48 - 152	1	21
Carbon tetrachloride	ND		50.0	57.63		ug/L		115	62 - 164	1	19
Chlorobenzene	ND		50.0	49.57		ug/L		99	80 - 129	0	14
Chlorodibromomethane	ND		50.0	51.89		ug/L		104	66 - 140	4	15
Chloroethane	ND		50.0	49.01		ug/L		98	58 - 137	1	20
Chloroform	ND		50.0	50.67		ug/L		101	66 - 138	2	18
Chloromethane	ND		50.0	44.13		ug/L		88	10 - 169	1	31
cis-1,2-Dichloroethene	6.44		50.0	57.70		ug/L		103	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	49.11		ug/L		98	71 - 141	4	15
Dibromomethane	ND		50.0	46.34		ug/L		93	58 - 140	1	16
Dichlorobromomethane	ND		50.0	49.51		ug/L		99	70 - 140	2	18
1,1-Dichloroethane	ND		50.0	50.98		ug/L		102	71 - 139	2	17
1,2-Dichloroethane	ND		50.0	52.01		ug/L		104	64 - 136	1	17
1,1-Dichloroethene	ND		50.0	52.14		ug/L		104	70 - 142	2	17
1,2-Dichloropropane	ND		50.0	47.73		ug/L		95	67 - 131	3	17
1,1-Dichloropropene	ND		50.0	52.66		ug/L		105	76 - 139	2	17
Ethylbenzene	ND		50.0	49.08		ug/L		98	79 - 139	1	15
2-Hexanone	ND		250	213.4		ug/L		85	50 - 150	5	15
Methylene Chloride	ND		50.0	49.59		ug/L		99	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	205.6		ug/L		82	50 - 147	5	17
m-Xylene & p-Xylene	ND		50.0	48.57		ug/L		97	80 - 153	1	16
o-Xylene	ND		50.0	47.66		ug/L		95	74 - 138	0	14
Styrene	ND		50.0	49.61		ug/L		99	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	49.72		ug/L		99	73 - 141	1	16
Tetrachloroethene	ND		50.0	54.72		ug/L		109	72 - 145	1	16
Toluene	1.19		50.0	50.16		ug/L		98	75 - 136	1	15
trans-1,2-Dichloroethene	0.779		50.0	51.89		ug/L		102	66 - 143	2	16
trans-1,3-Dichloropropene	ND		50.0	47.90		ug/L		96	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	52.69		ug/L		105	60 - 140	3	30
1,1,1-Trichloroethane	ND		50.0	54.48		ug/L		109	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	43.20		ug/L		86	74 - 134	0	15
Trichloroethene	1.76		50.0	54.22		ug/L		105	73 - 144	1	17
Vinyl chloride	ND		50.0	50.82		ug/L		102	56 - 129	1	17
Xylenes, Total	ND		100	96.23		ug/L		96	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 490-208035/7
Matrix: Water
Analysis Batch: 208035

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 13:30	1
Benzene	ND		0.500	0.200	ug/L			11/21/14 13:30	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 13:30	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 13:30	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 13:30	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/21/14 13:30	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 13:30	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 13:30	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 13:30	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 13:30	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 13:30	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 13:30	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/21/14 13:30	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 13:30	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 13:30	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 13:30	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 13:30	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 13:30	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 13:30	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 13:30	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 13:30	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 13:30	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 13:30	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 13:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 13:30	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 13:30	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 13:30	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 13:30	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 13:30	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 13:30	1
Toluene	ND		0.500	0.170	ug/L			11/21/14 13:30	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/21/14 13:30	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 13:30	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 13:30	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 13:30	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 13:30	1
Trichloroethene	ND		0.500	0.200	ug/L			11/21/14 13:30	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 13:30	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 13:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*		*11/21/14 13:30*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/21/14 13:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*11/21/14 13:30*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*11/21/14 13:30*	*1*

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

Lab Sample ID: LCS 490-208035/3
Matrix: Water
Analysis Batch: 208035

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	205.6		ug/L		82	54 - 145
Benzene	50.0	50.25		ug/L		101	80 - 121
Bromoform	50.0	51.57		ug/L		103	46 - 145
Bromomethane	50.0	49.38		ug/L		99	41 - 150
2-Butanone (MEK)	250	216.5		ug/L		87	62 - 133
Carbon disulfide	50.0	60.91		ug/L		122	77 - 126
Carbon tetrachloride	50.0	56.34		ug/L		113	64 - 147
Chlorobenzene	50.0	50.19		ug/L		100	80 - 120
Chlorodibromomethane	50.0	52.50		ug/L		105	69 - 133
Chloroethane	50.0	51.52		ug/L		103	72 - 120
Chloroform	50.0	51.16		ug/L		102	73 - 129
Chloromethane	50.0	48.24		ug/L		96	12 - 150
cis-1,2-Dichloroethene	50.0	51.59		ug/L		103	76 - 125
cis-1,3-Dichloropropene	50.0	49.64		ug/L		99	74 - 140
Dibromomethane	50.0	48.31		ug/L		97	71 - 125
Dichlorobromomethane	50.0	49.67		ug/L		99	75 - 129
1,1-Dichloroethane	50.0	51.51		ug/L		103	78 - 125
1,2-Dichloroethane	50.0	54.21		ug/L		108	77 - 121
1,1-Dichloroethene	50.0	52.45		ug/L		105	79 - 124
1,2-Dichloropropane	50.0	48.14		ug/L		96	75 - 120
1,1-Dichloropropene	50.0	52.74		ug/L		105	80 - 122
Ethylbenzene	50.0	48.84		ug/L		98	80 - 130
2-Hexanone	250	221.2		ug/L		88	60 - 142
Methylene Chloride	50.0	51.82		ug/L		104	79 - 123
4-Methyl-2-pentanone (MIBK)	250	212.3		ug/L		85	60 - 137
m-Xylene & p-Xylene	50.0	48.46		ug/L		97	80 - 141
o-Xylene	50.0	48.39		ug/L		97	80 - 127
Styrene	50.0	50.11		ug/L		100	80 - 127
1,1,1,2-Tetrachloroethane	50.0	50.36		ug/L		101	74 - 135
Tetrachloroethene	50.0	53.24		ug/L		106	80 - 126
Toluene	50.0	49.12		ug/L		98	80 - 126
trans-1,2-Dichloroethene	50.0	52.46		ug/L		105	79 - 126
trans-1,3-Dichloropropene	50.0	48.90		ug/L		98	63 - 134
1,3,5-Trichlorobenzene	50.0	51.84		ug/L		104	70 - 130
1,1,1-Trichloroethane	50.0	53.40		ug/L		107	78 - 135
1,1,2-Trichloroethane	50.0	44.26		ug/L		89	80 - 124
Trichloroethene	50.0	52.78		ug/L		106	80 - 123
Vinyl chloride	50.0	53.36		ug/L		107	68 - 120
Xylenes, Total	100	96.85		ug/L		97	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

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

Lab Sample ID: LCSD 490-208035/4
Matrix: Water
Analysis Batch: 208035

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
Acetone	250	208.9		ug/L		84	54 - 145	2	21
Benzene	50.0	48.82		ug/L		98	80 - 121	3	17
Bromoform	50.0	51.25		ug/L		103	46 - 145	1	16
Bromomethane	50.0	50.49		ug/L		101	41 - 150	2	50
2-Butanone (MEK)	250	215.0		ug/L		86	62 - 133	1	19
Carbon disulfide	50.0	59.82		ug/L		120	77 - 126	2	21
Carbon tetrachloride	50.0	53.88		ug/L		108	64 - 147	4	19
Chlorobenzene	50.0	49.51		ug/L		99	80 - 120	1	14
Chlorodibromomethane	50.0	52.13		ug/L		104	69 - 133	1	15
Chloroethane	50.0	48.74		ug/L		97	72 - 120	6	20
Chloroform	50.0	49.52		ug/L		99	73 - 129	3	18
Chloromethane	50.0	46.43		ug/L		93	12 - 150	4	31
cis-1,2-Dichloroethene	50.0	50.53		ug/L		101	76 - 125	2	17
cis-1,3-Dichloropropene	50.0	49.24		ug/L		98	74 - 140	1	15
Dibromomethane	50.0	47.43		ug/L		95	71 - 125	2	16
Dichlorobromomethane	50.0	48.60		ug/L		97	75 - 129	2	18
1,1-Dichloroethane	50.0	50.41		ug/L		101	78 - 125	2	17
1,2-Dichloroethane	50.0	51.42		ug/L		103	77 - 121	5	17
1,1-Dichloroethene	50.0	51.19		ug/L		102	79 - 124	2	17
1,2-Dichloropropane	50.0	46.64		ug/L		93	75 - 120	3	17
1,1-Dichloropropene	50.0	51.02		ug/L		102	80 - 122	3	17
Ethylbenzene	50.0	48.24		ug/L		96	80 - 130	1	15
2-Hexanone	250	223.7		ug/L		89	60 - 142	1	15
Methylene Chloride	50.0	50.82		ug/L		102	79 - 123	2	17
4-Methyl-2-pentanone (MIBK)	250	212.4		ug/L		85	60 - 137	0	17
m-Xylene & p-Xylene	50.0	47.83		ug/L		96	80 - 141	1	16
o-Xylene	50.0	47.48		ug/L		95	80 - 127	2	14
Styrene	50.0	49.56		ug/L		99	80 - 127	1	24
1,1,1,2-Tetrachloroethane	50.0	50.13		ug/L		100	74 - 135	0	16
Tetrachloroethene	50.0	52.61		ug/L		105	80 - 126	1	16
Toluene	50.0	48.11		ug/L		96	80 - 126	2	15
trans-1,2-Dichloroethene	50.0	51.16		ug/L		102	79 - 126	2	16
trans-1,3-Dichloropropene	50.0	48.19		ug/L		96	63 - 134	1	14
1,3,5-Trichlorobenzene	50.0	51.36		ug/L		103	70 - 130	1	30
1,1,1-Trichloroethane	50.0	51.14		ug/L		102	78 - 135	4	17
1,1,2-Trichloroethane	50.0	44.13		ug/L		88	80 - 124	0	15
Trichloroethene	50.0	50.98		ug/L		102	80 - 123	3	17
Vinyl chloride	50.0	52.38		ug/L		105	68 - 120	2	17
Xylenes, Total	100	95.30		ug/L		95	80 - 132	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: 490-66356-B-2 MS
Matrix: Water
Analysis Batch: 208035

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	204.8		ug/L		82	45 - 141
Benzene	0.473	J	50.0	51.72		ug/L		102	75 - 133
Bromoform	ND		50.0	55.29		ug/L		111	42 - 147
Bromomethane	ND		50.0	40.17		ug/L		80	16 - 163
2-Butanone (MEK)	ND		250	207.2		ug/L		83	50 - 138
Carbon disulfide	ND		50.0	62.60		ug/L		125	48 - 152
Carbon tetrachloride	ND		50.0	64.56		ug/L		129	62 - 164
Chlorobenzene	ND		50.0	52.31		ug/L		105	80 - 129
Chlorodibromomethane	ND		50.0	55.72		ug/L		111	66 - 140
Chloroethane	ND		50.0	51.47		ug/L		103	58 - 137
Chloroform	ND		50.0	53.89		ug/L		108	66 - 138
Chloromethane	ND		50.0	47.29		ug/L		95	10 - 169
cis-1,2-Dichloroethene	ND		50.0	53.82		ug/L		108	68 - 138
cis-1,3-Dichloropropene	ND		50.0	51.09		ug/L		102	71 - 141
Dibromomethane	ND		50.0	49.57		ug/L		99	58 - 140
Dichlorobromomethane	ND		50.0	53.57		ug/L		107	70 - 140
1,1-Dichloroethane	ND		50.0	53.76		ug/L		108	71 - 139
1,2-Dichloroethane	ND		50.0	58.54		ug/L		117	64 - 136
1,1-Dichloroethene	ND		50.0	55.51		ug/L		111	70 - 142
1,2-Dichloropropane	ND		50.0	48.18		ug/L		96	67 - 131
1,1-Dichloropropene	ND		50.0	56.01		ug/L		112	76 - 139
Ethylbenzene	ND		50.0	51.72		ug/L		103	79 - 139
2-Hexanone	ND		250	217.6		ug/L		87	50 - 150
Methylene Chloride	ND		50.0	52.68		ug/L		105	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	206.7		ug/L		83	50 - 147
m-Xylene & p-Xylene	ND		50.0	51.35		ug/L		103	80 - 153
o-Xylene	ND		50.0	50.76		ug/L		102	74 - 138
Styrene	ND		50.0	52.12		ug/L		104	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	54.62		ug/L		109	73 - 141
Tetrachloroethene	ND		50.0	59.34		ug/L		119	72 - 145
Toluene	ND		50.0	51.67		ug/L		103	75 - 136
trans-1,2-Dichloroethene	ND		50.0	54.53		ug/L		109	66 - 143
trans-1,3-Dichloropropene	ND		50.0	51.45		ug/L		103	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	52.93		ug/L		106	60 - 140
1,1,1-Trichloroethane	ND		50.0	60.04		ug/L		120	76 - 149
1,1,2-Trichloroethane	ND		50.0	46.45		ug/L		93	74 - 134
Trichloroethene	ND		50.0	56.63		ug/L		113	73 - 144
Vinyl chloride	ND		50.0	55.00		ug/L		110	56 - 129
Xylenes, Total	ND		100	102.1		ug/L		102	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
Dibromofluoromethane (Surr)	*108*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*114*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

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

Lab Sample ID: 490-66356-C-2 MSD
Matrix: Water
Analysis Batch: 208035

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	199.6		ug/L		80	45 - 141	3	21
Benzene	0.473	J	50.0	50.67		ug/L		100	75 - 133	2	17
Bromoform	ND		50.0	51.23		ug/L		102	42 - 147	8	16
Bromomethane	ND		50.0	50.49		ug/L		101	16 - 163	23	50
2-Butanone (MEK)	ND		250	202.8		ug/L		81	50 - 138	2	19
Carbon disulfide	ND		50.0	62.74		ug/L		125	48 - 152	0	21
Carbon tetrachloride	ND		50.0	63.03		ug/L		126	62 - 164	2	19
Chlorobenzene	ND		50.0	50.01		ug/L		100	80 - 129	4	14
Chlorodibromomethane	ND		50.0	51.73		ug/L		103	66 - 140	7	15
Chloroethane	ND		50.0	51.43		ug/L		103	58 - 137	0	20
Chloroform	ND		50.0	52.60		ug/L		105	66 - 138	2	18
Chloromethane	ND		50.0	46.72		ug/L		93	10 - 169	1	31
cis-1,2-Dichloroethene	ND		50.0	53.18		ug/L		106	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	48.67		ug/L		97	71 - 141	5	15
Dibromomethane	ND		50.0	48.47		ug/L		97	58 - 140	2	16
Dichlorobromomethane	ND		50.0	51.43		ug/L		103	70 - 140	4	18
1,1-Dichloroethane	ND		50.0	51.90		ug/L		104	71 - 139	4	17
1,2-Dichloroethane	ND		50.0	56.10		ug/L		112	64 - 136	4	17
1,1-Dichloroethene	ND		50.0	55.30		ug/L		111	70 - 142	0	17
1,2-Dichloropropane	ND		50.0	47.49		ug/L		95	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	55.42		ug/L		111	76 - 139	1	17
Ethylbenzene	ND		50.0	49.71		ug/L		99	79 - 139	4	15
2-Hexanone	ND		250	207.8		ug/L		83	50 - 150	5	15
Methylene Chloride	ND		50.0	51.97		ug/L		104	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	200.8		ug/L		80	50 - 147	3	17
m-Xylene & p-Xylene	ND		50.0	49.45		ug/L		99	80 - 153	4	16
o-Xylene	ND		50.0	48.32		ug/L		97	74 - 138	5	14
Styrene	ND		50.0	50.28		ug/L		101	61 - 148	4	24
1,1,1,2-Tetrachloroethane	ND		50.0	51.42		ug/L		103	73 - 141	6	16
Tetrachloroethene	ND		50.0	56.36		ug/L		113	72 - 145	5	16
Toluene	ND		50.0	48.76		ug/L		98	75 - 136	6	15
trans-1,2-Dichloroethene	ND		50.0	53.57		ug/L		107	66 - 143	2	16
trans-1,3-Dichloropropene	ND		50.0	48.78		ug/L		98	59 - 135	5	14
1,3,5-Trichlorobenzene	ND		50.0	52.42		ug/L		105	60 - 140	1	30
1,1,1-Trichloroethane	ND		50.0	58.70		ug/L		117	76 - 149	2	17
1,1,2-Trichloroethane	ND		50.0	44.48		ug/L		89	74 - 134	4	15
Trichloroethene	ND		50.0	54.91		ug/L		110	73 - 144	3	17
Vinyl chloride	ND		50.0	54.84		ug/L		110	56 - 129	0	17
Xylenes, Total	ND		100	97.77		ug/L		98	74 - 141	4	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-208103/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 209269 — **Prep Batch: 208103**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:24	11/26/14 01:06	1
Manganese	ND		0.0150	0.00500	mg/L		11/21/14 12:24	11/26/14 01:06	1

Lab Sample ID: LCS 490-208103/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 209269 — **Prep Batch: 208103**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.500	0.5220		mg/L		104	80 - 120
Manganese	0.500	0.4706		mg/L		94	80 - 120

Lab Sample ID: 490-66350-11 MS — **Client Sample ID: MW-300 (40-50)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 209269 — **Prep Batch: 208103**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.00920	J	0.500	0.5431		mg/L		107	75 - 125
Manganese	0.0951		0.500	0.5427		mg/L		90	75 - 125

Lab Sample ID: 490-66350-11 MSD — **Client Sample ID: MW-300 (40-50)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 209269 — **Prep Batch: 208103**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.00920	J	0.500	0.5438		mg/L		107	75 - 125	0	20
Manganese	0.0951		0.500	0.5583		mg/L		93	75 - 125	3	20

Lab Sample ID: MB 490-208106/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210562 — **Prep Batch: 208106**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/21/14 12:28	12/01/14 16:13	1
Manganese	ND		0.0150	0.00500	mg/L		11/21/14 12:28	12/01/14 16:13	1

Lab Sample ID: LCS 490-208106/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210562 — **Prep Batch: 208106**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.500	0.5070		mg/L		101	80 - 120
Manganese	0.500	0.5151		mg/L		103	80 - 120

Lab Sample ID: LCSD 490-208106/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210562 — **Prep Batch: 208106**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.500	0.5075		mg/L		102	80 - 120	0	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCSD 490-208106/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210562 — **Prep Batch: 208106**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Manganese			0.500	0.5161		mg/L		103	80 - 120	0	20

Lab Sample ID: 490-66166-D-23-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210562 — **Prep Batch: 208106**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	0.125		0.500	0.6270		mg/L		100	75 - 125		

Lab Sample ID: 490-66166-D-23-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210562 — **Prep Batch: 208106**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.125		0.500	0.6254		mg/L		100	75 - 125	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

GC/MS VOA

Analysis Batch: 207839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66350-2	70S	Total/NA	Water	8260B	
490-66350-3	75D	Total/NA	Water	8260B	
490-66350-4	175D	Total/NA	Water	8260B	
490-66350-5	MW-305 (285-300)	Total/NA	Water	8260B	
490-66350-6	MW-300 (20-30)	Total/NA	Water	8260B	
490-66350-7	MW-300 (120-130)	Total/NA	Water	8260B	
490-66350-8	MW-300 (80-90)	Total/NA	Water	8260B	
490-66350-8 MS	MW-300 (80-90)	Total/NA	Water	8260B	
490-66350-8 MSD	MW-300 (80-90)	Total/NA	Water	8260B	
490-66350-9	108R	Total/NA	Water	8260B	
490-66350-10	MW-301 (115-125)	Total/NA	Water	8260B	
490-66350-11	MW-300 (40-50)	Total/NA	Water	8260B	
490-66350-12	MW-301 (240-250)	Total/NA	Water	8260B	
490-66350-13	MW-305 (233-243)	Total/NA	Water	8260B	
490-66350-14	MW-301 (290-300)	Total/NA	Water	8260B	
490-66350-15	MW-305 (35-45)	Total/NA	Water	8260B	
LCS 490-207839/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-207839/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-207839/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 208035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66350-1	MW-301 (145-155)	Total/NA	Water	8260B	
490-66350-16	MW-305 (265-275)	Total/NA	Water	8260B	
490-66350-17	MW-305 (145-155)	Total/NA	Water	8260B	
490-66350-18	MW-305 (62-72)	Total/NA	Water	8260B	
490-66350-19	MW-301 (35-45)	Total/NA	Water	8260B	
490-66350-20	Trip Blank	Total/NA	Water	8260B	
490-66356-B-2 MS	Matrix Spike	Total/NA	Water	8260B	
490-66356-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-208035/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-208035/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-208035/7	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 208103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66350-11	MW-300 (40-50)	Total/NA	Water	3010A	
490-66350-11 MS	MW-300 (40-50)	Total/NA	Water	3010A	
490-66350-11 MSD	MW-300 (40-50)	Total/NA	Water	3010A	
490-66350-12	MW-301 (240-250)	Total/NA	Water	3010A	
490-66350-13	MW-305 (233-243)	Total/NA	Water	3010A	
490-66350-14	MW-301 (290-300)	Total/NA	Water	3010A	
490-66350-15	MW-305 (35-45)	Total/NA	Water	3010A	
490-66350-16	MW-305 (265-275)	Total/NA	Water	3010A	
490-66350-17	MW-305 (145-155)	Total/NA	Water	3010A	
490-66350-18	MW-305 (62-72)	Total/NA	Water	3010A	
490-66350-19	MW-301 (35-45)	Total/NA	Water	3010A	
LCS 490-208103/2-A	Lab Control Sample	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 208103 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-208103/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 208106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66166-D-23-B MS	Matrix Spike	Total/NA	Water	3010A	
490-66166-D-23-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-66350-1	MW-301 (145-155)	Total/NA	Water	3010A	
490-66350-2	70S	Total/NA	Water	3010A	
490-66350-3	75D	Total/NA	Water	3010A	
490-66350-4	175D	Total/NA	Water	3010A	
490-66350-5	MW-305 (285-300)	Total/NA	Water	3010A	
490-66350-6	MW-300 (20-30)	Total/NA	Water	3010A	
490-66350-7	MW-300 (120-130)	Total/NA	Water	3010A	
490-66350-8	MW-300 (80-90)	Total/NA	Water	3010A	
490-66350-9	108R	Total/NA	Water	3010A	
490-66350-10	MW-301 (115-125)	Total/NA	Water	3010A	
LCS 490-208106/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-208106/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-208106/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 209269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66350-11	MW-300 (40-50)	Total/NA	Water	6010B	208103
490-66350-11 MS	MW-300 (40-50)	Total/NA	Water	6010B	208103
490-66350-11 MSD	MW-300 (40-50)	Total/NA	Water	6010B	208103
490-66350-12	MW-301 (240-250)	Total/NA	Water	6010B	208103
490-66350-13	MW-305 (233-243)	Total/NA	Water	6010B	208103
490-66350-14	MW-301 (290-300)	Total/NA	Water	6010B	208103
490-66350-15	MW-305 (35-45)	Total/NA	Water	6010B	208103
490-66350-16	MW-305 (265-275)	Total/NA	Water	6010B	208103
490-66350-17	MW-305 (145-155)	Total/NA	Water	6010B	208103
490-66350-18	MW-305 (62-72)	Total/NA	Water	6010B	208103
490-66350-19	MW-301 (35-45)	Total/NA	Water	6010B	208103
LCS 490-208103/2-A	Lab Control Sample	Total/NA	Water	6010B	208103
MB 490-208103/1-A	Method Blank	Total/NA	Water	6010B	208103

Analysis Batch: 210562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66166-D-23-B MS	Matrix Spike	Total/NA	Water	6010B	208106
490-66166-D-23-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	208106
490-66350-1	MW-301 (145-155)	Total/NA	Water	6010B	208106
490-66350-2	70S	Total/NA	Water	6010B	208106
490-66350-3	75D	Total/NA	Water	6010B	208106
490-66350-4	175D	Total/NA	Water	6010B	208106
490-66350-5	MW-305 (285-300)	Total/NA	Water	6010B	208106
490-66350-6	MW-300 (20-30)	Total/NA	Water	6010B	208106
490-66350-7	MW-300 (120-130)	Total/NA	Water	6010B	208106
490-66350-8	MW-300 (80-90)	Total/NA	Water	6010B	208106
490-66350-9	108R	Total/NA	Water	6010B	208106
490-66350-10	MW-301 (115-125)	Total/NA	Water	6010B	208106
LCS 490-208106/2-A	Lab Control Sample	Total/NA	Water	6010B	208106

Metals (Continued)

Analysis Batch: 210562 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 490-208106/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	208106
MB 490-208106/1-A	Method Blank	Total/NA	Water	6010B	208106

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-301 (145-155)

Lab Sample ID: 490-66350-1
Date Collected: 11/13/14 12:30
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	208035	11/21/14 14:49	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208106	11/21/14 12:28	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	210562	12/01/14 17:45	ADN	TAL NSH

Client Sample ID: 70S

Lab Sample ID: 490-66350-2
Date Collected: 11/13/14 09:25
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 03:56	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208106	11/21/14 12:28	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	210562	12/01/14 17:49	ADN	TAL NSH

Client Sample ID: 75D

Lab Sample ID: 490-66350-3
Date Collected: 11/13/14 10:45
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 04:22	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208106	11/21/14 12:28	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	210562	12/01/14 17:54	ADN	TAL NSH

Client Sample ID: 175D

Lab Sample ID: 490-66350-4
Date Collected: 11/13/14 16:30
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 04:48	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208106	11/21/14 12:28	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	210562	12/01/14 17:59	ADN	TAL NSH

Client Sample ID: MW-305 (285-300)

Lab Sample ID: 490-66350-5
Date Collected: 11/13/14 15:00
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 05:14	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208106	11/21/14 12:28	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	210562	12/01/14 18:04	ADN	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-300 (20-30)

Lab Sample ID: 490-66350-6
Date Collected: 11/13/14 09:30
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 05:40	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208106	11/21/14 12:28	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	210562	12/01/14 18:09	ADN	TAL NSH

Client Sample ID: MW-300 (120-130)

Lab Sample ID: 490-66350-7
Date Collected: 11/13/14 11:00
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 06:06	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208106	11/21/14 12:28	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	210562	12/01/14 18:14	ADN	TAL NSH

Client Sample ID: MW-300 (80-90)

Lab Sample ID: 490-66350-8
Date Collected: 11/13/14 11:10
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 06:32	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208106	11/21/14 12:28	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	210562	12/01/14 18:18	ADN	TAL NSH

Client Sample ID: 108R

Lab Sample ID: 490-66350-9
Date Collected: 11/13/14 14:20
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 06:58	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208106	11/21/14 12:28	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	210562	12/01/14 18:23	ADN	TAL NSH

Client Sample ID: MW-301 (115-125)

Lab Sample ID: 490-66350-10
Date Collected: 11/13/14 12:00
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 07:24	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208106	11/21/14 12:28	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	210562	12/01/14 18:28	ADN	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-300 (40-50)

Lab Sample ID: 490-66350-11

Date Collected: 11/13/14 09:20
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 07:50	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208103	11/21/14 12:24	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	209269	11/26/14 01:16	CME	TAL NSH

Client Sample ID: MW-301 (240-250)

Lab Sample ID: 490-66350-12

Date Collected: 11/13/14 12:50
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 08:16	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208103	11/21/14 12:24	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	209269	11/26/14 01:30	CME	TAL NSH

Client Sample ID: MW-305 (233-243)

Lab Sample ID: 490-66350-13

Date Collected: 11/13/14 14:20
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 08:42	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208103	11/21/14 12:24	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	209269	11/26/14 01:34	CME	TAL NSH

Client Sample ID: MW-301 (290-300)

Lab Sample ID: 490-66350-14

Date Collected: 11/13/14 13:05
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 09:08	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208103	11/21/14 12:24	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	209269	11/26/14 01:39	CME	TAL NSH

Client Sample ID: MW-305 (35-45)

Lab Sample ID: 490-66350-15

Date Collected: 11/13/14 13:20
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	207839	11/21/14 09:34	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208103	11/21/14 12:24	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	209269	11/26/14 01:44	CME	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Client Sample ID: MW-305 (265-275)

Lab Sample ID: 490-66350-16

Date Collected: 11/13/14 14:40
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	208035	11/21/14 15:41	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208103	11/21/14 12:24	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	209269	11/26/14 01:59	CME	TAL NSH

Client Sample ID: MW-305 (145-155)

Lab Sample ID: 490-66350-17

Date Collected: 11/13/14 14:00
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	208035	11/21/14 16:07	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208103	11/21/14 12:24	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	209269	11/26/14 02:04	CME	TAL NSH

Client Sample ID: MW-305 (62-72)

Lab Sample ID: 490-66350-18

Date Collected: 11/13/14 13:40
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	208035	11/21/14 16:33	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208103	11/21/14 12:24	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	209269	11/26/14 02:08	CME	TAL NSH

Client Sample ID: MW-301 (35-45)

Lab Sample ID: 490-66350-19

Date Collected: 11/13/14 13:40
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	208035	11/21/14 15:15	EML	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	208103	11/21/14 12:24	TDP	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	209269	11/26/14 02:13	CME	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-66350-20

Date Collected: 11/13/14 01:01
Matrix: Water
Date Received: 11/14/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	208035	11/21/14 14:22	EML	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66350-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-66350 Chain of Custody

Cooler Received/Opened On : 11/14/2014 @ 0840

1. Tracking # 9256 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 18290455

2. Temperature of rep. sample or temp blank when opened: 0.6 *Degrees Celsius*

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

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

If yes, how many and where: 1 Front

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information

Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone: 717-645-6179
Email: chuck.castelluccio@arcadis-us.com
Project Name: Tibbetts Road Site E101274
Site:

Sampler: MK, JB, TM
Phone: 717-645-6179
Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Carrier Tracking No(s):

FORD Site E101274
Page: 1/2
Job #:

Due Date Requested:
TAT Requested (days): Standard
PO #: Purchase Order Requested
WO #:
Lab Project #: 49002494
Client Project #:

Analysis Requested

Loc: 490
66350

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - (MOD) 6010B As and Mn (D)	8260B_LL - (MOD) New Hampshire Volatiles List (A)	Total Number of containers	Special Instructions/Note:
				Preservation Code:							
1	MW-301 (145-155)	11/13/14	1230	G	W			X	X		
2	70S	11/13/14	0925	G	W			X	X		
3	75D	11/13/14	1045	G	W			X	X		
4	175D	11/13/14	1630	G	W			X	X		
5	MW-305 (285-300)	11/13/14	1500	G	W			X	X		
6	MW-300 (20-30)	11/13/14	0930	G	W			X	X		
7	MW-300 (120-130)	11/13/14	1100	G	W			X	X		
8	MW-300 (80-90)	11/13/14	1110	G	W			X	X		
9	~~MW~~-108R	11/13/14	1420	G	W			X	X		
10	MW-301 (115-125)	11/13/14	1200	G	W			X	X		
11	MW-300 (40-50)	11/13/14	0920	G	W			X	X		

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/13/14 / 1645		[signature] / TAW	11/14/14 0840	O.6
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: MK, JB, TM	Lab PM: Brown, Shali	Carrier Tracking No(s):	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 717-645-6179	E-Mail: shali.brown@testamericainc.com		Page: 2/2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Standard			
State, Zip: MA, 01824				
Phone: 717-645-6179	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #:			

Analysis Requested

Loc: 490
66350

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - (MOD) 6010B As and Mn	8260B_LL - (MOD) New Hampshire Volatiles List	Total Number of containers	Special Instructions/Note:
				Preservation Code:				D	A		
12	MW-301 (240-250)	11/13/14	1250	G	W			X	X	4	*MW-301(35-45)
13	MW-305 (233-243)	11/13/14	1420	G	W			X	X	4	only has 2 voas
14	MW-301 (290-300)	11/13/14	1305	G	W			X	X	4	for 8260B due
15	MW-305 (35-45)	11/13/14	1320	G	W			X	X	4	to lack of
16	MW-305 (265-275)	11/13/14	1440	G	W			X	X	4	water. And
17	MW-305 (145-155)	11/13/14	1400	G	W			X	X	4	6010B bottle only
18	MW-305 (62-72)	11/13/14	1340	G	W			X	X	4	120 mL. Please
19	MW-301 (35-45)	11/13/14	1340	G	W			X	X*	3	run
20	TRIP BLANK	11/13/14	—		W				X	2	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	11/13/14 / 1645		[signature]	11/14/14 0850	O.L
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

12/2/2014

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-66350-1

Login Number: 66350

List Source: TestAmerica Nashville

List Number: 1

Creator: Buckingham, Paul

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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.	N/A	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-66213-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
12/9/2014 6:14:07 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-66213-1	63R (85-100)	Water	11/12/14 09:55	11/13/14 08:30
490-66213-2	IW-103	Water	11/12/14 14:45	11/13/14 08:30
490-66213-3	67R (83-98)	Water	11/12/14 09:50	11/13/14 08:30
490-66213-4	IW-100	Water	11/12/14 14:40	11/13/14 08:30
490-66213-5	Effluent	Water	11/12/14 14:35	11/13/14 08:30
490-66213-6	MW-302 (60-70)	Water	11/12/14 14:00	11/13/14 08:30
490-66213-7	63R (150-165)	Water	11/12/14 11:10	11/13/14 08:30
490-66213-8	67R (149-164)	Water	11/12/14 11:10	11/13/14 08:30
490-66213-9	204R	Water	11/12/14 13:45	11/13/14 08:30
490-66213-10	MW-302 (100-110)	Water	11/12/14 10:50	11/13/14 08:30
490-66213-11	57S	Water	11/12/14 11:20	11/13/14 08:30
490-66213-12	73S	Water	11/12/14 10:05	11/13/14 08:30
490-66213-13	75R	Water	11/12/14 16:30	11/13/14 08:30
490-66213-14	65R (180-195)	Water	11/12/14 15:10	11/13/14 08:30
490-66213-15	65R (100-115)	Water	11/12/14 14:00	11/13/14 08:30
490-66213-16	Trip Blank	Water	11/12/14 00:01	11/13/14 08:30

Job ID: 490-66213-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-66213-1

Comments
No additional comments.

Receipt
The samples were received on 11/13/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
Method(s) 8260B: The following sample(s) were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: 63R (85-100) (490-66213-1). Based on sample date, this sample was analyzed out of hold.

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

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

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

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
F2	MS/MSD RPD exceeds 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 63R (85-100)

Date Collected: 11/12/14 09:55
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**27.5**		5.00	2.66	ug/L			11/20/14 19:54	1
Benzene	**0.225**	**J**	0.500	0.200	ug/L			11/20/14 19:54	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 19:54	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 19:54	1
2-Butanone (MEK)	**4.88**	**J**	50.0	2.64	ug/L			11/20/14 19:54	1
Carbon disulfide	**2.60**		0.500	0.220	ug/L			11/20/14 19:54	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 19:54	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 19:54	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 19:54	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 19:54	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 19:54	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 19:54	1
cis-1,2-Dichloroethene	**1.35**		0.500	0.210	ug/L			11/20/14 19:54	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 19:54	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 19:54	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 19:54	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 19:54	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 19:54	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 19:54	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 19:54	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 19:54	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 19:54	1
2-Hexanone	**5.46**		5.00	1.28	ug/L			11/20/14 19:54	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 19:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 19:54	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 19:54	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 19:54	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 19:54	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 19:54	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 19:54	1
Toluene	**0.849**		0.500	0.170	ug/L			11/20/14 19:54	1
trans-1,2-Dichloroethene	**0.471**	**J**	0.500	0.230	ug/L			11/20/14 19:54	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 19:54	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 19:54	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 19:54	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 19:54	1
Trichloroethene	**0.521**		0.500	0.200	ug/L			11/20/14 19:54	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 19:54	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*11/20/14 19:54*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*11/20/14 19:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*		*11/20/14 19:54*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/20/14 19:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		12/01/14 14:04	12/04/14 02:56	1
Manganese	**0.0230**		0.0150	0.00500	mg/L		12/01/14 14:04	12/04/14 02:56	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: IW-103

Date Collected: 11/12/14 14:45
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 18:33	1
Benzene	**11.9**		0.500	0.200	ug/L			11/20/14 18:33	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 18:33	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 18:33	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 18:33	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 18:33	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 18:33	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 18:33	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 18:33	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 18:33	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 18:33	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 18:33	1
cis-1,2-Dichloroethene	**19.8**		0.500	0.210	ug/L			11/20/14 18:33	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 18:33	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 18:33	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 18:33	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 18:33	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 18:33	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 18:33	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 18:33	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 18:33	1
Ethylbenzene	**3.02**		0.500	0.190	ug/L			11/20/14 18:33	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 18:33	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 18:33	1
4-Methyl-2-pentanone (MIBK)	**1.81**	**J**	5.00	0.810	ug/L			11/20/14 18:33	1
m-Xylene & p-Xylene	**2.76**		0.500	0.380	ug/L			11/20/14 18:33	1
o-Xylene	**0.298**	**J**	0.500	0.200	ug/L			11/20/14 18:33	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 18:33	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 18:33	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 18:33	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 18:33	1
trans-1,2-Dichloroethene	**0.548**		0.500	0.230	ug/L			11/20/14 18:33	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 18:33	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 18:33	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 18:33	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 18:33	1
Trichloroethene	**0.758**		0.500	0.200	ug/L			11/20/14 18:33	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 18:33	1
Xylenes, Total	**3.06**		1.50	0.580	ug/L			11/20/14 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*11/20/14 18:33*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*11/20/14 18:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*11/20/14 18:33*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/20/14 18:33*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 67R (83-98)

Date Collected: 11/12/14 09:50
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.92**		5.00	2.66	ug/L			11/20/14 20:21	1
Benzene	**3.38**		0.500	0.200	ug/L			11/20/14 20:21	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 20:21	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 20:21	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 20:21	1
Carbon disulfide	**2.09**		0.500	0.220	ug/L			11/20/14 20:21	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 20:21	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 20:21	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 20:21	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 20:21	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 20:21	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 20:21	1
cis-1,2-Dichloroethene	**37.8**		0.500	0.210	ug/L			11/20/14 20:21	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 20:21	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 20:21	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 20:21	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 20:21	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 20:21	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 20:21	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 20:21	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 20:21	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 20:21	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 20:21	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 20:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 20:21	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 20:21	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 20:21	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 20:21	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 20:21	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 20:21	1
Toluene	**0.756**		0.500	0.170	ug/L			11/20/14 20:21	1
trans-1,2-Dichloroethene	**20.3**		0.500	0.230	ug/L			11/20/14 20:21	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 20:21	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 20:21	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 20:21	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 20:21	1
Trichloroethene	**80.8**		0.500	0.200	ug/L			11/20/14 20:21	1
Vinyl chloride	**0.271**	**J**	0.500	0.180	ug/L			11/20/14 20:21	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 20:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*11/20/14 20:21*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*11/20/14 20:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*11/20/14 20:21*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/20/14 20:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00810**	**J**	0.0100	0.00720	mg/L		12/01/14 14:04	12/04/14 03:00	1
Manganese	ND		0.0150	0.00500	mg/L		12/01/14 14:04	12/04/14 03:00	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: IW-100

Date Collected: 11/12/14 14:40
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 19:00	1
Benzene	**16.6**		0.500	0.200	ug/L			11/20/14 19:00	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 19:00	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 19:00	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 19:00	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 19:00	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 19:00	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 19:00	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 19:00	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 19:00	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 19:00	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 19:00	1
cis-1,2-Dichloroethene	**39.4**		0.500	0.210	ug/L			11/20/14 19:00	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 19:00	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 19:00	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 19:00	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 19:00	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 19:00	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 19:00	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 19:00	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 19:00	1
Ethylbenzene	**4.73**		0.500	0.190	ug/L			11/20/14 19:00	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 19:00	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 19:00	1
4-Methyl-2-pentanone (MIBK)	**4.12**	**J**	5.00	0.810	ug/L			11/20/14 19:00	1
m-Xylene & p-Xylene	**3.65**		0.500	0.380	ug/L			11/20/14 19:00	1
o-Xylene	**0.511**		0.500	0.200	ug/L			11/20/14 19:00	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 19:00	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 19:00	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 19:00	1
Toluene	**0.332**	**J**	0.500	0.170	ug/L			11/20/14 19:00	1
trans-1,2-Dichloroethene	**2.59**		0.500	0.230	ug/L			11/20/14 19:00	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 19:00	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 19:00	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 19:00	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 19:00	1
Trichloroethene	**2.87**		0.500	0.200	ug/L			11/20/14 19:00	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 19:00	1
Xylenes, Total	**4.16**		1.50	0.580	ug/L			11/20/14 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*11/20/14 19:00*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*11/20/14 19:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*11/20/14 19:00*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*11/20/14 19:00*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: Effluent

Lab Sample ID: 490-66213-5

Date Collected: 11/12/14 14:35
Matrix: Water
Date Received: 11/13/14 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 18:06	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 18:06	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 18:06	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 18:06	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 18:06	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 18:06	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 18:06	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 18:06	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 18:06	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 18:06	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 18:06	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 18:06	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 18:06	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 18:06	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 18:06	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 18:06	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 18:06	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 18:06	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 18:06	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 18:06	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 18:06	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 18:06	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 18:06	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 18:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 18:06	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 18:06	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 18:06	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 18:06	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 18:06	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 18:06	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 18:06	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 18:06	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 18:06	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 18:06	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 18:06	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 18:06	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 18:06	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 18:06	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*11/20/14 18:06*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*11/20/14 18:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*		*11/20/14 18:06*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/20/14 18:06*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: MW-302 (60-70)

Lab Sample ID: 490-66213-6

Date Collected: 11/12/14 14:00
Matrix: Water
Date Received: 11/13/14 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 20:48	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 20:48	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 20:48	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 20:48	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 20:48	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 20:48	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 20:48	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 20:48	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 20:48	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 20:48	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 20:48	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 20:48	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 20:48	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 20:48	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 20:48	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 20:48	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 20:48	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 20:48	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 20:48	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 20:48	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 20:48	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 20:48	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 20:48	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 20:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 20:48	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 20:48	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 20:48	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 20:48	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 20:48	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 20:48	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 20:48	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 20:48	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 20:48	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 20:48	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 20:48	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 20:48	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 20:48	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 20:48	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*11/20/14 20:48*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*11/20/14 20:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*11/20/14 20:48*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/20/14 20:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0294**		0.0100	0.00720	mg/L		11/17/14 14:21	12/06/14 10:01	1
Manganese	**0.122**		0.0150	0.00500	mg/L		11/17/14 14:21	12/06/14 10:01	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 63R (150-165)

Date Collected: 11/12/14 11:10
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 21:15	1
Benzene	**0.740**		0.500	0.200	ug/L			11/20/14 21:15	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 21:15	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 21:15	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 21:15	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 21:15	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 21:15	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 21:15	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 21:15	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 21:15	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 21:15	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 21:15	1
cis-1,2-Dichloroethene	**11.4**		0.500	0.210	ug/L			11/20/14 21:15	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 21:15	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 21:15	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 21:15	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 21:15	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 21:15	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 21:15	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 21:15	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 21:15	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 21:15	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 21:15	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 21:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 21:15	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 21:15	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 21:15	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 21:15	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 21:15	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 21:15	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 21:15	1
trans-1,2-Dichloroethene	**4.05**		0.500	0.230	ug/L			11/20/14 21:15	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 21:15	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 21:15	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 21:15	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 21:15	1
Trichloroethene	**12.3**		0.500	0.200	ug/L			11/20/14 21:15	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 21:15	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*11/20/14 21:15*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*11/20/14 21:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*11/20/14 21:15*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*11/20/14 21:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0244**		0.0100	0.00720	mg/L		11/17/14 14:21	12/06/14 10:05	1
Manganese	**0.0187**		0.0150	0.00500	mg/L		11/17/14 14:21	12/06/14 10:05	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 67R (149-164)

Date Collected: 11/12/14 11:10
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**15.3**		5.00	2.66	ug/L			11/20/14 21:42	1
Benzene	**1.45**		0.500	0.200	ug/L			11/20/14 21:42	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 21:42	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 21:42	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 21:42	1
Carbon disulfide	**17.1**		0.500	0.220	ug/L			11/20/14 21:42	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 21:42	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 21:42	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 21:42	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 21:42	1
Chloroform	**0.375**	**J**	0.500	0.230	ug/L			11/20/14 21:42	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 21:42	1
cis-1,2-Dichloroethene	**7.54**		0.500	0.210	ug/L			11/20/14 21:42	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 21:42	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 21:42	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 21:42	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 21:42	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 21:42	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 21:42	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 21:42	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 21:42	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 21:42	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 21:42	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 21:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 21:42	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 21:42	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 21:42	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 21:42	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 21:42	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 21:42	1
Toluene	**0.372**	**J**	0.500	0.170	ug/L			11/20/14 21:42	1
trans-1,2-Dichloroethene	**3.27**		0.500	0.230	ug/L			11/20/14 21:42	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 21:42	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 21:42	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 21:42	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 21:42	1
Trichloroethene	**12.1**		0.500	0.200	ug/L			11/20/14 21:42	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 21:42	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*11/20/14 21:42*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*11/20/14 21:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*		*11/20/14 21:42*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/20/14 21:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/17/14 14:21	12/06/14 10:09	1
Manganese	**0.627**		0.0150	0.00500	mg/L		11/17/14 14:21	12/06/14 10:09	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 204R

Date Collected: 11/12/14 13:45
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 19:27	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 19:27	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 19:27	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 19:27	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 19:27	1
Carbon disulfide	**0.516**		0.500	0.220	ug/L			11/20/14 19:27	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 19:27	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 19:27	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 19:27	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 19:27	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 19:27	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 19:27	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 19:27	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 19:27	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 19:27	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 19:27	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 19:27	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 19:27	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 19:27	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 19:27	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 19:27	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 19:27	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 19:27	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 19:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 19:27	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 19:27	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 19:27	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 19:27	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 19:27	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 19:27	1
Toluene	**0.209**	**J**	0.500	0.170	ug/L			11/20/14 19:27	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 19:27	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 19:27	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 19:27	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 19:27	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 19:27	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 19:27	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 19:27	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*11/20/14 19:27*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*11/20/14 19:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*		*11/20/14 19:27*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/20/14 19:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.00840**	**J**	0.0100	0.00720	mg/L		11/17/14 14:21	12/06/14 10:14	1
Manganese	**0.111**		0.0150	0.00500	mg/L		11/17/14 14:21	12/06/14 10:14	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: MW-302 (100-110)

Lab Sample ID: 490-66213-10

Date Collected: 11/12/14 10:50
Date Received: 11/13/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 22:09	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 22:09	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 22:09	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 22:09	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 22:09	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 22:09	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 22:09	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 22:09	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 22:09	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 22:09	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 22:09	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 22:09	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 22:09	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 22:09	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 22:09	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 22:09	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 22:09	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 22:09	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 22:09	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 22:09	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 22:09	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 22:09	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 22:09	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 22:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 22:09	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 22:09	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 22:09	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 22:09	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 22:09	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 22:09	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 22:09	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 22:09	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 22:09	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 22:09	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 22:09	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 22:09	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 22:09	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 22:09	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*11/20/14 22:09*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*11/20/14 22:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*		*11/20/14 22:09*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/20/14 22:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0257**		0.0100	0.00720	mg/L		11/17/14 14:21	12/06/14 10:28	1
Manganese	**0.147**		0.0150	0.00500	mg/L		11/17/14 14:21	12/06/14 10:28	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 57S

Date Collected: 11/12/14 11:20
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 22:36	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 22:36	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 22:36	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 22:36	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 22:36	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 22:36	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 22:36	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 22:36	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 22:36	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 22:36	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 22:36	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 22:36	1
cis-1,2-Dichloroethene	**1.97**		0.500	0.210	ug/L			11/20/14 22:36	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 22:36	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 22:36	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 22:36	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 22:36	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 22:36	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 22:36	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 22:36	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 22:36	1
Ethylbenzene	**7.98**		0.500	0.190	ug/L			11/20/14 22:36	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 22:36	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 22:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 22:36	1
m-Xylene & p-Xylene	**2.04**		0.500	0.380	ug/L			11/20/14 22:36	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 22:36	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 22:36	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 22:36	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 22:36	1
Toluene	**0.255**	**J**	0.500	0.170	ug/L			11/20/14 22:36	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 22:36	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 22:36	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 22:36	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 22:36	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 22:36	1
Trichloroethene	**2.65**		0.500	0.200	ug/L			11/20/14 22:36	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 22:36	1
Xylenes, Total	**2.04**		1.50	0.580	ug/L			11/20/14 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*11/20/14 22:36*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*11/20/14 22:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*11/20/14 22:36*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*11/20/14 22:36*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0639**		0.0100	0.00720	mg/L		11/17/14 14:21	12/06/14 10:32	1
Manganese	**3.81**		0.0150	0.00500	mg/L		11/17/14 14:21	12/06/14 10:32	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 73S

Date Collected: 11/12/14 10:05
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 23:03	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 23:03	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 23:03	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 23:03	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 23:03	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 23:03	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 23:03	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 23:03	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 23:03	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 23:03	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 23:03	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 23:03	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 23:03	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 23:03	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 23:03	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 23:03	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 23:03	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 23:03	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 23:03	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 23:03	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 23:03	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 23:03	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 23:03	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 23:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 23:03	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 23:03	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 23:03	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 23:03	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 23:03	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 23:03	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 23:03	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 23:03	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 23:03	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 23:03	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 23:03	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 23:03	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 23:03	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 23:03	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*11/20/14 23:03*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*11/20/14 23:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*		*11/20/14 23:03*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/20/14 23:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/17/14 14:21	12/06/14 10:36	1
Manganese	**0.907**		0.0150	0.00500	mg/L		11/17/14 14:21	12/06/14 10:36	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 75R

Date Collected: 11/12/14 16:30
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-13

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 23:30	1
Benzene	**19.4**		0.500	0.200	ug/L			11/20/14 23:30	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 23:30	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 23:30	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 23:30	1
Carbon disulfide	**1.17**		0.500	0.220	ug/L			11/20/14 23:30	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 23:30	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 23:30	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 23:30	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 23:30	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 23:30	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 23:30	1
cis-1,2-Dichloroethene	**191**		0.500	0.210	ug/L			11/20/14 23:30	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 23:30	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 23:30	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 23:30	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 23:30	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 23:30	1
1,1-Dichloroethene	**0.677**		0.500	0.250	ug/L			11/20/14 23:30	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 23:30	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 23:30	1
Ethylbenzene	**1.51**		0.500	0.190	ug/L			11/20/14 23:30	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 23:30	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 23:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 23:30	1
m-Xylene & p-Xylene	**0.629**		0.500	0.380	ug/L			11/20/14 23:30	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 23:30	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 23:30	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 23:30	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 23:30	1
Toluene	**0.205**	**J**	0.500	0.170	ug/L			11/20/14 23:30	1
trans-1,2-Dichloroethene	**12.5**		0.500	0.230	ug/L			11/20/14 23:30	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 23:30	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 23:30	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 23:30	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 23:30	1
Trichloroethene	**3.00**		0.500	0.200	ug/L			11/20/14 23:30	1
Vinyl chloride	**0.817**		0.500	0.180	ug/L			11/20/14 23:30	1
Xylenes, Total	**0.629**	**J**	1.50	0.580	ug/L			11/20/14 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*11/20/14 23:30*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*11/20/14 23:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*		*11/20/14 23:30*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/20/14 23:30*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/17/14 14:21	12/06/14 10:41	1
Manganese	**2.02**		0.0150	0.00500	mg/L		11/17/14 14:21	12/06/14 10:41	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 65R (180-195)

Date Collected: 11/12/14 15:10
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-14

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 23:57	1
Benzene	**18.8**		0.500	0.200	ug/L			11/20/14 23:57	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 23:57	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 23:57	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 23:57	1
Carbon disulfide	**0.960**		0.500	0.220	ug/L			11/20/14 23:57	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 23:57	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 23:57	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 23:57	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 23:57	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 23:57	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 23:57	1
cis-1,2-Dichloroethene	**184**		0.500	0.210	ug/L			11/20/14 23:57	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 23:57	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 23:57	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 23:57	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 23:57	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 23:57	1
1,1-Dichloroethene	**0.695**		0.500	0.250	ug/L			11/20/14 23:57	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 23:57	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 23:57	1
Ethylbenzene	**1.56**		0.500	0.190	ug/L			11/20/14 23:57	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 23:57	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 23:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 23:57	1
m-Xylene & p-Xylene	**0.618**		0.500	0.380	ug/L			11/20/14 23:57	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 23:57	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 23:57	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 23:57	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 23:57	1
Toluene	**0.192**	**J**	0.500	0.170	ug/L			11/20/14 23:57	1
trans-1,2-Dichloroethene	**12.1**		0.500	0.230	ug/L			11/20/14 23:57	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 23:57	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 23:57	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 23:57	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 23:57	1
Trichloroethene	**2.99**		0.500	0.200	ug/L			11/20/14 23:57	1
Vinyl chloride	**0.704**		0.500	0.180	ug/L			11/20/14 23:57	1
Xylenes, Total	**0.618**	**J**	1.50	0.580	ug/L			11/20/14 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/20/14 23:57*	*1*
Dibromofluoromethane (Surr)	*91*		*70 - 130*		*11/20/14 23:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*11/20/14 23:57*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*11/20/14 23:57*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/17/14 14:21	12/06/14 10:45	1
Manganese	**2.08**		0.0150	0.00500	mg/L		11/17/14 14:21	12/06/14 10:45	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 65R (100-115)

Date Collected: 11/12/14 14:00
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-15

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/21/14 00:24	1
Benzene	**0.631**		0.500	0.200	ug/L			11/21/14 00:24	1
Bromoform	ND		0.500	0.290	ug/L			11/21/14 00:24	1
Bromomethane	ND		0.500	0.350	ug/L			11/21/14 00:24	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/21/14 00:24	1
Carbon disulfide	**3.46**		0.500	0.220	ug/L			11/21/14 00:24	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/21/14 00:24	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/21/14 00:24	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/21/14 00:24	1
Chloroethane	ND		0.500	0.360	ug/L			11/21/14 00:24	1
Chloroform	ND		0.500	0.230	ug/L			11/21/14 00:24	1
Chloromethane	ND		0.500	0.360	ug/L			11/21/14 00:24	1
cis-1,2-Dichloroethene	**8.83**		0.500	0.210	ug/L			11/21/14 00:24	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 00:24	1
Dibromomethane	ND		0.500	0.450	ug/L			11/21/14 00:24	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/21/14 00:24	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/21/14 00:24	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/21/14 00:24	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/21/14 00:24	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/21/14 00:24	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/21/14 00:24	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/21/14 00:24	1
2-Hexanone	ND		5.00	1.28	ug/L			11/21/14 00:24	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/21/14 00:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/21/14 00:24	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/21/14 00:24	1
o-Xylene	ND		0.500	0.200	ug/L			11/21/14 00:24	1
Styrene	ND		0.500	0.280	ug/L			11/21/14 00:24	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/21/14 00:24	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/21/14 00:24	1
Toluene	**0.176**	**J**	0.500	0.170	ug/L			11/21/14 00:24	1
trans-1,2-Dichloroethene	**4.13**		0.500	0.230	ug/L			11/21/14 00:24	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/21/14 00:24	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/21/14 00:24	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 00:24	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/21/14 00:24	1
Trichloroethene	**5.32**		0.500	0.200	ug/L			11/21/14 00:24	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/21/14 00:24	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/21/14 00:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*11/21/14 00:24*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*11/21/14 00:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*11/21/14 00:24*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*11/21/14 00:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0132**		0.0100	0.00720	mg/L		11/17/14 14:21	12/06/14 10:50	1
Manganese	ND		0.0150	0.00500	mg/L		11/17/14 14:21	12/06/14 10:50	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: Trip Blank

Date Collected: 11/12/14 00:01
Date Received: 11/13/14 08:30

Lab Sample ID: 490-66213-16

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 15:51	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 15:51	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 15:51	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 15:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 15:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 15:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 15:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 15:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 15:51	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 15:51	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 15:51	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 15:51	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 15:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 15:51	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 15:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 15:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 15:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 15:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 15:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 15:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 15:51	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 15:51	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 15:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 15:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 15:51	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 15:51	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 15:51	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 15:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 15:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 15:51	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 15:51	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 15:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 15:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 15:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 15:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 15:51	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 15:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 15:51	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*11/20/14 15:51*	*1*
Dibromofluoromethane (Surr)	*91*		*70 - 130*		*11/20/14 15:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*11/20/14 15:51*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*		*11/20/14 15:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-207595/10
Matrix: Water
Analysis Batch: 207595

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			11/20/14 15:24	1
Benzene	ND		0.500	0.200	ug/L			11/20/14 15:24	1
Bromoform	ND		0.500	0.290	ug/L			11/20/14 15:24	1
Bromomethane	ND		0.500	0.350	ug/L			11/20/14 15:24	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			11/20/14 15:24	1
Carbon disulfide	ND		0.500	0.220	ug/L			11/20/14 15:24	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			11/20/14 15:24	1
Chlorobenzene	ND		0.500	0.180	ug/L			11/20/14 15:24	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			11/20/14 15:24	1
Chloroethane	ND		0.500	0.360	ug/L			11/20/14 15:24	1
Chloroform	ND		0.500	0.230	ug/L			11/20/14 15:24	1
Chloromethane	ND		0.500	0.360	ug/L			11/20/14 15:24	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			11/20/14 15:24	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 15:24	1
Dibromomethane	ND		0.500	0.450	ug/L			11/20/14 15:24	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			11/20/14 15:24	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			11/20/14 15:24	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			11/20/14 15:24	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			11/20/14 15:24	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			11/20/14 15:24	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			11/20/14 15:24	1
Ethylbenzene	ND		0.500	0.190	ug/L			11/20/14 15:24	1
2-Hexanone	ND		5.00	1.28	ug/L			11/20/14 15:24	1
Methylene Chloride	ND		5.00	0.220	ug/L			11/20/14 15:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			11/20/14 15:24	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			11/20/14 15:24	1
o-Xylene	ND		0.500	0.200	ug/L			11/20/14 15:24	1
Styrene	ND		0.500	0.280	ug/L			11/20/14 15:24	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			11/20/14 15:24	1
Tetrachloroethene	ND		0.500	0.140	ug/L			11/20/14 15:24	1
Toluene	ND		0.500	0.170	ug/L			11/20/14 15:24	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			11/20/14 15:24	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			11/20/14 15:24	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			11/20/14 15:24	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 15:24	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			11/20/14 15:24	1
Trichloroethene	ND		0.500	0.200	ug/L			11/20/14 15:24	1
Vinyl chloride	ND		0.500	0.180	ug/L			11/20/14 15:24	1
Xylenes, Total	ND		1.50	0.580	ug/L			11/20/14 15:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*11/20/14 15:24*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*11/20/14 15:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*		*11/20/14 15:24*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/20/14 15:24*	*1*

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

Lab Sample ID: LCS 490-207595/7
Matrix: Water
Analysis Batch: 207595

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	85.52		ug/L		86	54 - 145
Benzene	20.0	19.06		ug/L		95	80 - 121
Bromoform	20.0	17.47		ug/L		87	46 - 145
Bromomethane	20.0	19.72		ug/L		99	41 - 150
2-Butanone (MEK)	100	82.90		ug/L		83	62 - 133
Carbon disulfide	20.0	18.38		ug/L		92	77 - 126
Carbon tetrachloride	20.0	15.69		ug/L		78	64 - 147
Chlorobenzene	20.0	19.42		ug/L		97	80 - 120
Chlorodibromomethane	20.0	19.71		ug/L		99	69 - 133
Chloroethane	20.0	18.12		ug/L		91	72 - 120
Chloroform	20.0	16.77		ug/L		84	73 - 129
Chloromethane	20.0	20.66		ug/L		103	12 - 150
cis-1,2-Dichloroethene	20.0	17.94		ug/L		90	76 - 125
cis-1,3-Dichloropropene	20.0	19.40		ug/L		97	74 - 140
Dibromomethane	20.0	19.00		ug/L		95	71 - 125
Dichlorobromomethane	20.0	18.76		ug/L		94	75 - 129
1,1-Dichloroethane	20.0	18.64		ug/L		93	78 - 125
1,2-Dichloroethane	20.0	16.12		ug/L		81	77 - 121
1,1-Dichloroethene	20.0	19.30		ug/L		97	79 - 124
1,2-Dichloropropane	20.0	21.01		ug/L		105	75 - 120
1,1-Dichloropropene	20.0	19.02		ug/L		95	80 - 122
Ethylbenzene	20.0	19.04		ug/L		95	80 - 130
2-Hexanone	100	86.83		ug/L		87	60 - 142
Methylene Chloride	20.0	18.85		ug/L		94	79 - 123
4-Methyl-2-pentanone (MIBK)	100	88.90		ug/L		89	60 - 137
m-Xylene & p-Xylene	20.0	18.28		ug/L		91	80 - 141
o-Xylene	20.0	18.15		ug/L		91	80 - 127
Styrene	20.0	18.77		ug/L		94	80 - 127
1,1,1,2-Tetrachloroethane	20.0	17.73		ug/L		89	74 - 135
Tetrachloroethene	20.0	20.08		ug/L		100	80 - 126
Toluene	20.0	19.93		ug/L		100	80 - 126
trans-1,2-Dichloroethene	20.0	18.87		ug/L		94	79 - 126
trans-1,3-Dichloropropene	20.0	16.50		ug/L		83	63 - 134
1,3,5-Trichlorobenzene	20.0	20.60		ug/L		103	70 - 130
1,1,1-Trichloroethane	20.0	15.57		ug/L		78	78 - 135
1,1,2-Trichloroethane	20.0	19.89		ug/L		99	80 - 124
Trichloroethene	20.0	18.19		ug/L		91	80 - 123
Vinyl chloride	20.0	22.55		ug/L		113	68 - 120
Xylenes, Total	40.0	36.42		ug/L		91	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
Dibromofluoromethane (Surr)	*92*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

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

Lab Sample ID: 490-66213-5 MS
Matrix: Water
Analysis Batch: 207595

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	167.4		ug/L		67	45 - 141
Benzene	ND		50.0	40.34		ug/L		81	75 - 133
Bromoform	ND		50.0	42.71		ug/L		85	42 - 147
Bromomethane	ND		50.0	20.04		ug/L		40	16 - 163
2-Butanone (MEK)	ND		250	167.6		ug/L		67	50 - 138
Carbon disulfide	ND		50.0	27.21		ug/L		54	48 - 152
Carbon tetrachloride	ND		50.0	37.95		ug/L		76	62 - 164
Chlorobenzene	ND		50.0	42.83		ug/L		86	80 - 129
Chlorodibromomethane	ND		50.0	46.95		ug/L		94	66 - 140
Chloroethane	ND		50.0	34.83		ug/L		70	58 - 137
Chloroform	ND		50.0	38.48		ug/L		77	66 - 138
Chloromethane	ND		50.0	24.32		ug/L		49	10 - 169
cis-1,2-Dichloroethene	ND		50.0	38.64		ug/L		77	68 - 138
cis-1,3-Dichloropropene	ND		50.0	42.70		ug/L		85	71 - 141
Dibromomethane	ND		50.0	41.75		ug/L		83	58 - 140
Dichlorobromomethane	ND		50.0	44.98		ug/L		90	70 - 140
1,1-Dichloroethane	ND		50.0	41.82		ug/L		84	71 - 139
1,2-Dichloroethane	ND		50.0	34.49		ug/L		69	64 - 136
1,1-Dichloroethene	ND		50.0	40.08		ug/L		80	70 - 142
1,2-Dichloropropane	ND		50.0	47.13		ug/L		94	67 - 131
1,1-Dichloropropene	ND		50.0	40.18		ug/L		80	76 - 139
Ethylbenzene	ND		50.0	41.71		ug/L		83	79 - 139
2-Hexanone	ND		250	186.7		ug/L		75	50 - 150
Methylene Chloride	ND		50.0	38.43		ug/L		77	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	210.7		ug/L		84	50 - 147
m-Xylene & p-Xylene	ND		50.0	40.08		ug/L		80	80 - 153
o-Xylene	ND		50.0	40.29		ug/L		81	74 - 138
Styrene	ND		50.0	42.55		ug/L		85	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	42.37		ug/L		85	73 - 141
Tetrachloroethene	ND		50.0	41.96		ug/L		84	72 - 145
Toluene	ND		50.0	41.44		ug/L		83	75 - 136
trans-1,2-Dichloroethene	ND		50.0	37.44		ug/L		75	66 - 143
trans-1,3-Dichloropropene	ND		50.0	37.22		ug/L		74	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	40.37		ug/L		81	60 - 140
1,1,1-Trichloroethane	ND		50.0	37.11	F1	ug/L		74	76 - 149
1,1,2-Trichloroethane	ND		50.0	45.25		ug/L		90	74 - 134
Trichloroethene	ND		50.0	39.72		ug/L		79	73 - 144
Vinyl chloride	ND		50.0	36.89		ug/L		74	56 - 129
Xylenes, Total	ND		100	80.37		ug/L		80	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

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

Lab Sample ID: 490-66213-5 MSD
Matrix: Water
Analysis Batch: 207595

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	175.6		ug/L		70	45 - 141	5	21
Benzene	ND		50.0	40.96		ug/L		82	75 - 133	2	17
Bromoform	ND		50.0	44.42		ug/L		89	42 - 147	4	16
Bromomethane	ND		50.0	22.88		ug/L		46	16 - 163	13	50
2-Butanone (MEK)	ND		250	176.4		ug/L		71	50 - 138	5	19
Carbon disulfide	ND		50.0	42.39	F2	ug/L		85	48 - 152	44	21
Carbon tetrachloride	ND		50.0	38.20		ug/L		76	62 - 164	1	19
Chlorobenzene	ND		50.0	44.44		ug/L		89	80 - 129	4	14
Chlorodibromomethane	ND		50.0	48.46		ug/L		97	66 - 140	3	15
Chloroethane	ND		50.0	36.88		ug/L		74	58 - 137	6	20
Chloroform	ND		50.0	38.80		ug/L		78	66 - 138	1	18
Chloromethane	ND		50.0	28.27		ug/L		57	10 - 169	15	31
cis-1,2-Dichloroethene	ND		50.0	39.09		ug/L		78	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	44.48		ug/L		89	71 - 141	4	15
Dibromomethane	ND		50.0	42.38		ug/L		85	58 - 140	1	16
Dichlorobromomethane	ND		50.0	46.10		ug/L		92	70 - 140	2	18
1,1-Dichloroethane	ND		50.0	43.00		ug/L		86	71 - 139	3	17
1,2-Dichloroethane	ND		50.0	34.97		ug/L		70	64 - 136	1	17
1,1-Dichloroethene	ND		50.0	41.25		ug/L		83	70 - 142	3	17
1,2-Dichloropropane	ND		50.0	47.52		ug/L		95	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	40.38		ug/L		81	76 - 139	0	17
Ethylbenzene	ND		50.0	43.15		ug/L		86	79 - 139	3	15
2-Hexanone	ND		250	212.8		ug/L		85	50 - 150	13	15
Methylene Chloride	ND		50.0	38.89		ug/L		78	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	229.2		ug/L		92	50 - 147	8	17
m-Xylene & p-Xylene	ND		50.0	41.56		ug/L		83	80 - 153	4	16
o-Xylene	ND		50.0	41.37		ug/L		83	74 - 138	3	14
Styrene	ND		50.0	43.78		ug/L		88	61 - 148	3	24
1,1,1,2-Tetrachloroethane	ND		50.0	43.37		ug/L		87	73 - 141	2	16
Tetrachloroethene	ND		50.0	42.41		ug/L		85	72 - 145	1	16
Toluene	ND		50.0	42.51		ug/L		85	75 - 136	3	15
trans-1,2-Dichloroethene	ND		50.0	38.38		ug/L		77	66 - 143	3	16
trans-1,3-Dichloropropene	ND		50.0	40.00		ug/L		80	59 - 135	7	14
1,3,5-Trichlorobenzene	ND		50.0	47.81		ug/L		96	60 - 140	17	30
1,1,1-Trichloroethane	ND		50.0	37.27	F1	ug/L		75	76 - 149	0	17
1,1,2-Trichloroethane	ND		50.0	46.71		ug/L		93	74 - 134	3	15
Trichloroethene	ND		50.0	40.44		ug/L		81	73 - 144	2	17
Vinyl chloride	ND		50.0	39.65		ug/L		79	56 - 129	7	17
Xylenes, Total	ND		100	82.93		ug/L		83	74 - 141	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*81*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 490-206812/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		11/17/14 14:21	11/19/14 15:29	1
Manganese	ND		0.0150	0.00500	mg/L		11/17/14 14:21	11/19/14 15:29	1

Lab Sample ID: LCS 490-206812/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0500	0.05730		mg/L		115	80 - 120
Manganese	0.500	0.5026		mg/L		101	80 - 120

Lab Sample ID: LCSD 490-206812/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0500	0.05000		mg/L		100	80 - 120	14	20
Manganese	0.500	0.4728		mg/L		95	80 - 120	6	20

Lab Sample ID: 490-66142-B-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.0500	0.05390		mg/L		108	75 - 125
Manganese	0.417		0.500	0.8616		mg/L		89	75 - 125

Lab Sample ID: 490-66142-B-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 207509 — **Prep Batch: 206812**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.0500	0.05150		mg/L		103	75 - 125	5	20
Manganese	0.417		0.500	0.9305		mg/L		103	75 - 125	8	20

Lab Sample ID: MB 490-210403/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211179 — **Prep Batch: 210403**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.0100	0.00720	mg/L		12/01/14 14:04	12/04/14 02:24	1
Manganese	ND		0.0150	0.00500	mg/L		12/01/14 14:04	12/04/14 02:24	1

Lab Sample ID: LCS 490-210403/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211179 — **Prep Batch: 210403**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.500	0.4968		mg/L		99	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 490-210403/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211179 — **Prep Batch: 210403**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Manganese			0.500	0.4975		mg/L		100	80 - 120		

Lab Sample ID: 490-66082-J-6-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211179 — **Prep Batch: 210403**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	ND		0.500	0.5143		mg/L		103	75 - 125		
Manganese	1.25		0.500	1.755		mg/L		100	75 - 125		

Lab Sample ID: 490-66082-J-6-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 211179 — **Prep Batch: 210403**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.500	0.5035		mg/L		101	75 - 125	2	20
Manganese	1.25		0.500	1.738		mg/L		97	75 - 125	1	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

GC/MS VOA

Analysis Batch: 207595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66213-1	63R (85-100)	Total/NA	Water	8260B	
490-66213-2	IW-103	Total/NA	Water	8260B	
490-66213-3	67R (83-98)	Total/NA	Water	8260B	
490-66213-4	IW-100	Total/NA	Water	8260B	
490-66213-5	Effluent	Total/NA	Water	8260B	
490-66213-5 MS	Effluent	Total/NA	Water	8260B	
490-66213-5 MSD	Effluent	Total/NA	Water	8260B	
490-66213-6	MW-302 (60-70)	Total/NA	Water	8260B	
490-66213-7	63R (150-165)	Total/NA	Water	8260B	
490-66213-8	67R (149-164)	Total/NA	Water	8260B	
490-66213-9	204R	Total/NA	Water	8260B	
490-66213-10	MW-302 (100-110)	Total/NA	Water	8260B	
490-66213-11	57S	Total/NA	Water	8260B	
490-66213-12	73S	Total/NA	Water	8260B	
490-66213-13	75R	Total/NA	Water	8260B	
490-66213-14	65R (180-195)	Total/NA	Water	8260B	
490-66213-15	65R (100-115)	Total/NA	Water	8260B	
490-66213-16	Trip Blank	Total/NA	Water	8260B	
LCS 490-207595/7	Lab Control Sample	Total/NA	Water	8260B	
MB 490-207595/10	Method Blank	Total/NA	Water	8260B	

Metals

Prep Batch: 206812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66142-B-2-B MS	Matrix Spike	Total/NA	Water	3010A	
490-66142-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-66213-6	MW-302 (60-70)	Total/NA	Water	3010A	
490-66213-7	63R (150-165)	Total/NA	Water	3010A	
490-66213-8	67R (149-164)	Total/NA	Water	3010A	
490-66213-9	204R	Total/NA	Water	3010A	
490-66213-10	MW-302 (100-110)	Total/NA	Water	3010A	
490-66213-11	57S	Total/NA	Water	3010A	
490-66213-12	73S	Total/NA	Water	3010A	
490-66213-13	75R	Total/NA	Water	3010A	
490-66213-14	65R (180-195)	Total/NA	Water	3010A	
490-66213-15	65R (100-115)	Total/NA	Water	3010A	
LCS 490-206812/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-206812/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
MB 490-206812/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 207509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66142-B-2-B MS	Matrix Spike	Total/NA	Water	6010B	206812
490-66142-B-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	206812
LCS 490-206812/2-A	Lab Control Sample	Total/NA	Water	6010B	206812
LCSD 490-206812/3-A	Lab Control Sample Dup	Total/NA	Water	6010B	206812
MB 490-206812/1-A	Method Blank	Total/NA	Water	6010B	206812

Metals (Continued)

Prep Batch: 210403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66082-J-6-B MS	Matrix Spike	Total/NA	Water	3010A	
490-66082-J-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	
490-66213-1	63R (85-100)	Total/NA	Water	3010A	
490-66213-3	67R (83-98)	Total/NA	Water	3010A	
LCS 490-210403/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 490-210403/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 211179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66082-J-6-B MS	Matrix Spike	Total/NA	Water	6010B	210403
490-66082-J-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	6010B	210403
490-66213-1	63R (85-100)	Total/NA	Water	6010B	210403
490-66213-3	67R (83-98)	Total/NA	Water	6010B	210403
LCS 490-210403/2-A	Lab Control Sample	Total/NA	Water	6010B	210403
MB 490-210403/1-A	Method Blank	Total/NA	Water	6010B	210403

Analysis Batch: 211953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-66213-6	MW-302 (60-70)	Total/NA	Water	6010B	206812
490-66213-7	63R (150-165)	Total/NA	Water	6010B	206812
490-66213-8	67R (149-164)	Total/NA	Water	6010B	206812
490-66213-9	204R	Total/NA	Water	6010B	206812
490-66213-10	MW-302 (100-110)	Total/NA	Water	6010B	206812
490-66213-11	57S	Total/NA	Water	6010B	206812
490-66213-12	73S	Total/NA	Water	6010B	206812
490-66213-13	75R	Total/NA	Water	6010B	206812
490-66213-14	65R (180-195)	Total/NA	Water	6010B	206812
490-66213-15	65R (100-115)	Total/NA	Water	6010B	206812

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 63R (85-100)

Lab Sample ID: 490-66213-1

Date Collected: 11/12/14 09:55
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 19:54	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	210403	12/01/14 14:04	NJB	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211179	12/04/14 02:56	LEG	TAL NSH

Client Sample ID: IW-103

Lab Sample ID: 490-66213-2

Date Collected: 11/12/14 14:45
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 18:33	JJR	TAL NSH

Client Sample ID: 67R (83-98)

Lab Sample ID: 490-66213-3

Date Collected: 11/12/14 09:50
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 20:21	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	210403	12/01/14 14:04	NJB	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211179	12/04/14 03:00	LEG	TAL NSH

Client Sample ID: IW-100

Lab Sample ID: 490-66213-4

Date Collected: 11/12/14 14:40
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 19:00	JJR	TAL NSH

Client Sample ID: Effluent

Lab Sample ID: 490-66213-5

Date Collected: 11/12/14 14:35
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 18:06	JJR	TAL NSH

Client Sample ID: MW-302 (60-70)

Lab Sample ID: 490-66213-6

Date Collected: 11/12/14 14:00
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 20:48	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211953	12/06/14 10:01	CME	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 63R (150-165)

Lab Sample ID: 490-66213-7

Date Collected: 11/12/14 11:10
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 21:15	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211953	12/06/14 10:05	CME	TAL NSH

Client Sample ID: 67R (149-164)

Lab Sample ID: 490-66213-8

Date Collected: 11/12/14 11:10
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 21:42	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211953	12/06/14 10:09	CME	TAL NSH

Client Sample ID: 204R

Lab Sample ID: 490-66213-9

Date Collected: 11/12/14 13:45
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 19:27	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211953	12/06/14 10:14	CME	TAL NSH

Client Sample ID: MW-302 (100-110)

Lab Sample ID: 490-66213-10

Date Collected: 11/12/14 10:50
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 22:09	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211953	12/06/14 10:28	CME	TAL NSH

Client Sample ID: 57S

Lab Sample ID: 490-66213-11

Date Collected: 11/12/14 11:20
Matrix: Water
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 22:36	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211953	12/06/14 10:32	CME	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Client Sample ID: 73S — Lab Sample ID: 490-66213-12

Date Collected: 11/12/14 10:05 — **Matrix: Water**
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 23:03	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211953	12/06/14 10:36	CME	TAL NSH

Client Sample ID: 75R — Lab Sample ID: 490-66213-13

Date Collected: 11/12/14 16:30 — **Matrix: Water**
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 23:30	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211953	12/06/14 10:41	CME	TAL NSH

Client Sample ID: 65R (180-195) — Lab Sample ID: 490-66213-14

Date Collected: 11/12/14 15:10 — **Matrix: Water**
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 23:57	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211953	12/06/14 10:45	CME	TAL NSH

Client Sample ID: 65R (100-115) — Lab Sample ID: 490-66213-15

Date Collected: 11/12/14 14:00 — **Matrix: Water**
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/21/14 00:24	JJR	TAL NSH
Total/NA	Prep	3010A			50 mL	50 mL	206812	11/17/14 14:21	ADN	TAL NSH
Total/NA	Analysis	6010B		1	50 mL	50 mL	211953	12/06/14 10:50	CME	TAL NSH

Client Sample ID: Trip Blank — Lab Sample ID: 490-66213-16

Date Collected: 11/12/14 00:01 — **Matrix: Water**
Date Received: 11/13/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	207595	11/20/14 15:51	JJR	TAL NSH

Laboratory References:

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

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
6010B	Metals (ICP)	SW846	TAL NSH

Protocol References:

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

Laboratory References:

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

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-66213-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-66213 Chain of Custody

Cooler Received/Opened On 11/13/2014@ 0830

1. Tracking # 7679 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 12080142

2. Temperature of rep. sample or temp blank when opened: 2.7 *Degrees Celsius*

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

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

   If yes, how many and where: one front

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAm THE LEADER IN ENVIRO

Loc: 490
66213

12/9/2014

Client Information	Sampler: LK, JB, TM	Lab PM: Brown, Shali	Carrier Tracking No(s):	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 717-645-6179	E-Mail: shali.brown@testamericainc.com		Page: 1/2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Standard			
State, Zip: MA, 01824				
Phone: 717-645-6179	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - (MOD) 6010B As and Mn	8260B_LL - (MOD) New Hampshire Volatiles List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A		
63R(85-100)	11/12/14	0955	G	W			X	X	4	-1
IW-103	11/12/14	1445	G	W				X	3	2
67R(83-98)	11/12/14	0950	G	W			X	X	4	3
IW-100	11/12/14	1440	G	W				X	3	4
Effluent	11/12/14	1435	G	W				X	3	5
MW-302(60-70)	11/12/14	1400	G	W			X	X	4	6
63R(150-165)	11/12/14	1110	G	W			X	X	4	7
67R(149-164)	11/12/14	1110	G	W			X	X	4	8
204R	11/12/14	1345	G	W			X	X	4	9
MW-302(100-110)	11/12/14	1500	G	W			X	X	4	10
575	11/12/14	1120	G	W			X	X	4	11

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 11/12/14/1645	Company	Received by:	Date/Time: 11-13-14 @ 0830	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 27c

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica THE LEADER IN ENVIRONM

Loc: 490
66213
#1
A

12/9/2014

Client Information	Sampler: MK, JB, TM	Lab PM: Brown, Shali	Carrier Tracking No(s):	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 717-645-6179	E-Mail: shali.brown@testamericainc.com		Page: 2/2
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Standard			
State, Zip: MA, 01824				
Phone: 717-645-6179	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B - (MOD) 6010B As and Mn	8260B_LL - (MOD) New Hampshire Volatiles List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A		
73S	11/12/14	1005	G	W			X	X	4	12
75R	11/12/14	1630	G	W			X	X	4	13
65R(180-195)	11/12/14	1510	G	W			X	X	4	14
65R(100-115)	11/12/14	1400	G	W			X	X	4	15
TRIP BLANK	11/12/14	—	G	W				X	2	16

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 11/12/14/1645	Company	Received by:	Date/Time: 11-13-14 0830	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 27c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-66213-1

Login Number: 66213
List Number: 1
Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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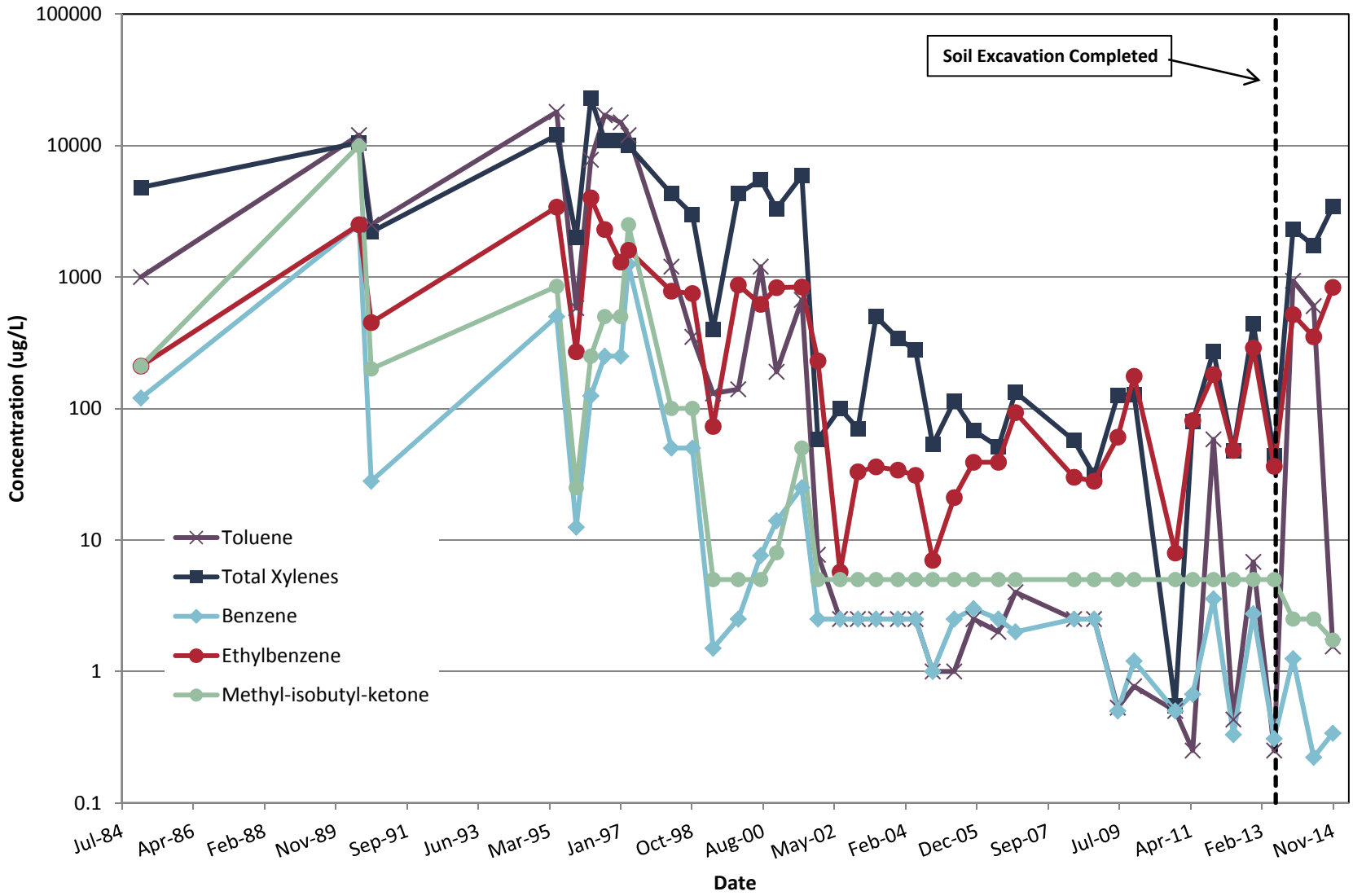
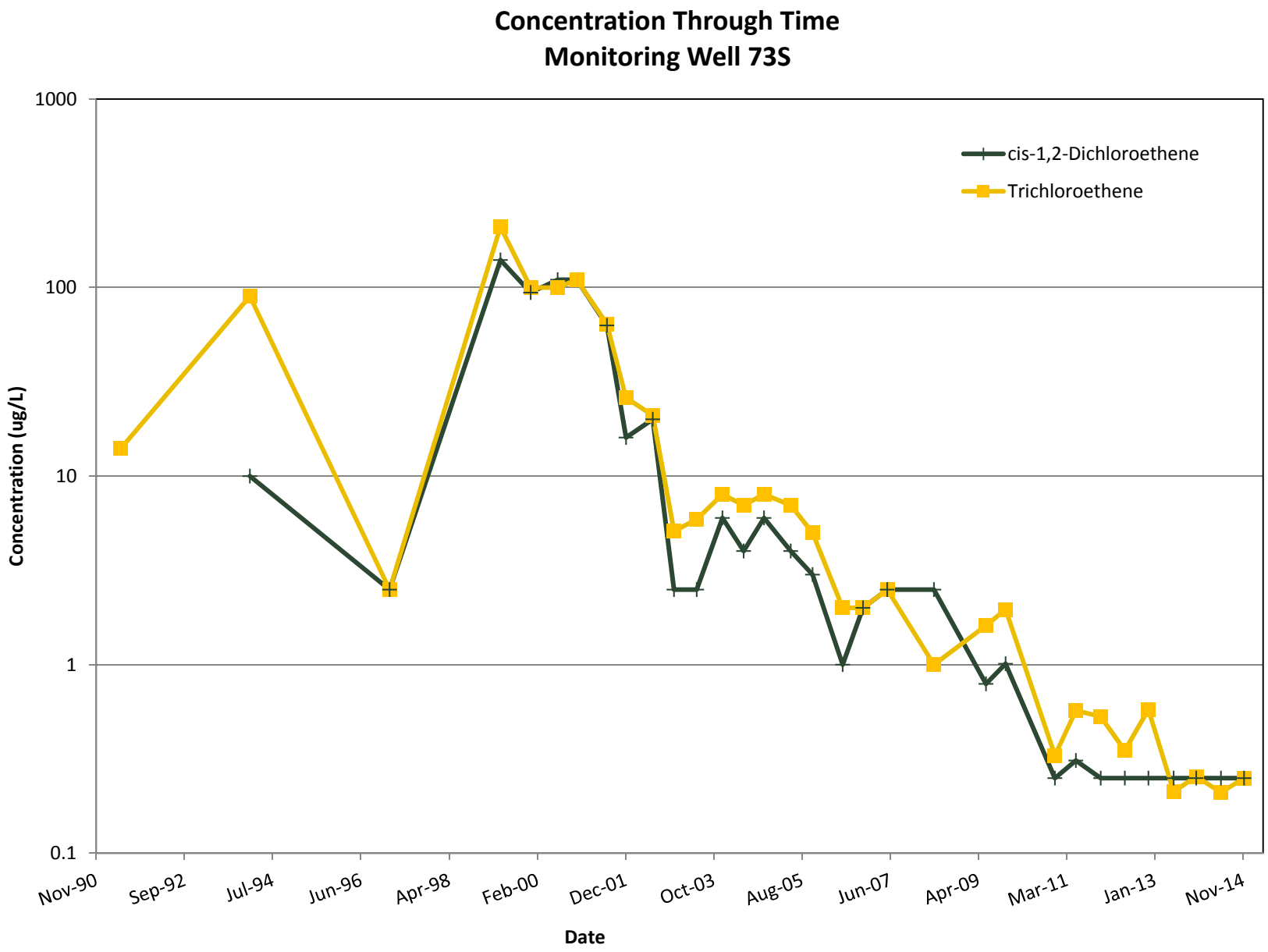
Appendix **B**

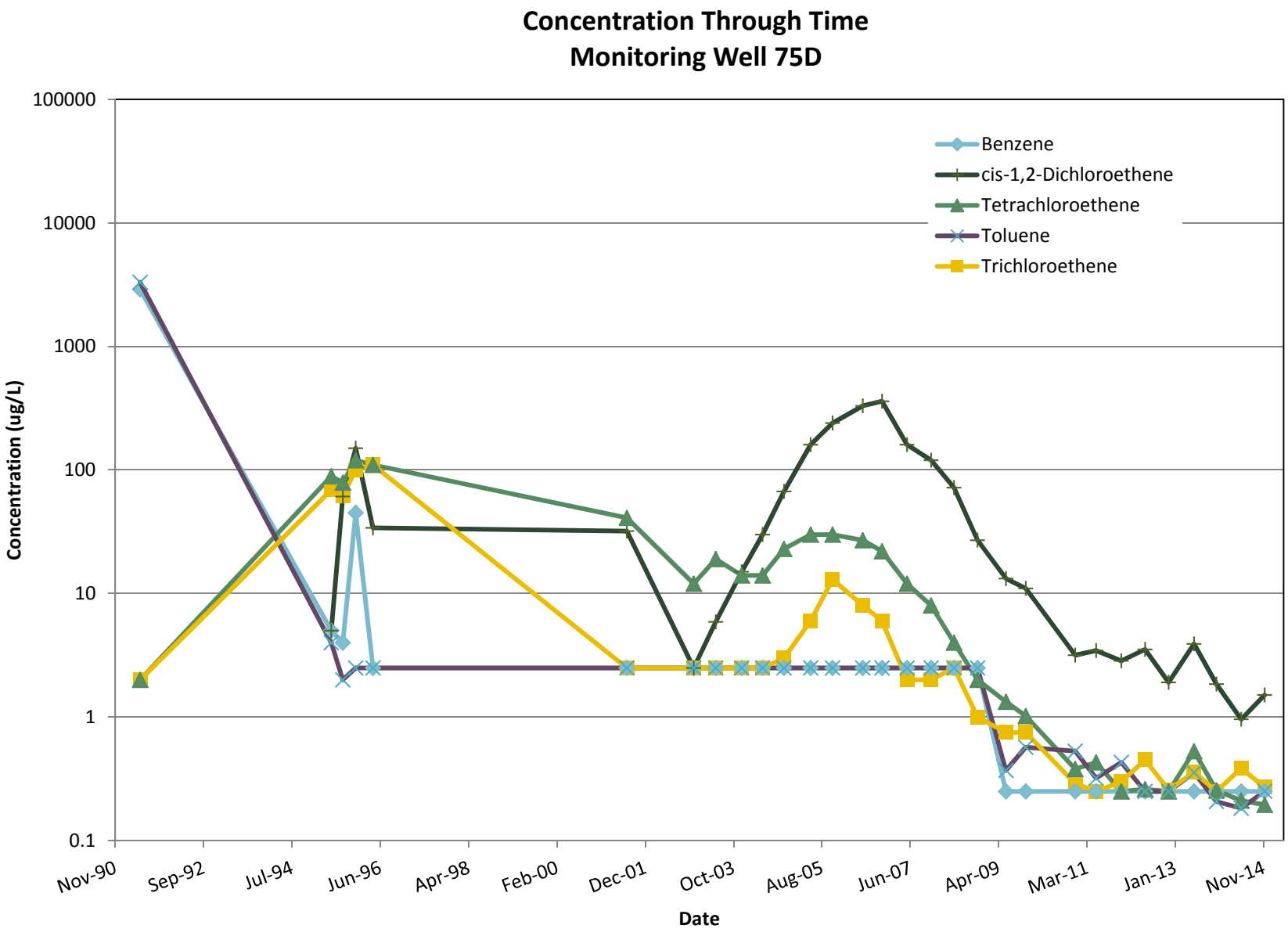
Concentration Trend Charts for Overburden Wells



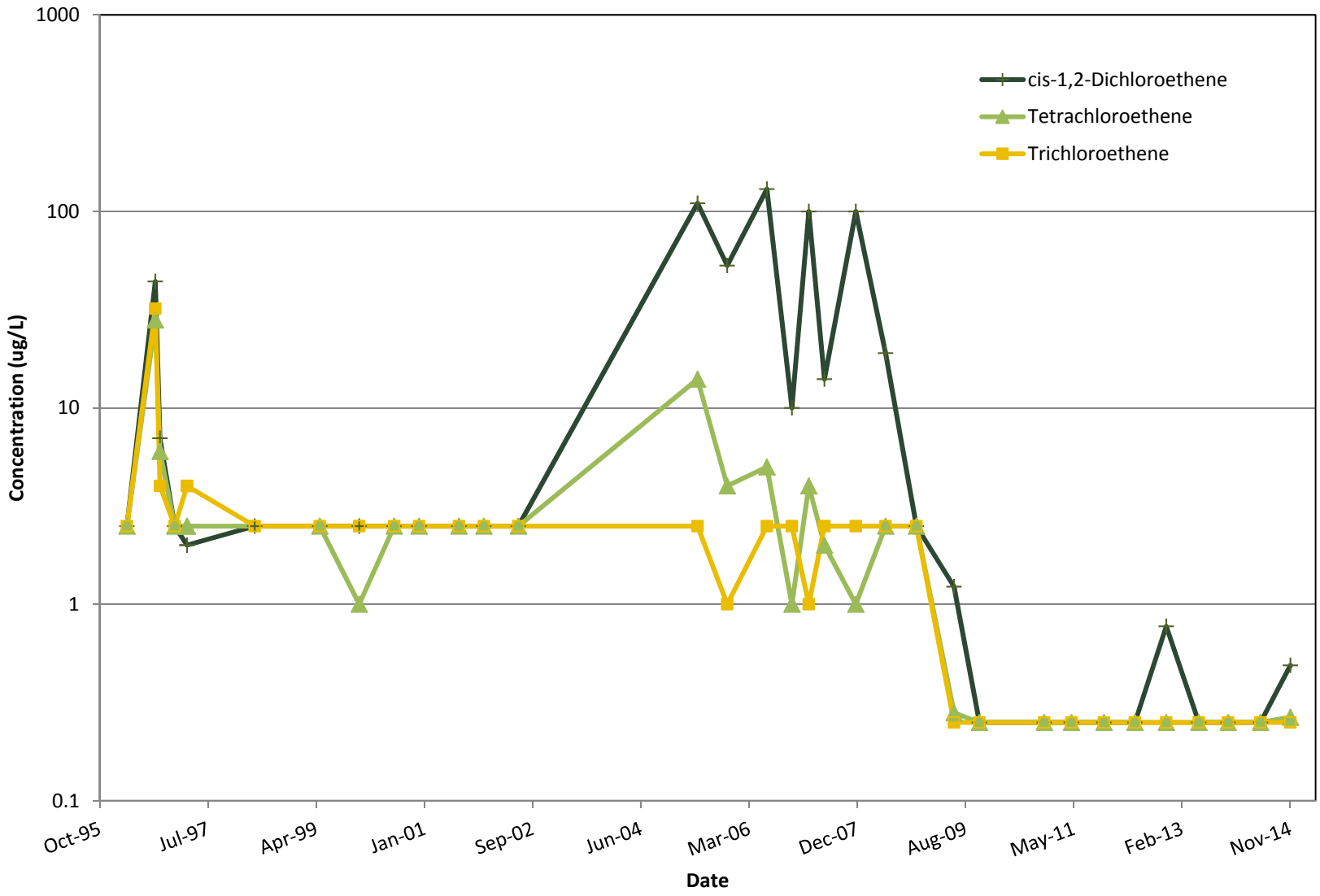
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



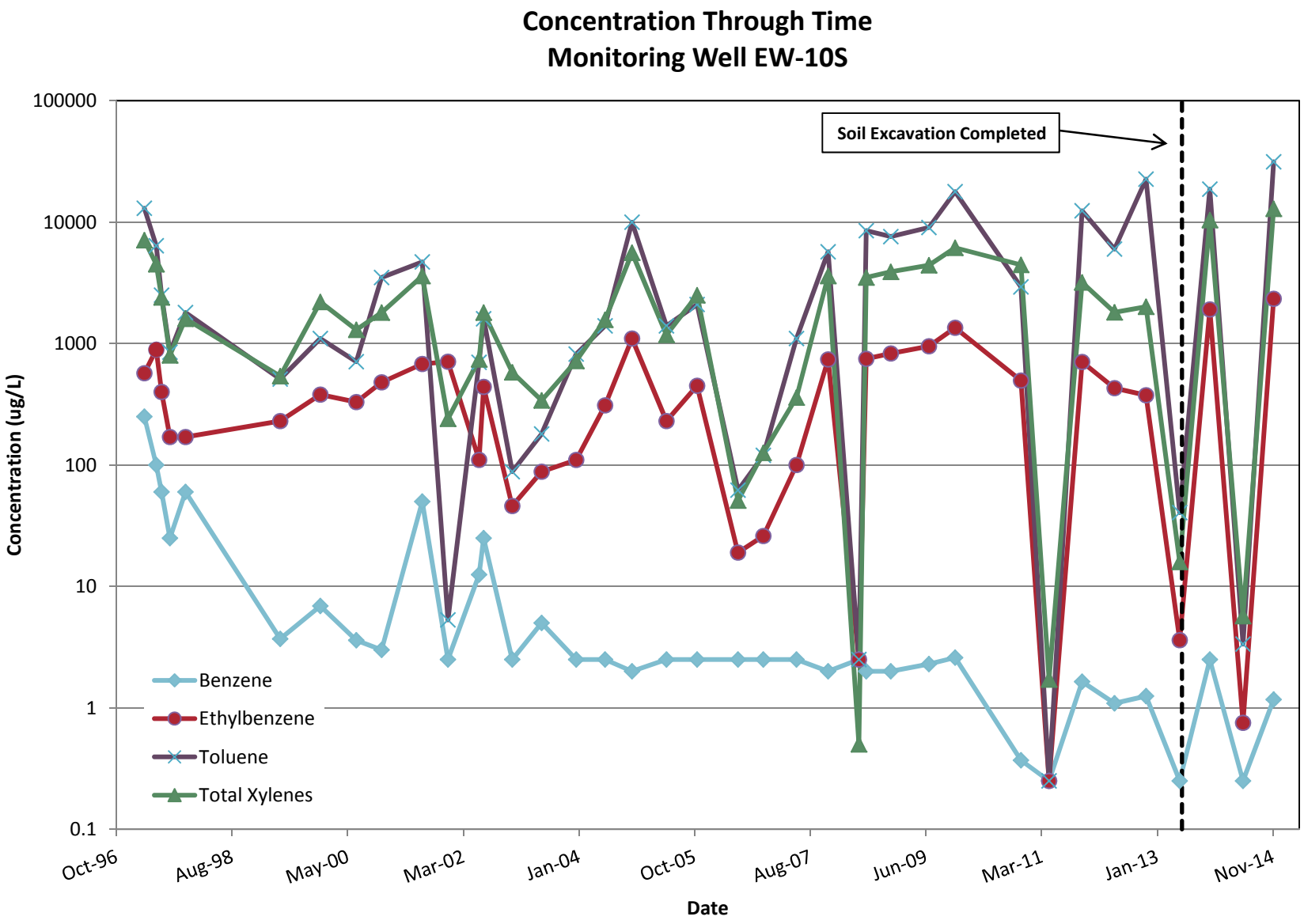
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



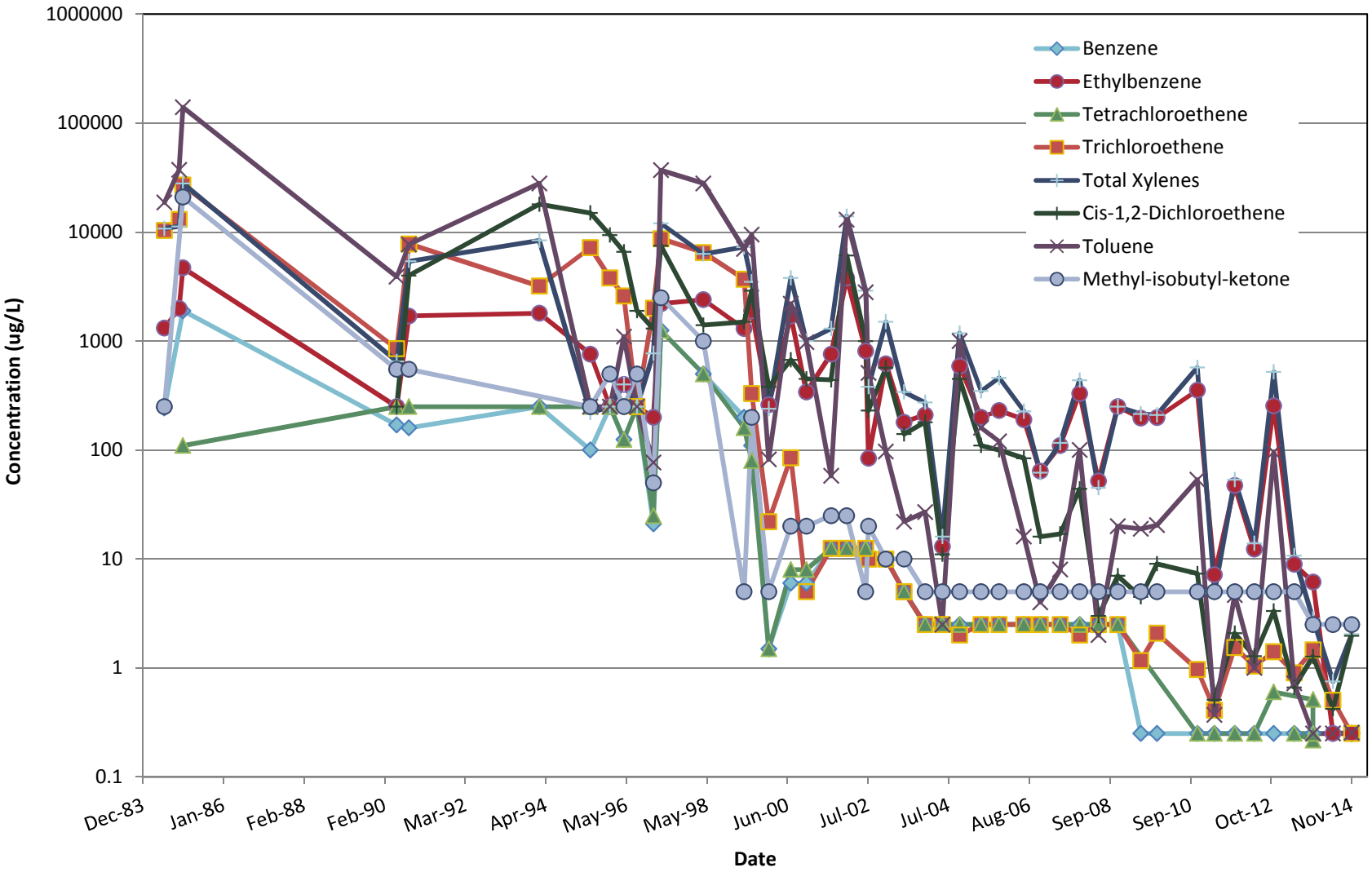
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.

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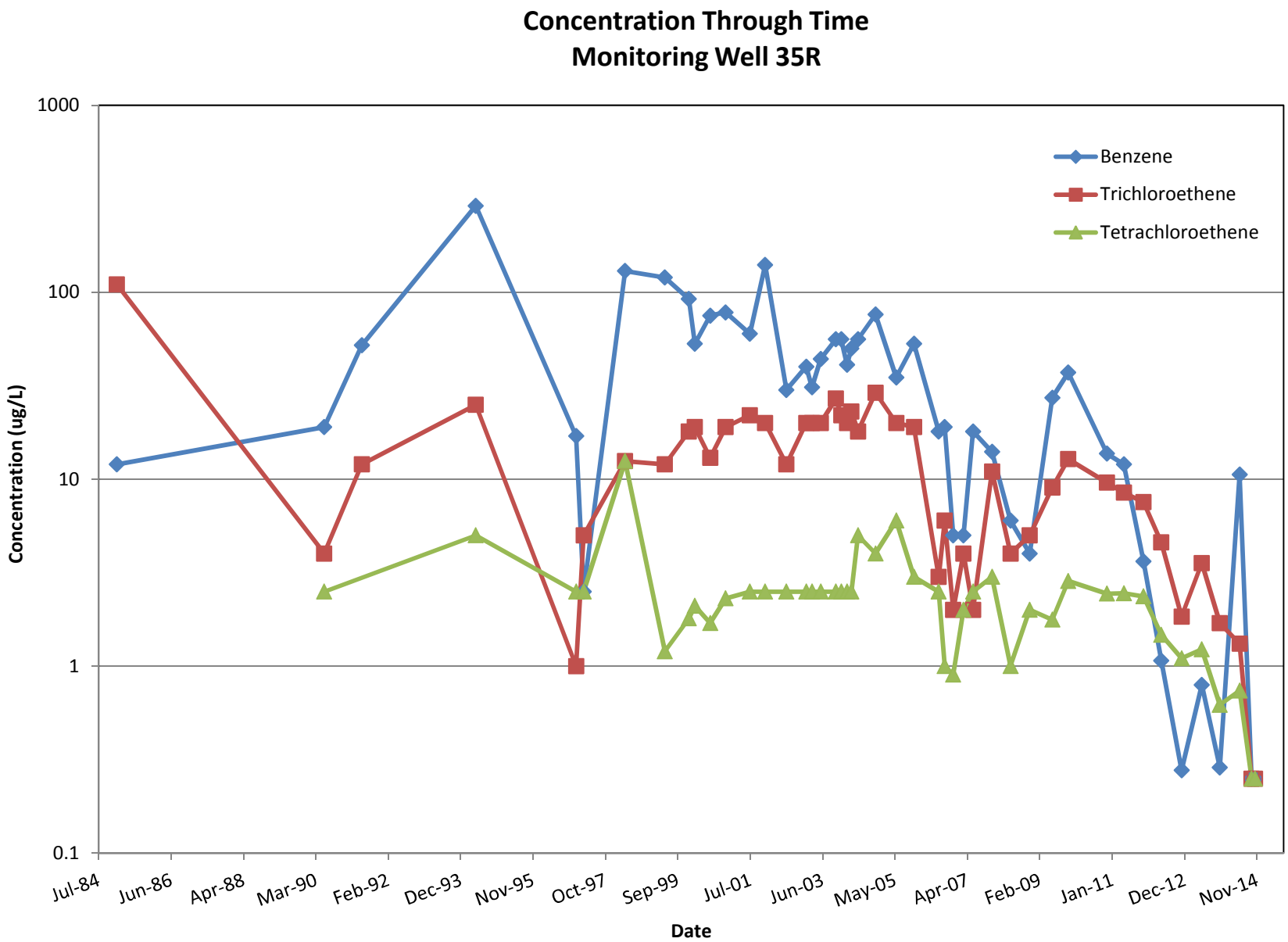
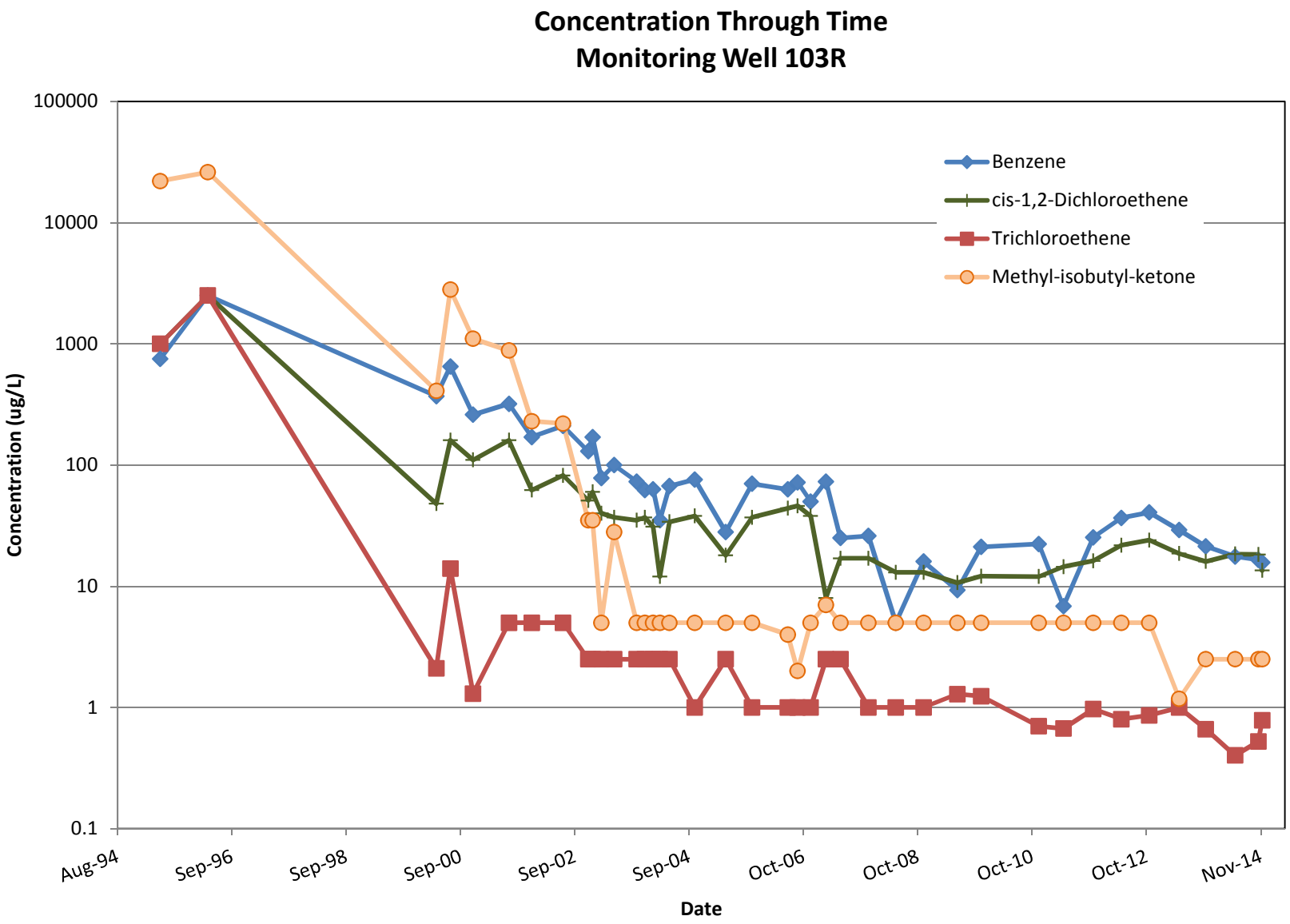
Appendix **C**

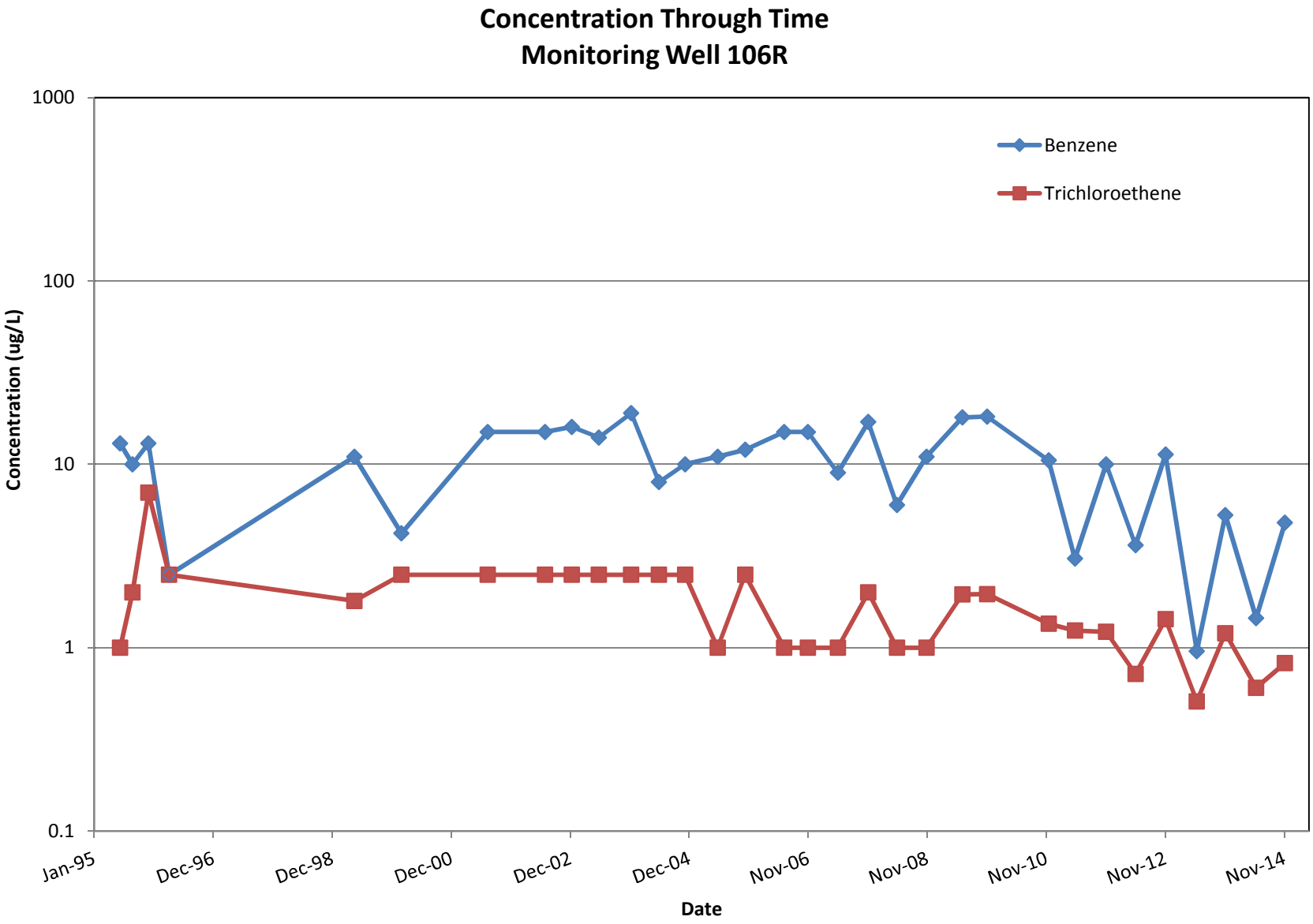
Concentration Trend Charts for Bedrock Wells



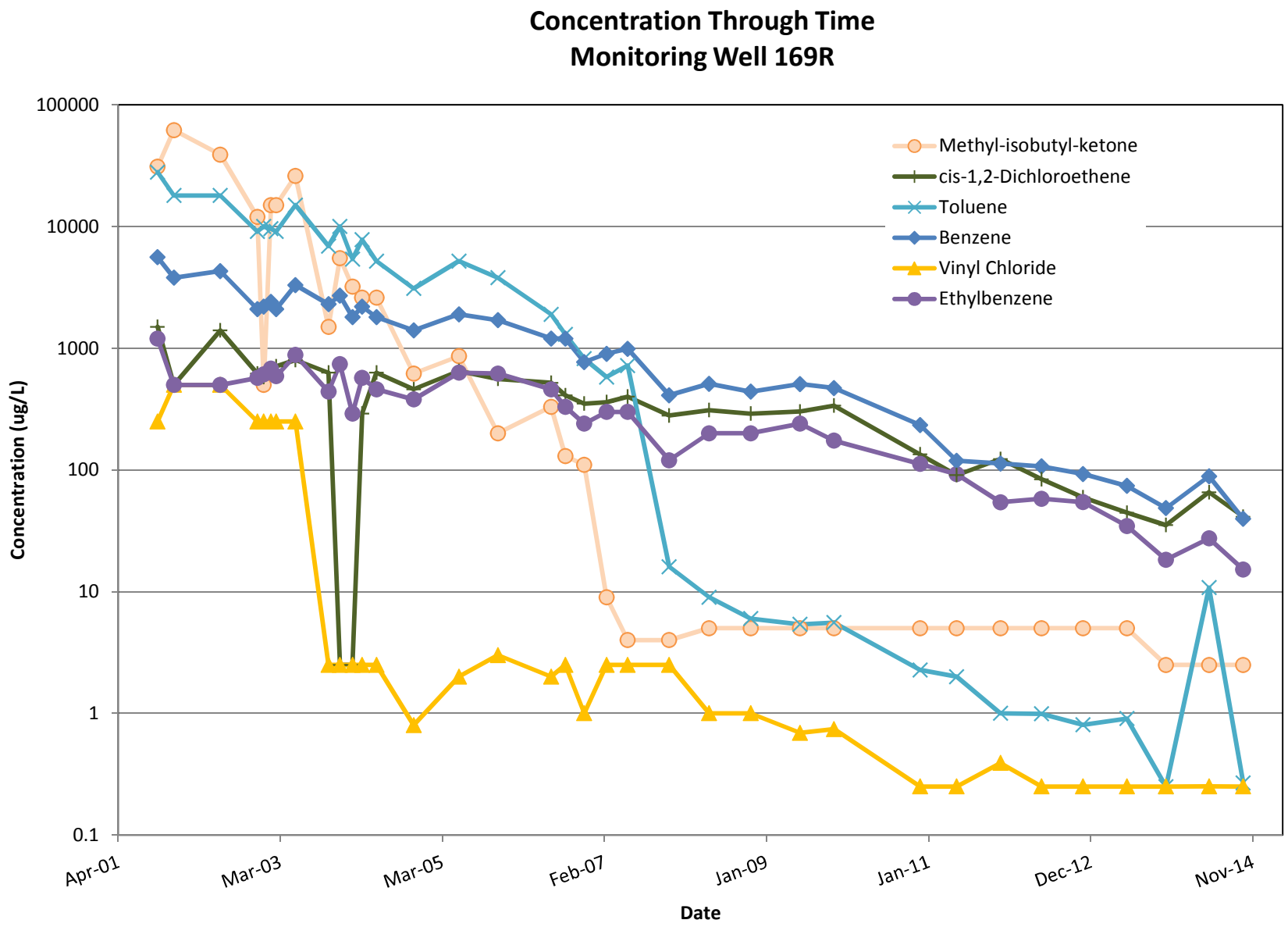
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



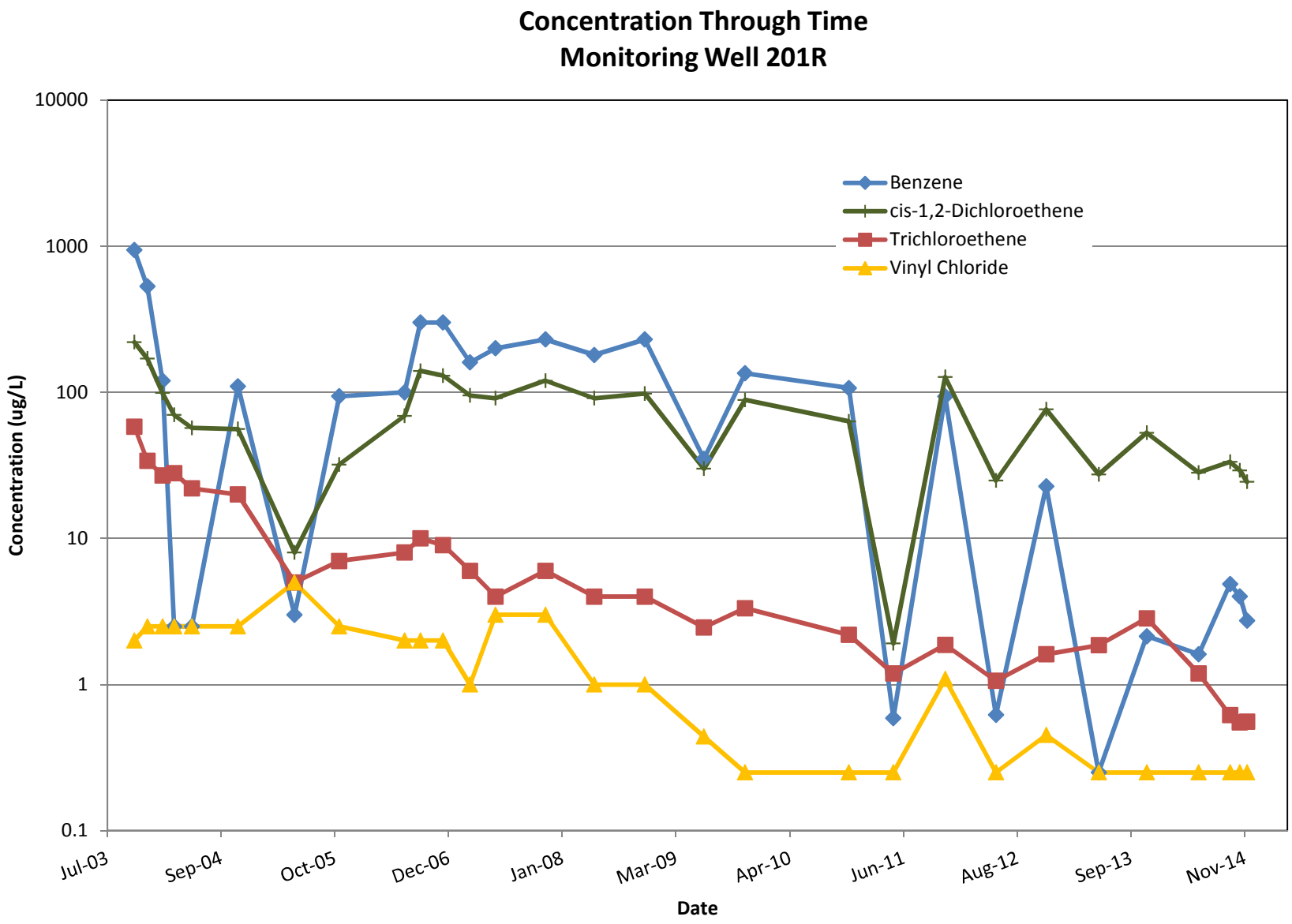
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



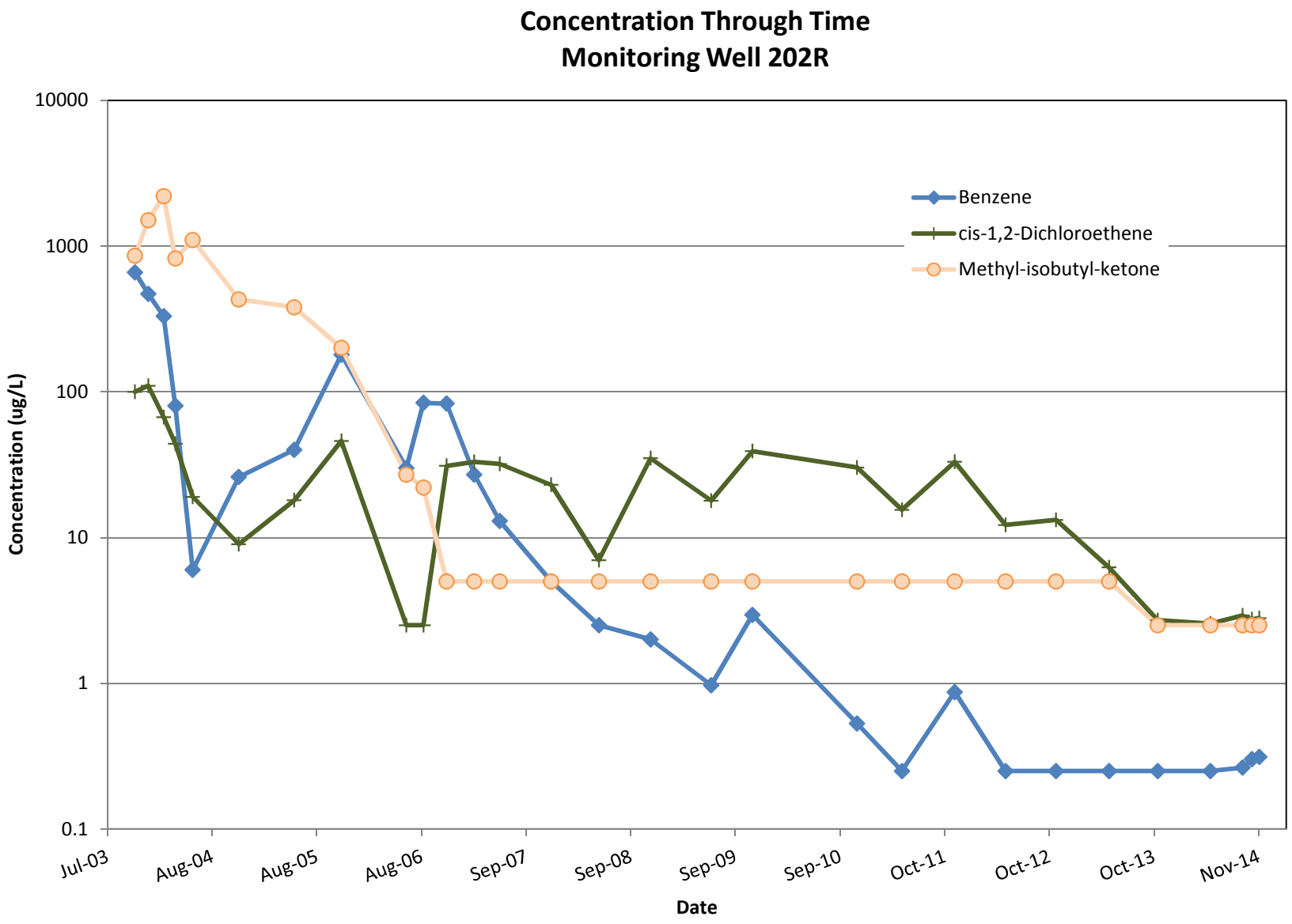
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



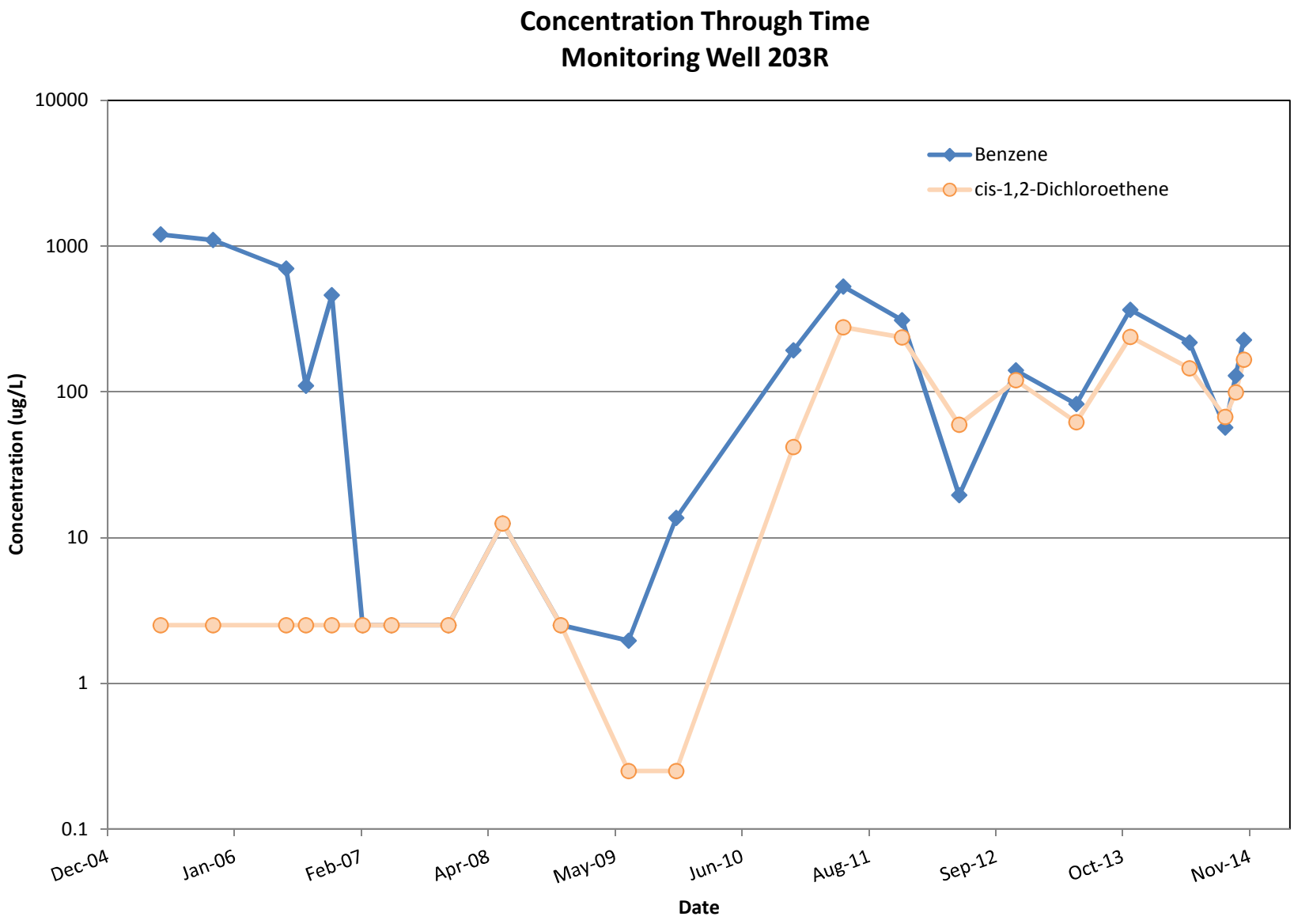
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



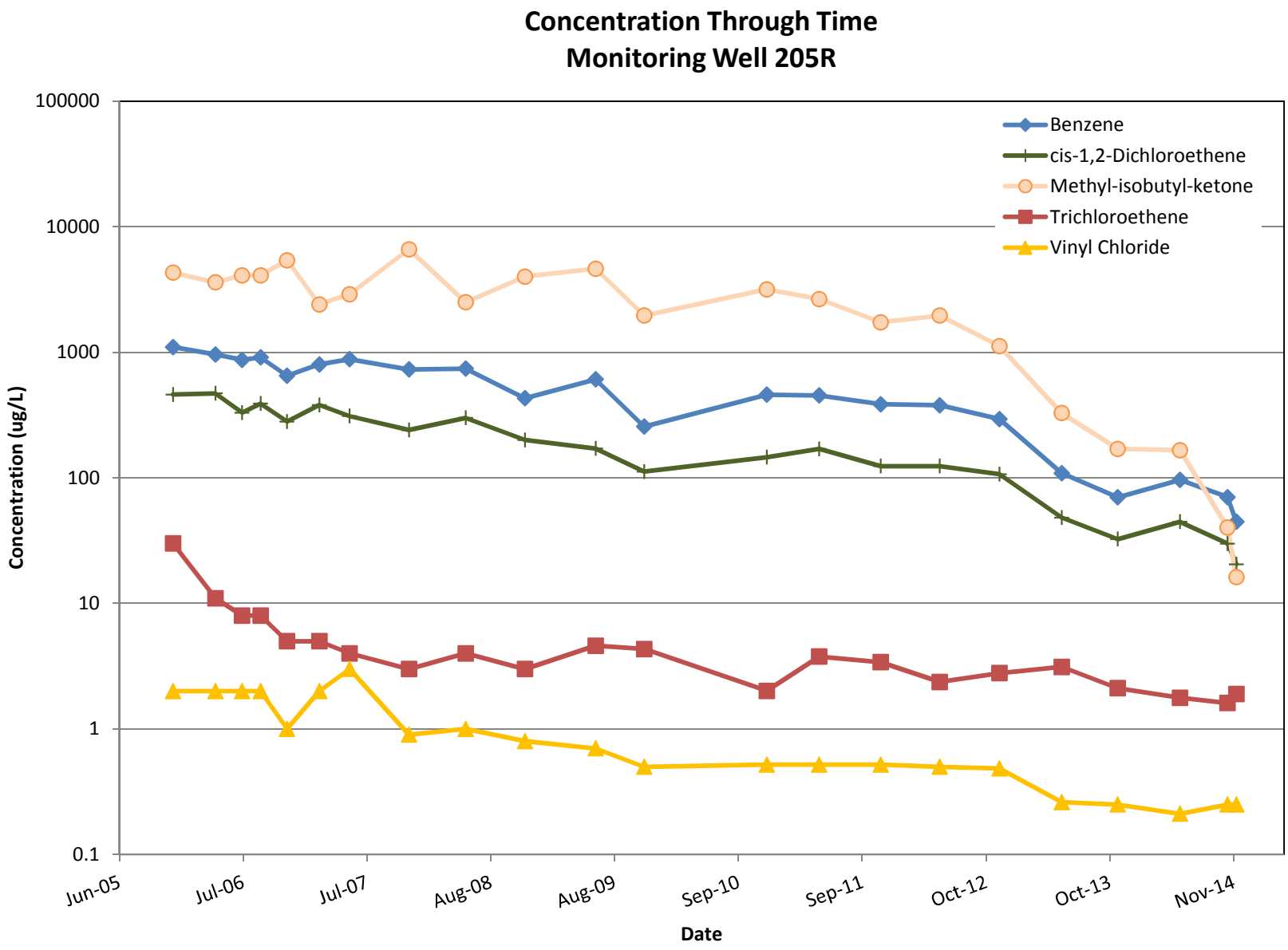
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



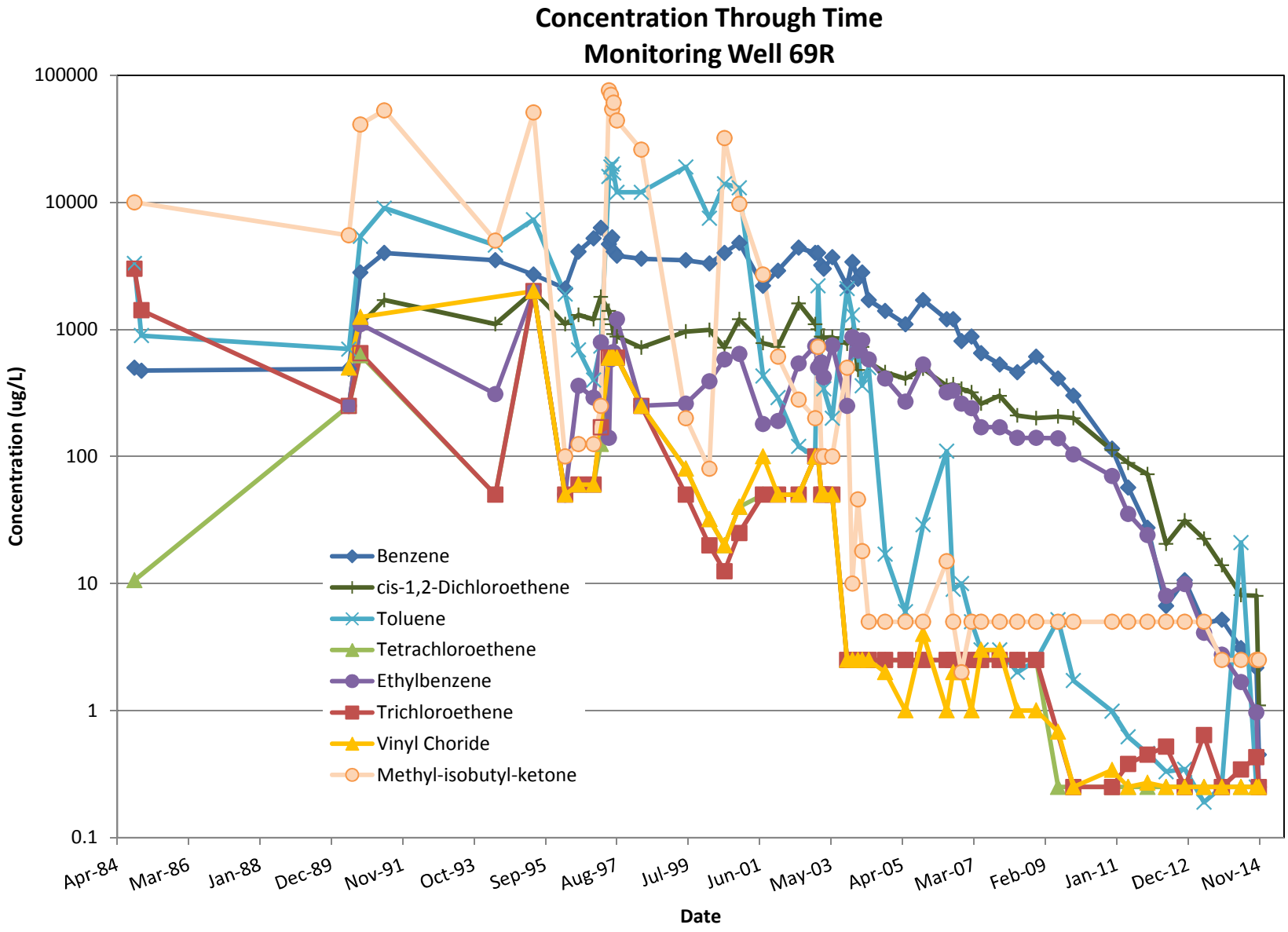
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



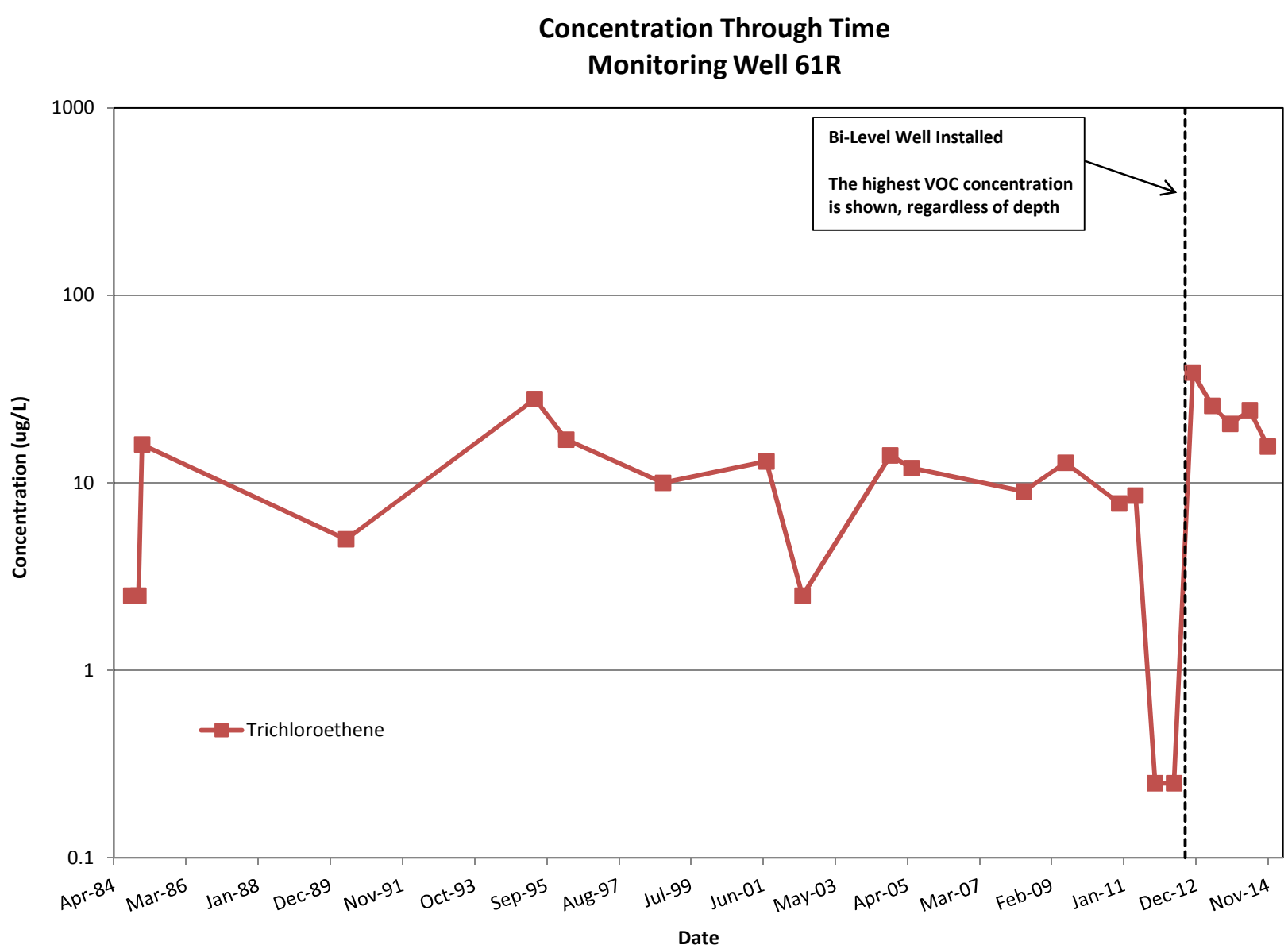
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



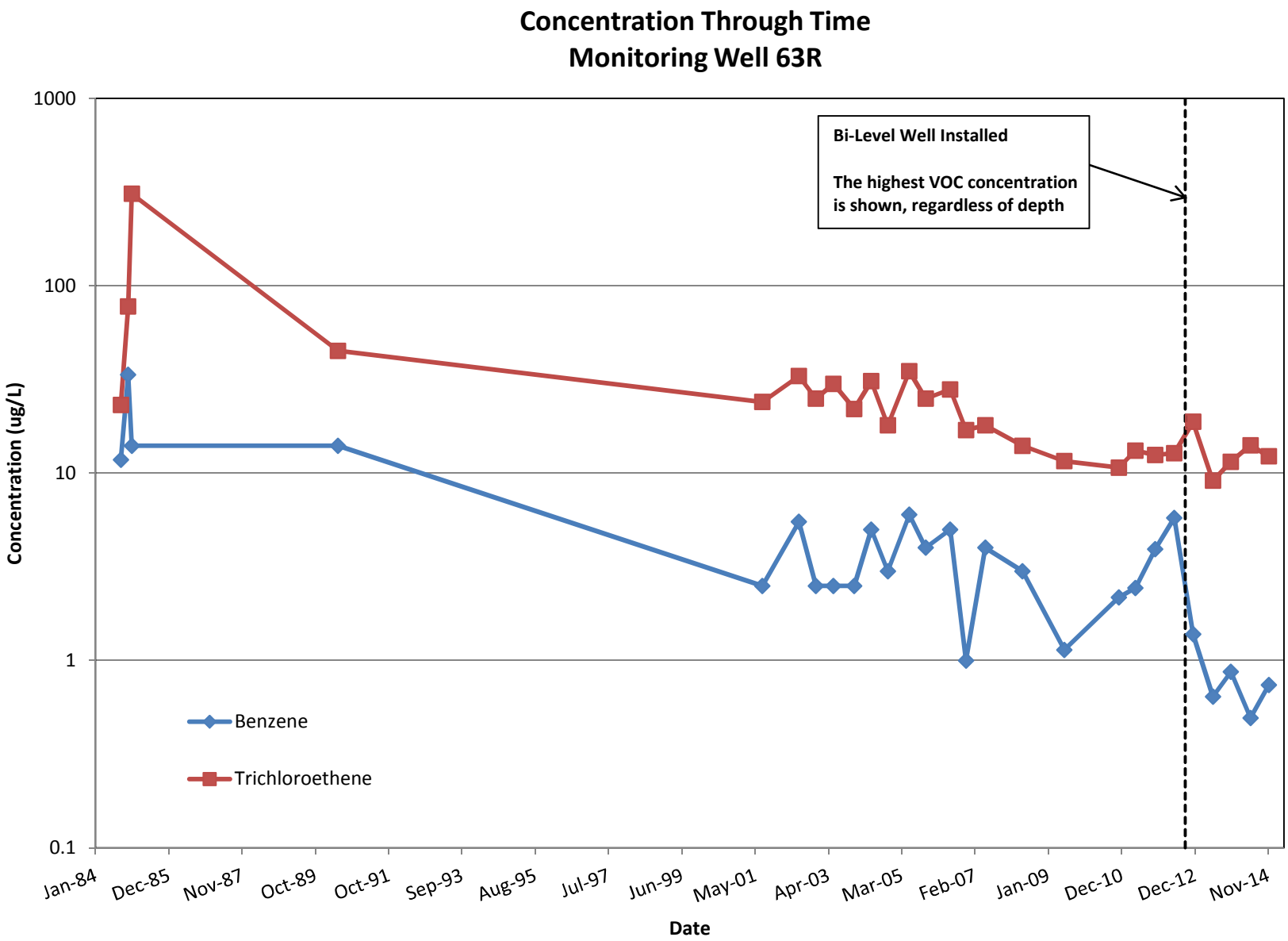
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



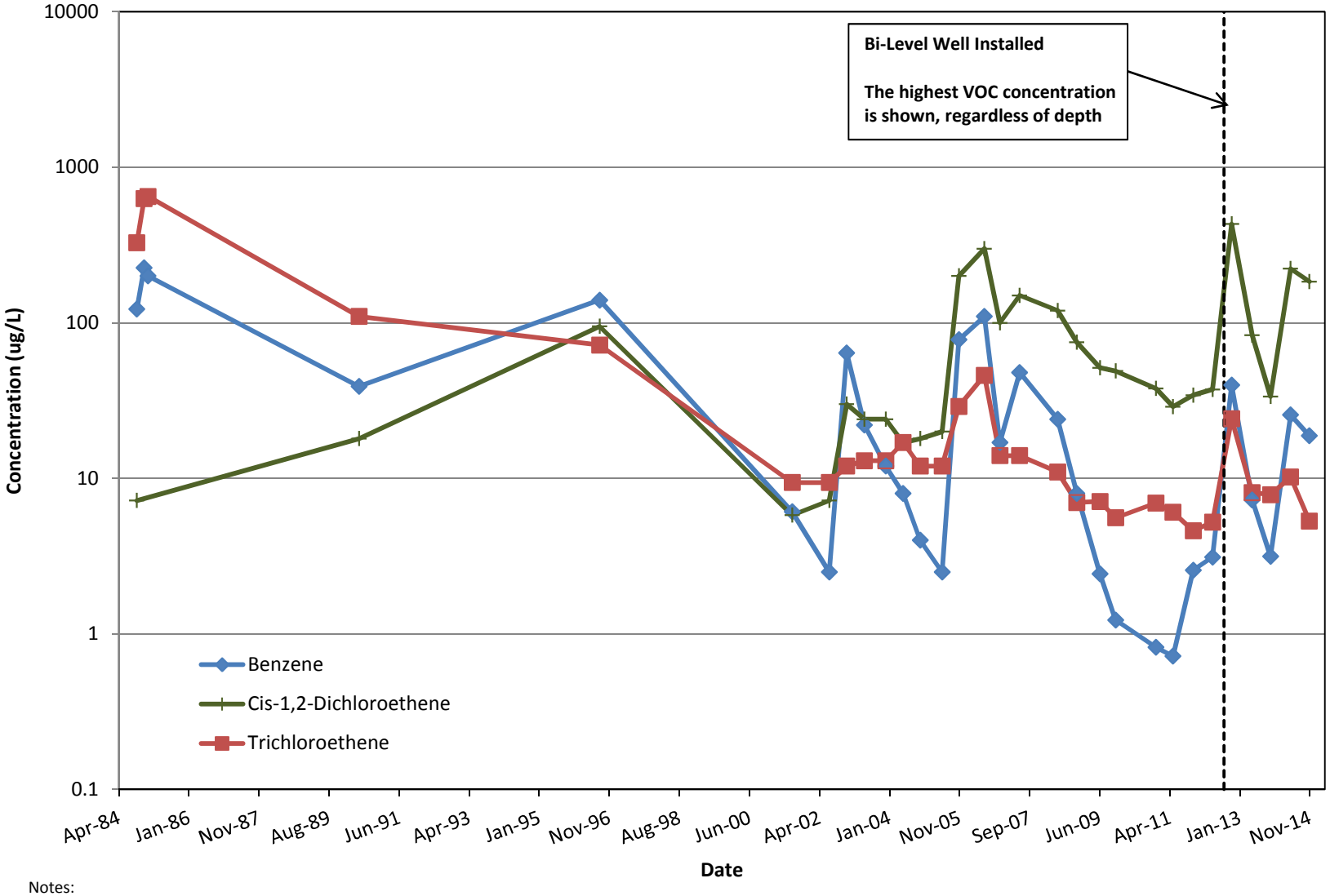
Note: Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.



Notes:
1. Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.
2. Bi-level well installed in 2012. From November 2012 on, data points represent results from the zone of greatest impact.

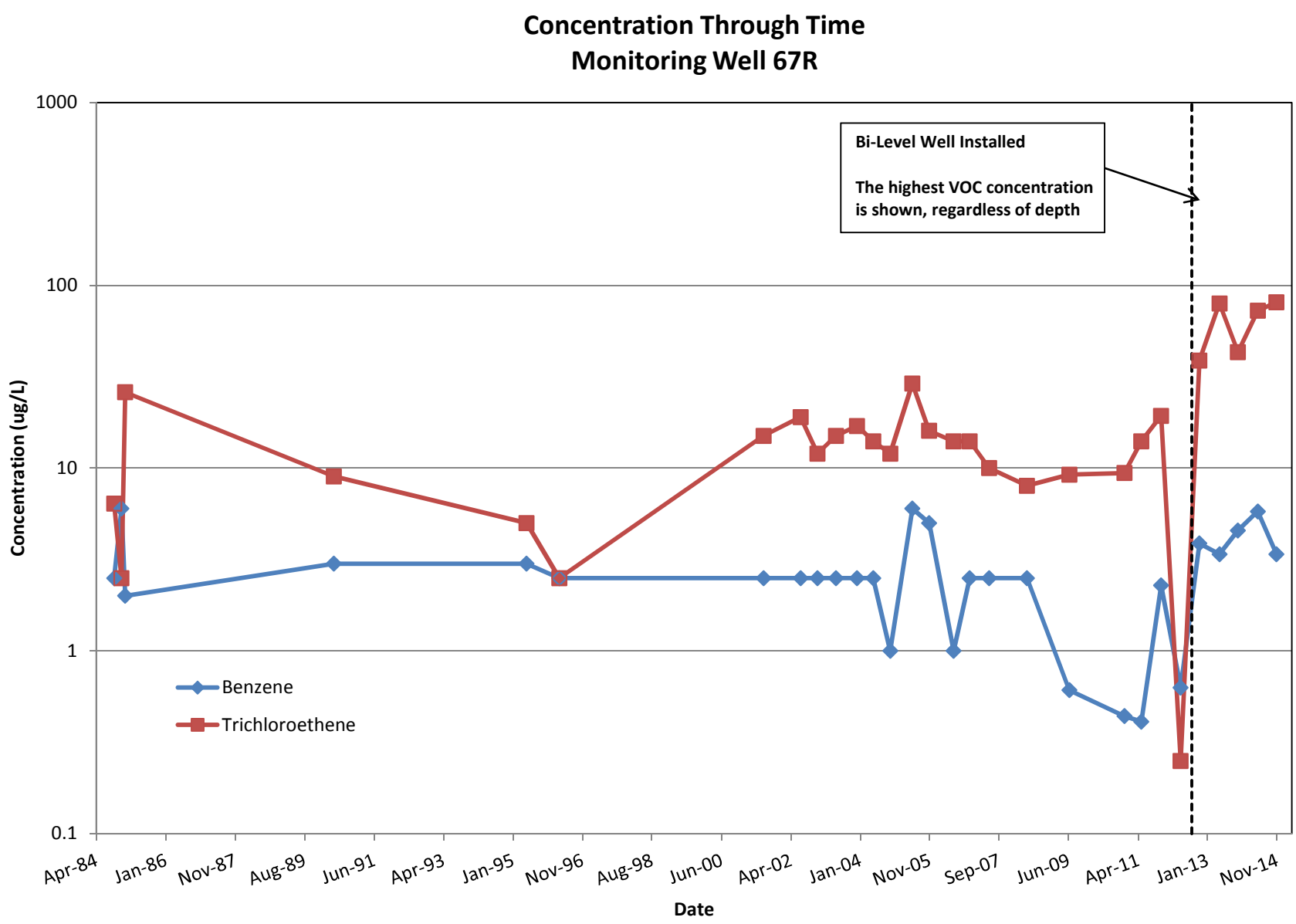


Notes:
1. Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.
2. Bi-level well installed in 2012. From November 2012 on, data points represent results from the zone of greatest impact.



Notes:

1. Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.
2. Bi-level well installed in 2012. From November 2012 on, data points represent results from the zone of greatest impact.



Notes:
1. Chart depicts compounds with historical exceedances of the ICL. Analytical results less than the laboratory detection limit are plotted as one-half the detection limit.
2. Bi-level well installed in 2012. From November 2012 on, data points represent results from the zone of greatest impact.

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Appendix **D**

Laboratory Analytical Reports (Cedar Creek Residential Water Sampling)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-44843-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 3:34:13 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44843-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44843-1	CC-16	Water	01/15/14 13:30	01/18/14 09:00

Job ID: 490-44843-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44843-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44843-1

Client Sample ID: CC-16

Date Collected: 01/15/14 13:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44843-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 13:58	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 13:58	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 13:58	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 13:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 13:58	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 13:58	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 13:58	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 13:58	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 13:58	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 13:58	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 13:58	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 13:58	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 13:58	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 13:58	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 13:58	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 13:58	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 13:58	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 13:58	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 13:58	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 13:58	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 13:58	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 13:58	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 13:58	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 13:58	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 13:58	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 13:58	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 13:58	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 13:58	1
Acetone	**1.37**	**J**	2.50	0.537	ug/L			01/21/14 13:58	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 13:58	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 13:58	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 13:58	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 13:58	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 13:58	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 13:58	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 13:58	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 13:58	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 13:58	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 13:58	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 13:58	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 13:58	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 13:58	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 13:58	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 13:58	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 13:58	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 13:58	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 13:58	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 13:58	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 13:58	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44843-1

Client Sample ID: CC-16

Date Collected: 01/15/14 13:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44843-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 13:58	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 13:58	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 13:58	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 13:58	1
Methyl tert-butyl ether	**0.149**	**J**	0.500	0.120	ug/L			01/21/14 13:58	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 13:58	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 13:58	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 13:58	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 13:58	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 13:58	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 13:58	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 13:58	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 13:58	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 13:58	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 13:58	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 13:58	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 13:58	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 13:58	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 13:58	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 13:58	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 13:58	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 13:58	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 13:58	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 13:58	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 13:58	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 13:58	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*01/21/14 13:58*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/21/14 13:58*	*1*

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Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44843-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44843-1	CC-16	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44843-1

Client Sample ID: CC-16

Date Collected: 01/15/14 13:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44843-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 13:58	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44843-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44843-1

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: Thomas Zakarian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA0000728 0008
Address: 1 Executive Drive Suite 303	Due Date Requested: STD			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-16	1/15/14	1330	G	W			X		3	

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by	Date/Time	Company	Received by	Date/Time 1/18/14 0900	Company TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44843-1

Login Number: 44843
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44843-1

Login Number: 44843
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 08:52 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	True	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-44845-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 3:38:47 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44845-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44845-1	CC-14	Water	01/15/14 13:55	01/18/14 09:00

Job ID: 490-44845-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44845-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44845-1

Client Sample ID: CC-14

Date Collected: 01/15/14 13:55
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44845-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 14:48	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 14:48	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 14:48	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 14:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 14:48	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 14:48	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 14:48	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 14:48	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 14:48	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 14:48	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 14:48	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 14:48	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 14:48	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 14:48	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 14:48	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 14:48	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 14:48	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 14:48	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 14:48	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 14:48	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 14:48	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 14:48	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 14:48	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 14:48	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 14:48	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 14:48	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 14:48	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 14:48	1
Acetone	**1.03**	**J**	2.50	0.537	ug/L			01/21/14 14:48	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 14:48	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 14:48	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 14:48	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 14:48	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 14:48	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 14:48	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 14:48	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 14:48	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 14:48	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 14:48	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 14:48	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 14:48	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 14:48	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 14:48	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 14:48	1
cis-1,2-Dichloroethene	**0.726**		0.500	0.120	ug/L			01/21/14 14:48	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 14:48	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 14:48	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 14:48	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 14:48	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44845-1

Client Sample ID: CC-14

Date Collected: 01/15/14 13:55
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44845-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 14:48	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 14:48	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 14:48	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 14:48	1
Methyl tert-butyl ether	**2.22**		0.500	0.120	ug/L			01/21/14 14:48	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 14:48	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 14:48	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 14:48	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 14:48	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 14:48	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 14:48	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 14:48	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 14:48	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 14:48	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 14:48	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 14:48	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 14:48	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 14:48	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 14:48	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 14:48	1
Trichloroethene	**0.134**	**J**	0.500	0.0600	ug/L			01/21/14 14:48	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 14:48	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 14:48	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 14:48	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 14:48	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 14:48	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/21/14 14:48*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/21/14 14:48*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44845-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44845-1	CC-14	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44845-1

Client Sample ID: CC-14

Date Collected: 01/15/14 13:55
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44845-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 14:48	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44845-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44845-1

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: Tom Zakarian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000725.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-14	1/15/14	1355	G	W			X		3	

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by	Date/Time	Company	Received by	Date/Time: 1/15/14 0900	Company: TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44845-1

Login Number: 44845
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44845-1

Login Number: 44845
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 08:58 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-44849-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 3:40:17 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44849-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44849-1	CC-13	Water	01/15/14 14:10	01/18/14 09:00

Job ID: 490-44849-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44849-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44849-1

Client Sample ID: CC-13

Date Collected: 01/15/14 14:10
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44849-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 15:13	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 15:13	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 15:13	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 15:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 15:13	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 15:13	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 15:13	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 15:13	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 15:13	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 15:13	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 15:13	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 15:13	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 15:13	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 15:13	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 15:13	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 15:13	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 15:13	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 15:13	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 15:13	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 15:13	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 15:13	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 15:13	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 15:13	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 15:13	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 15:13	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 15:13	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 15:13	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 15:13	1
Acetone	**0.967**	**J**	2.50	0.537	ug/L			01/21/14 15:13	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 15:13	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 15:13	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 15:13	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 15:13	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 15:13	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 15:13	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 15:13	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 15:13	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 15:13	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 15:13	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 15:13	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 15:13	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 15:13	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 15:13	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 15:13	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 15:13	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 15:13	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 15:13	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 15:13	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 15:13	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44849-1

Client Sample ID: CC-13

Date Collected: 01/15/14 14:10
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44849-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 15:13	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 15:13	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 15:13	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 15:13	1
Methyl tert-butyl ether	**0.389**	**J**	0.500	0.120	ug/L			01/21/14 15:13	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 15:13	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 15:13	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 15:13	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 15:13	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 15:13	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 15:13	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 15:13	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 15:13	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 15:13	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 15:13	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 15:13	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 15:13	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 15:13	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 15:13	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 15:13	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 15:13	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 15:13	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 15:13	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 15:13	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 15:13	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 15:13	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/21/14 15:13*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/21/14 15:13*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44849-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44849-1	CC-13	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44849-1

Client Sample ID: CC-13

Date Collected: 01/15/14 14:10
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44849-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 15:13	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44849-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44849-1

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: Tom Zakarian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000723.0004
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-13	1/15/14	1410	G	W			X		3	

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by	Date/Time	Company	Received by: [signature]	Date/Time: 1/18/14 0900	Company: TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44849-1

Login Number: 44849
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44849-1

Login Number: 44849
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 08:58 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-44844-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 3:37:14 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44844-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44844-1	CC-01	Water	01/15/14 13:30	01/18/14 09:00

Job ID: 490-44844-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44844-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44844-1

Client Sample ID: CC-01

Date Collected: 01/15/14 13:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44844-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 14:23	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 14:23	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 14:23	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 14:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 14:23	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 14:23	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 14:23	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 14:23	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 14:23	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 14:23	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 14:23	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 14:23	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 14:23	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 14:23	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 14:23	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 14:23	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 14:23	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 14:23	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 14:23	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 14:23	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 14:23	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 14:23	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 14:23	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 14:23	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 14:23	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 14:23	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 14:23	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 14:23	1
Acetone	**0.916**	**J**	2.50	0.537	ug/L			01/21/14 14:23	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 14:23	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 14:23	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 14:23	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 14:23	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 14:23	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 14:23	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 14:23	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 14:23	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 14:23	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 14:23	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 14:23	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 14:23	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 14:23	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 14:23	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 14:23	1
cis-1,2-Dichloroethene	**3.33**		0.500	0.120	ug/L			01/21/14 14:23	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 14:23	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 14:23	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 14:23	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 14:23	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44844-1

Client Sample ID: CC-01

Date Collected: 01/15/14 13:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44844-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 14:23	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 14:23	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 14:23	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 14:23	1
Methyl tert-butyl ether	**2.54**		0.500	0.120	ug/L			01/21/14 14:23	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 14:23	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 14:23	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 14:23	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 14:23	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 14:23	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 14:23	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 14:23	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 14:23	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 14:23	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 14:23	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 14:23	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 14:23	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 14:23	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 14:23	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 14:23	1
Trichloroethene	**0.328**	**J**	0.500	0.0600	ug/L			01/21/14 14:23	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 14:23	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 14:23	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 14:23	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 14:23	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 14:23	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/21/14 14:23*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/21/14 14:23*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44844-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44844-1	CC-01	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44844-1

Client Sample ID: CC-01

Date Collected: 01/15/14 13:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44844-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 14:23	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44844-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44844-1

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: Thomas Zakarian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000725.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-01	1/15/14	1330	G	W			X		3	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time	Company	Received by: [signature]	Date/Time: 1/18/14 0900	Company: TA
Relinquished by	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44844-1

Login Number: 44844
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44844-1

Login Number: 44844
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 08:57 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-44850-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 3:41:55 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44850-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44850-1	CC-12	Water	01/15/14 14:15	01/18/14 09:00

Job ID: 490-44850-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44850-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44850-1

Client Sample ID: CC-12

Date Collected: 01/15/14 14:15
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44850-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 15:38	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 15:38	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 15:38	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 15:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 15:38	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 15:38	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 15:38	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 15:38	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 15:38	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 15:38	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 15:38	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 15:38	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 15:38	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 15:38	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 15:38	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 15:38	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 15:38	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 15:38	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 15:38	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 15:38	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 15:38	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 15:38	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 15:38	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 15:38	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 15:38	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 15:38	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 15:38	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 15:38	1
Acetone	**0.920**	**J**	2.50	0.537	ug/L			01/21/14 15:38	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 15:38	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 15:38	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 15:38	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 15:38	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 15:38	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 15:38	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 15:38	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 15:38	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 15:38	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 15:38	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 15:38	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 15:38	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 15:38	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 15:38	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 15:38	1
cis-1,2-Dichloroethene	**0.141**	**J**	0.500	0.120	ug/L			01/21/14 15:38	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 15:38	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 15:38	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 15:38	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 15:38	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44850-1

Client Sample ID: CC-12

Date Collected: 01/15/14 14:15
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44850-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 15:38	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 15:38	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 15:38	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 15:38	1
Methyl tert-butyl ether	**0.810**		0.500	0.120	ug/L			01/21/14 15:38	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 15:38	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 15:38	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 15:38	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 15:38	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 15:38	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 15:38	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 15:38	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 15:38	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 15:38	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 15:38	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 15:38	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 15:38	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 15:38	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 15:38	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 15:38	1
Trichloroethene	**0.0981**	**J**	0.500	0.0600	ug/L			01/21/14 15:38	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 15:38	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 15:38	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 15:38	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 15:38	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 15:38	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*01/21/14 15:38*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/21/14 15:38*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44850-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44850-1	CC-12	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44850-1

Client Sample ID: CC-12

Date Collected: 01/15/14 14:15
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44850-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 15:38	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44850-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44850-1

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zakaria	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000725.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-12	1/15/14	1415	G	W			X		3	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			[signature]	1/18/14 0900	TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44850-1

Login Number: 44850

List Number: 1

Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44850-1

Login Number: 44850
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 08:59 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-44852-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 4:01:44 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44852-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44852-1	CC-11	Water	01/15/14 14:40	01/18/14 09:00

Job ID: 490-44852-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44852-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-11 (490-44852-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44852-1

Client Sample ID: CC-11

Date Collected: 01/15/14 14:40
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44852-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 16:28	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 16:28	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 16:28	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 16:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 16:28	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 16:28	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 16:28	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 16:28	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 16:28	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 16:28	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 16:28	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 16:28	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 16:28	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 16:28	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 16:28	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 16:28	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 16:28	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 16:28	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 16:28	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 16:28	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 16:28	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 16:28	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 16:28	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 16:28	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 16:28	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 16:28	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 16:28	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 16:28	1
Acetone	**0.624**	**J**	2.50	0.537	ug/L			01/21/14 16:28	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 16:28	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 16:28	1
Benzene	**1.49**		0.500	0.130	ug/L			01/21/14 16:28	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 16:28	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 16:28	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 16:28	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 16:28	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 16:28	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 16:28	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 16:28	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 16:28	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 16:28	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 16:28	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 16:28	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 16:28	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 16:28	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 16:28	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 16:28	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 16:28	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 16:28	1

Client Sample ID: CC-11

Lab Sample ID: 490-44852-1

Date Collected: 01/15/14 14:40

Matrix: Water

Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 16:28	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 16:28	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 16:28	1
Methyl tert-butyl ether	**0.146**	**J**	0.500	0.120	ug/L			01/21/14 16:28	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 16:28	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 16:28	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 16:28	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 16:28	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 16:28	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 16:28	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 16:28	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 16:28	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 16:28	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 16:28	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 16:28	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 16:28	1
trans-1,2-Dichloroethene	**0.303**	**J**	0.500	0.130	ug/L			01/21/14 16:28	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 16:28	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 16:28	1
Trichloroethene	**1.40**		0.500	0.0600	ug/L			01/21/14 16:28	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 16:28	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 16:28	1
Vinyl chloride	**0.0602**	**J**	0.500	0.0590	ug/L			01/21/14 16:28	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 16:28	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 16:28	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*01/21/14 16:28*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/21/14 16:28*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**22.4**		1.00	0.240	ug/L			01/22/14 12:52	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/22/14 12:52*	*2*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/22/14 12:52*	*2*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

Lab Sample ID: MB 480-162698/6
Matrix: Water
Analysis Batch: 162698

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 11:01	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162698/6
Matrix: Water
Analysis Batch: 162698

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		0.500	0.0590	ug/L			01/22/14 11:01	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 11:01	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 11:01	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 11:01	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 11:01	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 11:01	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 11:01	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 11:01	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 11:01	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 11:01	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 11:01	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 11:01	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 11:01	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 11:01	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 11:01	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 11:01	1
Acetone	ND		2.50	0.537	ug/L			01/22/14 11:01	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 11:01	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 11:01	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 11:01	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 11:01	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 11:01	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 11:01	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 11:01	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 11:01	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 11:01	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 11:01	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 11:01	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 11:01	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 11:01	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 11:01	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 11:01	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162698/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 162698

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 11:01	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 11:01	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 11:01	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 11:01	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 11:01	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 11:01	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 11:01	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 11:01	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 11:01	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 11:01	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 11:01	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 11:01	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 11:01	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 11:01	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/22/14 11:01*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/22/14 11:01*	*1*

Lab Sample ID: LCS 480-162698/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 162698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.221		ug/L		106	70 - 130
1,1,1-Trichloroethane	4.00	4.264		ug/L		107	70 - 130
1,1,2,2-Tetrachloroethane	4.00	4.013		ug/L		100	70 - 130
1,1,2-Trichloroethane	4.00	4.036		ug/L		101	70 - 130
1,1-Dichloroethane	4.00	4.120		ug/L		103	70 - 130
1,1-Dichloroethene	4.00	3.988		ug/L		100	70 - 130
1,1-Dichloropropene	4.00	4.511		ug/L		113	70 - 130
1,2,3-Trichlorobenzene	4.00	4.372		ug/L		109	70 - 130
1,2,3-Trichloropropane	4.00	4.177		ug/L		104	70 - 130
1,2,4-Trichlorobenzene	4.00	4.364		ug/L		109	70 - 130
1,2,4-Trimethylbenzene	4.00	4.059		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.271		ug/L		107	70 - 130
1,2-Dibromoethane	4.00	4.119		ug/L		103	70 - 130
1,2-Dichlorobenzene	4.00	4.021		ug/L		101	70 - 130
1,2-Dichloroethane	4.00	4.030		ug/L		101	70 - 130
1,2-Dichloropropane	4.00	4.076		ug/L		102	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	4.00	4.113		ug/L		103	70 - 130
1,3-Dichlorobenzene	4.00	3.928		ug/L		98	70 - 130
1,3-Dichloropropane	4.00	4.092		ug/L		102	70 - 130
1,4-Dichlorobenzene	4.00	3.949		ug/L		99	70 - 130
2,2-Dichloropropane	4.00	4.435		ug/L		111	70 - 130
2-Butanone (MEK)	20.0	21.00		ug/L		105	70 - 130
2-Chlorotoluene	4.00	4.077		ug/L		102	70 - 130
2-Hexanone	20.0	21.65		ug/L		108	70 - 130
4-Chlorotoluene	4.00	4.011		ug/L		100	70 - 130
4-Isopropyltoluene	4.00	4.185		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	20.69		ug/L		103	70 - 130
Acetone	20.0	21.23		ug/L		106	70 - 130
Benzene	4.00	3.998		ug/L		100	70 - 130
Bromobenzene	4.00	4.014		ug/L		100	70 - 130
Bromochloromethane	4.00	3.872		ug/L		97	70 - 130
Dichlorobromomethane	4.00	4.010		ug/L		100	70 - 130
Bromoform	4.00	3.962		ug/L		99	70 - 130
Bromomethane	4.00	5.075		ug/L		127	70 - 130
Carbon disulfide	4.00	3.999		ug/L		100	70 - 130
Carbon tetrachloride	4.00	4.432		ug/L		111	70 - 130
Chlorobenzene	4.00	4.063		ug/L		102	70 - 130
Chlorodibromomethane	3.92	3.958		ug/L		101	70 - 130
Chloroethane	4.00	3.835		ug/L		96	70 - 130
Chloroform	4.00	3.946		ug/L		99	70 - 130
Chloromethane	4.00	3.772		ug/L		94	70 - 130
cis-1,2-Dichloroethene	4.00	4.154		ug/L		104	70 - 130
cis-1,3-Dichloropropene	4.00	4.359		ug/L		109	70 - 130
Dibromomethane	4.00	4.036		ug/L		101	70 - 130
Dichlorodifluoromethane	4.00	3.786		ug/L		95	70 - 130
Ethylbenzene	4.00	4.138		ug/L		103	70 - 130
Hexachlorobutadiene	4.00	4.449		ug/L		111	70 - 130
Isopropylbenzene	4.00	4.330		ug/L		108	70 - 130
Methyl tert-butyl ether	4.00	4.275		ug/L		107	70 - 130
Methylene Chloride	4.00	4.020		ug/L		101	70 - 130
Naphthalene	4.00	4.512		ug/L		113	70 - 130
n-Butylbenzene	4.00	4.197		ug/L		105	70 - 130
N-Propylbenzene	4.00	4.047		ug/L		101	70 - 130
sec-Butylbenzene	4.00	4.247		ug/L		106	70 - 130
Styrene	4.00	4.179		ug/L		104	70 - 130
tert-Butylbenzene	4.00	4.244		ug/L		106	70 - 130
Tetrachloroethene	4.00	4.130		ug/L		103	70 - 130
Toluene	4.00	4.160		ug/L		104	70 - 130
trans-1,2-Dichloroethene	4.00	4.041		ug/L		101	70 - 130
trans-1,3-Dichloropropene	4.00	4.768		ug/L		119	70 - 130
Trichloroethene	4.00	4.041		ug/L		101	70 - 130
Trichlorofluoromethane	4.00	3.917		ug/L		98	70 - 130
Vinyl chloride	4.00	3.944		ug/L		99	70 - 130
Xylenes, Total	8.00	8.427		ug/L		105	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		80 - 120
1,2-Dichlorobenzene-d4	98		80 - 120

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44852-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44852-1	CC-11	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Analysis Batch: 162698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44852-1 - DL	CC-11	Total/NA	Water	524.2	
LCS 480-162698/4	Lab Control Sample	Total/NA	Water	524.2	
MB 480-162698/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44852-1

Client Sample ID: CC-11

Date Collected: 01/15/14 14:40
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44852-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 16:28	TRB	TAL BUF
Total/NA	Analysis	524.2	DL	2	25 mL	25 mL	162698	01/22/14 12:52	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44852-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44852-1

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
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

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zakarian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: NA000725.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site	SSOW#			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-11	1/15/14	1440	G	W			X		3	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			Chuck Kaiser	1/18/14 0900	TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44852-1

Login Number: 44852

List Source: TestAmerica Nashville

List Number: 1

Creator: Gambill, Jennifer

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44852-1

Login Number: 44852
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:01 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-44853-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 4:02:43 PM
Heather Baker, Project Manager I
(615)301-5043
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Designee for

Shali Brown, Project Manager II
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shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

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Visit us at: www.testamericainc.com

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

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

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44853-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44853-1	CC-08	Water	01/14/14 09:25	01/18/14 09:00

Job ID: 490-44853-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44853-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44853-1

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44853-1

Client Sample ID: CC-08

Date Collected: 01/14/14 09:25
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44853-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 16:53	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 16:53	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 16:53	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 16:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 16:53	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 16:53	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 16:53	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 16:53	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 16:53	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 16:53	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 16:53	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 16:53	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 16:53	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 16:53	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 16:53	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 16:53	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 16:53	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 16:53	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 16:53	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 16:53	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 16:53	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 16:53	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 16:53	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 16:53	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 16:53	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 16:53	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 16:53	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 16:53	1
Acetone	**1.90**	**J**	2.50	0.537	ug/L			01/21/14 16:53	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 16:53	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 16:53	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 16:53	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 16:53	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 16:53	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 16:53	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 16:53	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 16:53	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 16:53	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 16:53	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 16:53	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 16:53	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 16:53	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 16:53	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 16:53	1
cis-1,2-Dichloroethene	**0.140**	**J**	0.500	0.120	ug/L			01/21/14 16:53	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 16:53	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 16:53	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 16:53	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 16:53	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44853-1

Client Sample ID: CC-08

Date Collected: 01/14/14 09:25
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44853-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 16:53	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 16:53	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 16:53	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 16:53	1
Methyl tert-butyl ether	**0.664**		0.500	0.120	ug/L			01/21/14 16:53	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 16:53	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 16:53	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 16:53	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 16:53	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 16:53	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 16:53	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 16:53	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 16:53	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 16:53	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 16:53	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 16:53	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 16:53	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 16:53	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 16:53	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 16:53	1
Trichloroethene	**0.121**	**J**	0.500	0.0600	ug/L			01/21/14 16:53	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 16:53	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 16:53	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 16:53	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 16:53	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 16:53	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*		*01/21/14 16:53*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/21/14 16:53*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44853-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44853-1	CC-08	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44853-1

Client Sample ID: CC-08

Date Collected: 01/14/14 09:25
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44853-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 16:53	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44853-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44853-1

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T. Zukowski	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6745	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000725.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-08	1/14/14	0925	G	W			X		3	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			[signature]	1/18/14 0900	TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No. | Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44853-1

Login Number: 44853

List Number: 1

Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44853-1

Login Number: 44853
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:04 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 490-44854-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 4:04:46 PM
Heather Baker, Project Manager I
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44854-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44854-1	CC-07	Water	01/15/14 16:50	01/18/14 09:00

Job ID: 490-44854-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44854-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44854-1

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44854-1

Client Sample ID: CC-07

Date Collected: 01/15/14 16:50
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44854-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 17:18	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 17:18	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 17:18	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 17:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 17:18	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 17:18	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 17:18	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 17:18	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 17:18	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 17:18	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 17:18	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 17:18	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 17:18	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 17:18	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 17:18	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 17:18	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 17:18	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 17:18	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 17:18	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 17:18	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 17:18	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 17:18	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 17:18	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 17:18	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 17:18	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 17:18	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 17:18	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 17:18	1
Acetone	**1.67**	**J**	2.50	0.537	ug/L			01/21/14 17:18	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 17:18	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 17:18	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 17:18	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 17:18	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 17:18	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 17:18	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 17:18	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 17:18	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 17:18	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 17:18	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 17:18	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 17:18	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 17:18	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 17:18	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 17:18	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 17:18	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 17:18	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 17:18	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 17:18	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 17:18	1

Client Sample ID: CC-07

Lab Sample ID: 490-44854-1

Date Collected: 01/15/14 16:50

Matrix: Water

Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 17:18	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 17:18	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 17:18	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 17:18	1
Methyl tert-butyl ether	**0.217**	**J**	0.500	0.120	ug/L			01/21/14 17:18	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 17:18	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 17:18	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 17:18	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 17:18	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 17:18	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 17:18	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 17:18	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 17:18	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 17:18	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 17:18	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 17:18	1
Toluene	**0.472**	**J**	0.500	0.100	ug/L			01/21/14 17:18	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 17:18	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 17:18	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 17:18	1
Trichloroethene	**0.0718**	**J**	0.500	0.0600	ug/L			01/21/14 17:18	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 17:18	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 17:18	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 17:18	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 17:18	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 17:18	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*01/21/14 17:18*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*01/21/14 17:18*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44854-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44854-1	CC-07	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44854-1

Client Sample ID: CC-07

Date Collected: 01/15/14 16:50
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44854-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 17:18	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44854-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44854-1

Laboratory: TestAmerica Nashville

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zukowicz	Lab PM: Brown, Shali	Carrier Tracking No(s)	COC No
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000723.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-07	1/15/14	1650	G	W			K		3	

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			[signature]	1/18/14 0900	TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44854-1

Login Number: 44854
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44854-1

Login Number: 44854
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:04 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-44851-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 3:44:33 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44851-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44851-1	CC-05	Water	01/15/14 14:20	01/18/14 09:00

Job ID: 490-44851-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44851-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44851-1

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44851-1

Client Sample ID: CC-05

Date Collected: 01/15/14 14:20
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44851-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 16:03	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 16:03	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 16:03	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 16:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 16:03	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 16:03	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 16:03	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 16:03	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 16:03	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 16:03	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 16:03	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 16:03	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 16:03	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 16:03	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 16:03	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 16:03	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 16:03	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 16:03	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 16:03	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 16:03	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 16:03	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 16:03	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 16:03	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 16:03	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 16:03	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 16:03	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 16:03	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 16:03	1
Acetone	**1.14**	**J**	2.50	0.537	ug/L			01/21/14 16:03	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 16:03	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 16:03	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 16:03	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 16:03	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 16:03	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 16:03	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 16:03	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 16:03	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 16:03	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 16:03	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 16:03	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 16:03	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 16:03	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 16:03	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 16:03	1
cis-1,2-Dichloroethene	**1.09**		0.500	0.120	ug/L			01/21/14 16:03	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 16:03	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 16:03	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 16:03	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 16:03	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44851-1

Client Sample ID: CC-05

Date Collected: 01/15/14 14:20
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44851-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 16:03	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 16:03	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 16:03	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 16:03	1
Methyl tert-butyl ether	**2.38**		0.500	0.120	ug/L			01/21/14 16:03	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 16:03	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 16:03	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 16:03	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 16:03	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 16:03	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 16:03	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 16:03	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 16:03	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 16:03	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 16:03	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 16:03	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 16:03	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 16:03	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 16:03	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 16:03	1
Trichloroethene	**0.147**	**J**	0.500	0.0600	ug/L			01/21/14 16:03	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 16:03	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 16:03	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 16:03	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 16:03	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 16:03	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/21/14 16:03*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/21/14 16:03*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44851-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44851-1	CC-05	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44851-1

Client Sample ID: CC-05

Date Collected: 01/15/14 14:20
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44851-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 16:03	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44851-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44851-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zakarian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000725.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-05	1/15/14	14:20	G	W			X		3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			Chuck Kau	1/18/14 0900	TA
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44851-1

Login Number: 44851

List Number: 1

Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44851-1

Login Number: 44851
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:00 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-44855-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 4:06:06 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44855-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44855-1	CC-10	Water	01/16/14 09:10	01/18/14 09:00

Job ID: 490-44855-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44855-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44855-1

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44855-1

Client Sample ID: CC-10

Date Collected: 01/16/14 09:10
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44855-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 17:43	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 17:43	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 17:43	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 17:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 17:43	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 17:43	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 17:43	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 17:43	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 17:43	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 17:43	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 17:43	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 17:43	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 17:43	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 17:43	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 17:43	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 17:43	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 17:43	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 17:43	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 17:43	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 17:43	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 17:43	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 17:43	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 17:43	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 17:43	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 17:43	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 17:43	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 17:43	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 17:43	1
Acetone	**1.52**	**J**	2.50	0.537	ug/L			01/21/14 17:43	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 17:43	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 17:43	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 17:43	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 17:43	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 17:43	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 17:43	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 17:43	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 17:43	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 17:43	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 17:43	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 17:43	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 17:43	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 17:43	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 17:43	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 17:43	1
cis-1,2-Dichloroethene	**0.418**	**J**	0.500	0.120	ug/L			01/21/14 17:43	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 17:43	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 17:43	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 17:43	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 17:43	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44855-1

Client Sample ID: CC-10

Date Collected: 01/16/14 09:10
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44855-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 17:43	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 17:43	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 17:43	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 17:43	1
Methyl tert-butyl ether	**0.160**	**J**	0.500	0.120	ug/L			01/21/14 17:43	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 17:43	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 17:43	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 17:43	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 17:43	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 17:43	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 17:43	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 17:43	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 17:43	1
t-Butanol	**8.16**	**J**	10.0	2.46	ug/L			01/21/14 17:43	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 17:43	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 17:43	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 17:43	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 17:43	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 17:43	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 17:43	1
Trichloroethene	**0.664**		0.500	0.0600	ug/L			01/21/14 17:43	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 17:43	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 17:43	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 17:43	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 17:43	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 17:43	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*01/21/14 17:43*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 17:43*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44855-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44855-1	CC-10	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44855-1

Client Sample ID: CC-10

Date Collected: 01/16/14 09:10
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44855-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 17:43	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44855-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44855-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zukowski	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000735 V608
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-10	1/16/14	0910	G	W			X		3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			[signature]	1/18/14 0900	TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44855-1

Login Number: 44855

List Number: 1

Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44855-1

Login Number: 44855
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:05 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-44856-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 4:07:31 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44856-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44856-1	CC-17	Water	01/16/14 14:30	01/18/14 09:00

Job ID: 490-44856-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44856-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44856-1

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44856-1

Client Sample ID: CC-17

Date Collected: 01/16/14 14:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44856-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 18:08	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 18:08	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 18:08	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 18:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 18:08	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 18:08	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 18:08	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 18:08	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 18:08	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 18:08	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 18:08	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 18:08	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 18:08	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 18:08	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 18:08	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 18:08	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 18:08	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 18:08	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 18:08	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 18:08	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 18:08	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 18:08	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 18:08	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 18:08	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 18:08	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 18:08	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 18:08	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 18:08	1
Acetone	**11.2**		2.50	0.537	ug/L			01/21/14 18:08	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 18:08	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 18:08	1
Benzene	**0.142**	**J**	0.500	0.130	ug/L			01/21/14 18:08	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 18:08	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 18:08	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 18:08	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 18:08	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 18:08	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 18:08	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 18:08	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 18:08	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 18:08	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 18:08	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 18:08	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 18:08	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 18:08	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 18:08	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 18:08	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 18:08	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 18:08	1

Client Sample ID: CC-17

Lab Sample ID: 490-44856-1

Date Collected: 01/16/14 14:30

Matrix: Water

Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 18:08	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 18:08	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 18:08	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 18:08	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 18:08	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 18:08	1
m-Xylene & p-Xylene	**0.246**	**J**	1.00	0.0870	ug/L			01/21/14 18:08	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 18:08	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 18:08	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 18:08	1
o-Xylene	**0.130**	**J**	0.500	0.0440	ug/L			01/21/14 18:08	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 18:08	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 18:08	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 18:08	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 18:08	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 18:08	1
Toluene	**0.516**		0.500	0.100	ug/L			01/21/14 18:08	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 18:08	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 18:08	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 18:08	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 18:08	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 18:08	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 18:08	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 18:08	1
Xylenes, Total	**0.376**	**J**	1.00	0.200	ug/L			01/21/14 18:08	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 18:08	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/21/14 18:08*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/21/14 18:08*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44856-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44856-1	CC-17	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44856-1

Client Sample ID: CC-17

Date Collected: 01/16/14 14:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44856-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 18:08	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44856-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44856-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zakrevian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000725.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): ST D			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-17	1/16/14	1430	G	W			X		3	

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by	Date/Time	Company	Received by: [signature]	Date/Time 1/18/14 0900	Company TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44856-1

Login Number: 44856

List Number: 1

Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44856-1

Login Number: 44856
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:08 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-44857-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 4:22:10 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44857-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44857-1	CC-18	Water	01/16/14 12:15	01/18/14 09:00

Job ID: 490-44857-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44857-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44857-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44857-1

Client Sample ID: CC-18

Date Collected: 01/16/14 12:15
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44857-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 18:34	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 18:34	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 18:34	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 18:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 18:34	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 18:34	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 18:34	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 18:34	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 18:34	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 18:34	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 18:34	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 18:34	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 18:34	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 18:34	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 18:34	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 18:34	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 18:34	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 18:34	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 18:34	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 18:34	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 18:34	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 18:34	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 18:34	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 18:34	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 18:34	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 18:34	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 18:34	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 18:34	1
Acetone	**3.20**		2.50	0.537	ug/L			01/21/14 18:34	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 18:34	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 18:34	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 18:34	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 18:34	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 18:34	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 18:34	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 18:34	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 18:34	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 18:34	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 18:34	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 18:34	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 18:34	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 18:34	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 18:34	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 18:34	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 18:34	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 18:34	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 18:34	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 18:34	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 18:34	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44857-1

Client Sample ID: CC-18

Date Collected: 01/16/14 12:15
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44857-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 18:34	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 18:34	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 18:34	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 18:34	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 18:34	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 18:34	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 18:34	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 18:34	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 18:34	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 18:34	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 18:34	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 18:34	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 18:34	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 18:34	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 18:34	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 18:34	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 18:34	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 18:34	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 18:34	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 18:34	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 18:34	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 18:34	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 18:34	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 18:34	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 18:34	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 18:34	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/21/14 18:34*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*01/21/14 18:34*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44857-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44857-1	CC-18	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44857-1

Client Sample ID: CC-18

Date Collected: 01/16/14 12:15
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44857-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 18:34	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44857-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44857-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zalkowitz	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: B-M-000723.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-18	1/16/14	1215	G	W			X		3	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time	Company	Received by	Date/Time	Company
			Chuck Castelluccio	1/18/14 0900	TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44857-1

Login Number: 44857

List Number: 1

Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44857-1

Login Number: 44857
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:09 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-44858-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 4:24:36 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44858-1	CC-02 (Raw)	Water	01/16/14 09:55	01/18/14 09:00
490-44858-2	CC-02 (Post Softner)	Water	01/16/14 10:00	01/18/14 09:00
490-44858-3	CC-02 (GAC 1)	Water	01/16/14 09:50	01/18/14 09:00
490-44858-4	CC-02 (GAC 2)	Water	01/16/14 09:45	01/18/14 09:00

Job ID: 490-44858-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44858-1

Comments
No additional comments.

Receipt
The samples were received on 1/18/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-02 (Raw) (490-44858-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-163121 contained total manganese 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 CC-02 (Post Softner) (490-44858-2), CC-02 (Raw) (490-44858-1) was not performed.

No other analytical or quality issues were noted.

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.

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.
¤	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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Client Sample ID: CC-02 (Raw)

Lab Sample ID: 490-44858-1

Date Collected: 01/16/14 09:55
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.00	1.12	ug/L			01/22/14 14:07	8
1,1,1-Trichloroethane	ND		4.00	0.504	ug/L			01/22/14 14:07	8
1,1,2,2-Tetrachloroethane	ND		4.00	0.560	ug/L			01/22/14 14:07	8
1,1,2-Trichloroethane	ND		4.00	1.36	ug/L			01/22/14 14:07	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.00	1.36	ug/L			01/22/14 14:07	8
1,1-Dichloroethane	ND		4.00	0.592	ug/L			01/22/14 14:07	8
1,1-Dichloroethene	ND		4.00	0.472	ug/L			01/22/14 14:07	8
1,1-Dichloropropene	ND		4.00	0.504	ug/L			01/22/14 14:07	8
1,2,3-Trichlorobenzene	ND		4.00	0.456	ug/L			01/22/14 14:07	8
1,2,3-Trichloropropane	ND		4.00	0.976	ug/L			01/22/14 14:07	8
1,2,4-Trichlorobenzene	ND		4.00	1.02	ug/L			01/22/14 14:07	8
1,2,4-Trimethylbenzene	ND		4.00	0.720	ug/L			01/22/14 14:07	8
1,2-Dibromo-3-Chloropropane	ND		4.00	1.68	ug/L			01/22/14 14:07	8
1,2-Dibromoethane	ND		4.00	1.12	ug/L			01/22/14 14:07	8
1,2-Dichlorobenzene	ND		4.00	1.28	ug/L			01/22/14 14:07	8
1,2-Dichloroethane	ND		4.00	1.12	ug/L			01/22/14 14:07	8
1,2-Dichloropropane	ND		4.00	0.880	ug/L			01/22/14 14:07	8
1,3,5-Trimethylbenzene	ND		4.00	0.344	ug/L			01/22/14 14:07	8
1,3-Dichlorobenzene	ND		4.00	1.04	ug/L			01/22/14 14:07	8
1,3-Dichloropropane	ND		4.00	1.20	ug/L			01/22/14 14:07	8
1,4-Dichlorobenzene	ND		4.00	1.04	ug/L			01/22/14 14:07	8
2,2-Dichloropropane	ND		4.00	0.384	ug/L			01/22/14 14:07	8
2-Butanone (MEK)	ND		20.0	1.99	ug/L			01/22/14 14:07	8
2-Chlorotoluene	ND		4.00	0.400	ug/L			01/22/14 14:07	8
2-Hexanone	ND		20.0	1.85	ug/L			01/22/14 14:07	8
4-Chlorotoluene	ND		4.00	0.400	ug/L			01/22/14 14:07	8
4-Isopropyltoluene	ND		4.00	0.504	ug/L			01/22/14 14:07	8
4-Methyl-2-pentanone (MIBK)	ND		20.0	2.10	ug/L			01/22/14 14:07	8
Acetone	**8.94**	**J**	20.0	4.30	ug/L			01/22/14 14:07	8
Acrylonitrile	ND		80.0	1.82	ug/L			01/22/14 14:07	8
Allyl chloride	ND		4.00	0.728	ug/L			01/22/14 14:07	8
Benzene	ND		4.00	1.04	ug/L			01/22/14 14:07	8
Bromobenzene	ND		4.00	1.04	ug/L			01/22/14 14:07	8
Bromochloromethane	ND		4.00	0.880	ug/L			01/22/14 14:07	8
Dichlorobromomethane	ND		4.00	1.12	ug/L			01/22/14 14:07	8
Bromoform	ND		4.00	1.04	ug/L			01/22/14 14:07	8
Bromomethane	ND		4.00	0.408	ug/L			01/22/14 14:07	8
Carbon disulfide	ND		4.00	1.20	ug/L			01/22/14 14:07	8
Carbon tetrachloride	ND		4.00	0.424	ug/L			01/22/14 14:07	8
Chlorobenzene	ND		4.00	0.960	ug/L			01/22/14 14:07	8
Chlorodibromomethane	ND		4.00	1.28	ug/L			01/22/14 14:07	8
Chloroethane	ND		4.00	0.560	ug/L			01/22/14 14:07	8
Chloroform	ND		4.00	1.12	ug/L			01/22/14 14:07	8
Chloromethane	ND		4.00	0.503	ug/L			01/22/14 14:07	8
cis-1,2-Dichloroethene	**69.9**		4.00	0.960	ug/L			01/22/14 14:07	8
cis-1,3-Dichloropropene	ND		4.00	0.640	ug/L			01/22/14 14:07	8
Dibromomethane	ND		4.00	1.36	ug/L			01/22/14 14:07	8
Dichlorodifluoromethane	ND		4.00	0.560	ug/L			01/22/14 14:07	8
Ethyl ether	ND		4.00	0.920	ug/L			01/22/14 14:07	8

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Client Sample ID: CC-02 (Raw)

Date Collected: 01/16/14 09:55
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44858-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		4.00	0.880	ug/L			01/22/14 14:07	8
Hexachlorobutadiene	ND		4.00	0.880	ug/L			01/22/14 14:07	8
Iodomethane	ND		4.00	1.20	ug/L			01/22/14 14:07	8
Isopropylbenzene	ND		4.00	0.424	ug/L			01/22/14 14:07	8
Methyl tert-butyl ether	ND		4.00	0.960	ug/L			01/22/14 14:07	8
Methylene Chloride	ND		4.00	2.00	ug/L			01/22/14 14:07	8
m-Xylene & p-Xylene	ND		8.00	0.696	ug/L			01/22/14 14:07	8
Naphthalene	ND		4.00	0.480	ug/L			01/22/14 14:07	8
n-Butylbenzene	ND		4.00	0.648	ug/L			01/22/14 14:07	8
N-Propylbenzene	ND		4.00	0.456	ug/L			01/22/14 14:07	8
o-Xylene	ND		4.00	0.352	ug/L			01/22/14 14:07	8
sec-Butylbenzene	ND		4.00	0.544	ug/L			01/22/14 14:07	8
Styrene	ND		4.00	0.352	ug/L			01/22/14 14:07	8
t-Butanol	ND		80.0	19.7	ug/L			01/22/14 14:07	8
tert-Butylbenzene	ND		4.00	0.480	ug/L			01/22/14 14:07	8
Tetrachloroethene	ND		4.00	0.536	ug/L			01/22/14 14:07	8
Toluene	ND		4.00	0.800	ug/L			01/22/14 14:07	8
trans-1,2-Dichloroethene	**1.69**	**J**	4.00	1.04	ug/L			01/22/14 14:07	8
trans-1,3-Dichloropropene	ND		4.00	0.800	ug/L			01/22/14 14:07	8
trans-1,4-Dichloro-2-butene	ND		20.0	10.0	ug/L			01/22/14 14:07	8
Trichloroethene	**4.65**		4.00	0.480	ug/L			01/22/14 14:07	8
Trichlorofluoromethane	ND		4.00	0.352	ug/L			01/22/14 14:07	8
Vinyl acetate	ND		20.0	1.38	ug/L			01/22/14 14:07	8
Vinyl chloride	ND		4.00	0.472	ug/L			01/22/14 14:07	8
Xylenes, Total	ND		8.00	1.60	ug/L			01/22/14 14:07	8
Trihalomethanes, Total	ND		16.0	8.00	ug/L			01/22/14 14:07	8
Dichlorofluoromethane	ND		4.00	1.07	ug/L			01/22/14 14:07	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/22/14 14:07*	*8*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/22/14 14:07*	*8*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.0355**	**J**	0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 13:13	1
Manganese	**0.128**	**B**	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 13:13	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Client Sample ID: CC-02 (Post Softner)

Lab Sample ID: 490-44858-2

Date Collected: 01/16/14 10:00

Matrix: Water

Date Received: 01/18/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 13:16	1
Manganese	**0.000780**	**J B**	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 13:16	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Client Sample ID: CC-02 (GAC 1)

Lab Sample ID: 490-44858-3

Date Collected: 01/16/14 09:50
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 14:32	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 14:32	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 14:32	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 14:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 14:32	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 14:32	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 14:32	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 14:32	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 14:32	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 14:32	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 14:32	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 14:32	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 14:32	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 14:32	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 14:32	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 14:32	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 14:32	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 14:32	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 14:32	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 14:32	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 14:32	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 14:32	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 14:32	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 14:32	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 14:32	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 14:32	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 14:32	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 14:32	1
Acetone	**0.904**	**J**	2.50	0.537	ug/L			01/22/14 14:32	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 14:32	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 14:32	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 14:32	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 14:32	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 14:32	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 14:32	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 14:32	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 14:32	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 14:32	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 14:32	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 14:32	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 14:32	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 14:32	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 14:32	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 14:32	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 14:32	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 14:32	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 14:32	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 14:32	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 14:32	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Client Sample ID: CC-02 (GAC 1)

Lab Sample ID: 490-44858-3

Date Collected: 01/16/14 09:50
Matrix: Water
Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 14:32	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 14:32	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 14:32	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 14:32	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 14:32	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 14:32	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 14:32	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 14:32	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 14:32	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 14:32	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 14:32	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 14:32	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 14:32	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 14:32	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 14:32	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 14:32	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 14:32	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 14:32	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 14:32	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 14:32	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 14:32	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 14:32	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 14:32	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 14:32	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 14:32	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 14:32	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/22/14 14:32*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/22/14 14:32*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Client Sample ID: CC-02 (GAC 2)

Lab Sample ID: 490-44858-4

Date Collected: 01/16/14 09:45
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 14:57	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 14:57	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 14:57	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 14:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 14:57	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 14:57	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 14:57	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 14:57	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 14:57	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 14:57	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 14:57	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 14:57	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 14:57	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 14:57	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 14:57	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 14:57	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 14:57	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 14:57	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 14:57	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 14:57	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 14:57	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 14:57	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 14:57	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 14:57	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 14:57	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 14:57	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 14:57	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 14:57	1
Acetone	**0.942**	**J**	2.50	0.537	ug/L			01/22/14 14:57	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 14:57	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 14:57	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 14:57	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 14:57	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 14:57	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 14:57	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 14:57	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 14:57	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 14:57	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 14:57	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 14:57	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 14:57	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 14:57	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 14:57	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 14:57	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 14:57	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 14:57	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 14:57	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 14:57	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 14:57	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Client Sample ID: CC-02 (GAC 2)

Lab Sample ID: 490-44858-4

Date Collected: 01/16/14 09:45
Matrix: Water
Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 14:57	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 14:57	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 14:57	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 14:57	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 14:57	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 14:57	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 14:57	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 14:57	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 14:57	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 14:57	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 14:57	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 14:57	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 14:57	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 14:57	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 14:57	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 14:57	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 14:57	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 14:57	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 14:57	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 14:57	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 14:57	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 14:57	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 14:57	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 14:57	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 14:57	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 14:57	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/22/14 14:57*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/22/14 14:57*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162698/6
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 11:01	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 11:01	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 11:01	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 11:01	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 11:01	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 11:01	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 11:01	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 11:01	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 11:01	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 11:01	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 11:01	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 11:01	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 11:01	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 11:01	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 11:01	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 11:01	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 11:01	1
Acetone	ND		2.50	0.537	ug/L			01/22/14 11:01	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 11:01	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 11:01	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 11:01	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 11:01	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 11:01	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 11:01	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 11:01	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 11:01	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 11:01	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 11:01	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 11:01	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162698/6
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 11:01	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 11:01	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 11:01	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 11:01	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 11:01	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 11:01	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 11:01	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 11:01	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 11:01	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 11:01	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 11:01	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 11:01	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 11:01	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 11:01	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 11:01	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 11:01	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 11:01	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 11:01	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/22/14 11:01*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/22/14 11:01*	*1*

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.221		ug/L		106	70 - 130
1,1,1-Trichloroethane	4.00	4.264		ug/L		107	70 - 130
1,1,2,2-Tetrachloroethane	4.00	4.013		ug/L		100	70 - 130
1,1,2-Trichloroethane	4.00	4.036		ug/L		101	70 - 130
1,1-Dichloroethane	4.00	4.120		ug/L		103	70 - 130
1,1-Dichloroethene	4.00	3.988		ug/L		100	70 - 130
1,1-Dichloropropene	4.00	4.511		ug/L		113	70 - 130
1,2,3-Trichlorobenzene	4.00	4.372		ug/L		109	70 - 130
1,2,3-Trichloropropane	4.00	4.177		ug/L		104	70 - 130
1,2,4-Trichlorobenzene	4.00	4.364		ug/L		109	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	4.059		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.271		ug/L		107	70 - 130
1,2-Dibromoethane	4.00	4.119		ug/L		103	70 - 130
1,2-Dichlorobenzene	4.00	4.021		ug/L		101	70 - 130
1,2-Dichloroethane	4.00	4.030		ug/L		101	70 - 130
1,2-Dichloropropane	4.00	4.076		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	4.00	4.113		ug/L		103	70 - 130
1,3-Dichlorobenzene	4.00	3.928		ug/L		98	70 - 130
1,3-Dichloropropane	4.00	4.092		ug/L		102	70 - 130
1,4-Dichlorobenzene	4.00	3.949		ug/L		99	70 - 130
2,2-Dichloropropane	4.00	4.435		ug/L		111	70 - 130
2-Butanone (MEK)	20.0	21.00		ug/L		105	70 - 130
2-Chlorotoluene	4.00	4.077		ug/L		102	70 - 130
2-Hexanone	20.0	21.65		ug/L		108	70 - 130
4-Chlorotoluene	4.00	4.011		ug/L		100	70 - 130
4-Isopropyltoluene	4.00	4.185		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	20.69		ug/L		103	70 - 130
Acetone	20.0	21.23		ug/L		106	70 - 130
Benzene	4.00	3.998		ug/L		100	70 - 130
Bromobenzene	4.00	4.014		ug/L		100	70 - 130
Bromochloromethane	4.00	3.872		ug/L		97	70 - 130
Dichlorobromomethane	4.00	4.010		ug/L		100	70 - 130
Bromoform	4.00	3.962		ug/L		99	70 - 130
Bromomethane	4.00	5.075		ug/L		127	70 - 130
Carbon disulfide	4.00	3.999		ug/L		100	70 - 130
Carbon tetrachloride	4.00	4.432		ug/L		111	70 - 130
Chlorobenzene	4.00	4.063		ug/L		102	70 - 130
Chlorodibromomethane	3.92	3.958		ug/L		101	70 - 130
Chloroethane	4.00	3.835		ug/L		96	70 - 130
Chloroform	4.00	3.946		ug/L		99	70 - 130
Chloromethane	4.00	3.772		ug/L		94	70 - 130
cis-1,2-Dichloroethene	4.00	4.154		ug/L		104	70 - 130
cis-1,3-Dichloropropene	4.00	4.359		ug/L		109	70 - 130
Dibromomethane	4.00	4.036		ug/L		101	70 - 130
Dichlorodifluoromethane	4.00	3.786		ug/L		95	70 - 130
Ethylbenzene	4.00	4.138		ug/L		103	70 - 130
Hexachlorobutadiene	4.00	4.449		ug/L		111	70 - 130
Isopropylbenzene	4.00	4.330		ug/L		108	70 - 130
Methyl tert-butyl ether	4.00	4.275		ug/L		107	70 - 130
Methylene Chloride	4.00	4.020		ug/L		101	70 - 130
Naphthalene	4.00	4.512		ug/L		113	70 - 130
n-Butylbenzene	4.00	4.197		ug/L		105	70 - 130
N-Propylbenzene	4.00	4.047		ug/L		101	70 - 130
sec-Butylbenzene	4.00	4.247		ug/L		106	70 - 130
Styrene	4.00	4.179		ug/L		104	70 - 130
tert-Butylbenzene	4.00	4.244		ug/L		106	70 - 130
Tetrachloroethene	4.00	4.130		ug/L		103	70 - 130
Toluene	4.00	4.160		ug/L		104	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162698/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 162698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	4.041		ug/L		101	70 - 130
trans-1,3-Dichloropropene	4.00	4.768		ug/L		119	70 - 130
Trichloroethene	4.00	4.041		ug/L		101	70 - 130
Trichlorofluoromethane	4.00	3.917		ug/L		98	70 - 130
Vinyl chloride	4.00	3.944		ug/L		99	70 - 130
Xylenes, Total	8.00	8.427		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*98*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-163121/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 12:17	1
Manganese	0.0008700	J	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 12:17	1

Lab Sample ID: LCS 480-163121/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.10		mg/L		101	85 - 115
Manganese	0.200	0.2029		mg/L		101	85 - 115

Lab Sample ID: 490-44858-2 MS — **Client Sample ID: CC-02 (Post Softner)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		10.0	10.12		mg/L		101	70 - 130
Manganese	0.000780	J B	0.200	0.2018		mg/L		100	70 - 130

Lab Sample ID: 490-44858-2 MSD — **Client Sample ID: CC-02 (Post Softner)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.900		mg/L		99	70 - 130	2	20
Manganese	0.000780	J B	0.200	0.1965		mg/L		98	70 - 130	3	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

GC/MS VOA

Analysis Batch: 162698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44858-1	CC-02 (Raw)	Total/NA	Water	524.2	
490-44858-3	CC-02 (GAC 1)	Total/NA	Water	524.2	
490-44858-4	CC-02 (GAC 2)	Total/NA	Water	524.2	
LCS 480-162698/4	Lab Control Sample	Total/NA	Water	524.2	
MB 480-162698/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 163121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44858-1	CC-02 (Raw)	Total/NA	Water	200.7	
490-44858-2	CC-02 (Post Softner)	Total/NA	Water	200.7	
490-44858-2 MS	CC-02 (Post Softner)	Total/NA	Water	200.7	
490-44858-2 MSD	CC-02 (Post Softner)	Total/NA	Water	200.7	
LCS 480-163121/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-163121/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 163392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44858-1	CC-02 (Raw)	Total/NA	Water	200.7 Rev 4.4	163121
490-44858-2	CC-02 (Post Softner)	Total/NA	Water	200.7 Rev 4.4	163121
490-44858-2 MS	CC-02 (Post Softner)	Total/NA	Water	200.7 Rev 4.4	163121
490-44858-2 MSD	CC-02 (Post Softner)	Total/NA	Water	200.7 Rev 4.4	163121
LCS 480-163121/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	163121
MB 480-163121/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	163121

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Client Sample ID: CC-02 (Raw)

Lab Sample ID: 490-44858-1
Date Collected: 01/16/14 09:55
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		8	25 mL	25 mL	162698	01/22/14 14:07	CDC	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	163121	01/24/14 11:10	SS1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	163392	01/27/14 13:13	LMH	TAL BUF

Client Sample ID: CC-02 (Post Softner)

Lab Sample ID: 490-44858-2
Date Collected: 01/16/14 10:00
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	163121	01/24/14 11:10	SS1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	163392	01/27/14 13:16	LMH	TAL BUF

Client Sample ID: CC-02 (GAC 1)

Lab Sample ID: 490-44858-3
Date Collected: 01/16/14 09:50
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162698	01/22/14 14:32	CDC	TAL BUF

Client Sample ID: CC-02 (GAC 2)

Lab Sample ID: 490-44858-4
Date Collected: 01/16/14 09:45
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162698	01/22/14 14:57	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44858-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
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

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zukowium	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000725.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-02 (Raw)	1/16/14	0955	G				3	1	4	
CC-02 (Post Settner)	1/16/14	1000	G					1	1	
CC-02 (GAC1)	1/16/14	0950	G				3		3	
CC-02 (GAC2)	1/16/14	0945	G				3		3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by:	Date/Time	Company	Received by	Date/Time	Company
			[illegible]	1/18/14 0900	TA
Relinquished by	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No..	Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44858-1

Login Number: 44858

List Number: 1

Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44858-1

Login Number: 44858
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:09 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44858-1

Login Number: 44858
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:11 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-44859-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 4:27:52 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44859-1	CC-03 (Raw)	Water	01/15/14 11:40	01/18/14 09:00
490-44859-2	CC-03 (Post Filter)	Water	01/15/14 11:55	01/18/14 09:00
490-44859-3	CC-03 (GAC 1)	Water	01/15/14 11:45	01/18/14 09:00
490-44859-4	CC-03 (GAC 2)	Water	01/15/14 11:50	01/18/14 09:00

Job ID: 490-44859-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44859-1

Comments
No additional comments.

Receipt
The samples were received on 1/18/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-03 (Raw) (490-44859-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-163121 contained total manganese 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 CC-03 (Post Filter) (490-44859-2), CC-03 (Raw) (490-44859-1) was not performed.

No other analytical or quality issues were noted.

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.

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.
¤	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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Client Sample ID: CC-03 (Raw)

Lab Sample ID: 490-44859-1

Date Collected: 01/15/14 11:40
Matrix: Water
Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.00	0.280	ug/L			01/23/14 01:46	2
1,1,1-Trichloroethane	ND		1.00	0.126	ug/L			01/23/14 01:46	2
1,1,2,2-Tetrachloroethane	ND		1.00	0.140	ug/L			01/23/14 01:46	2
1,1,2-Trichloroethane	ND		1.00	0.340	ug/L			01/23/14 01:46	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.340	ug/L			01/23/14 01:46	2
1,1-Dichloroethane	ND		1.00	0.148	ug/L			01/23/14 01:46	2
1,1-Dichloroethene	ND		1.00	0.118	ug/L			01/23/14 01:46	2
1,1-Dichloropropene	ND		1.00	0.126	ug/L			01/23/14 01:46	2
1,2,3-Trichlorobenzene	ND		1.00	0.114	ug/L			01/23/14 01:46	2
1,2,3-Trichloropropane	ND		1.00	0.244	ug/L			01/23/14 01:46	2
1,2,4-Trichlorobenzene	ND		1.00	0.254	ug/L			01/23/14 01:46	2
1,2,4-Trimethylbenzene	ND		1.00	0.180	ug/L			01/23/14 01:46	2
1,2-Dibromo-3-Chloropropane	ND		1.00	0.420	ug/L			01/23/14 01:46	2
1,2-Dibromoethane	ND		1.00	0.280	ug/L			01/23/14 01:46	2
1,2-Dichlorobenzene	ND		1.00	0.320	ug/L			01/23/14 01:46	2
1,2-Dichloroethane	ND		1.00	0.280	ug/L			01/23/14 01:46	2
1,2-Dichloropropane	ND		1.00	0.220	ug/L			01/23/14 01:46	2
1,3,5-Trimethylbenzene	ND		1.00	0.0860	ug/L			01/23/14 01:46	2
1,3-Dichlorobenzene	ND		1.00	0.260	ug/L			01/23/14 01:46	2
1,3-Dichloropropane	ND		1.00	0.300	ug/L			01/23/14 01:46	2
1,4-Dichlorobenzene	ND		1.00	0.260	ug/L			01/23/14 01:46	2
2,2-Dichloropropane	ND		1.00	0.0960	ug/L			01/23/14 01:46	2
2-Butanone (MEK)	ND		5.00	0.498	ug/L			01/23/14 01:46	2
2-Chlorotoluene	ND		1.00	0.100	ug/L			01/23/14 01:46	2
2-Hexanone	ND		5.00	0.462	ug/L			01/23/14 01:46	2
4-Chlorotoluene	ND		1.00	0.100	ug/L			01/23/14 01:46	2
4-Isopropyltoluene	ND		1.00	0.126	ug/L			01/23/14 01:46	2
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.524	ug/L			01/23/14 01:46	2
Acetone	ND		5.00	1.07	ug/L			01/23/14 01:46	2
Acrylonitrile	ND		20.0	0.454	ug/L			01/23/14 01:46	2
Allyl chloride	ND		1.00	0.182	ug/L			01/23/14 01:46	2
Benzene	**0.628**	**J**	1.00	0.260	ug/L			01/23/14 01:46	2
Bromobenzene	ND		1.00	0.260	ug/L			01/23/14 01:46	2
Bromochloromethane	ND		1.00	0.220	ug/L			01/23/14 01:46	2
Dichlorobromomethane	ND		1.00	0.280	ug/L			01/23/14 01:46	2
Bromoform	ND		1.00	0.260	ug/L			01/23/14 01:46	2
Bromomethane	ND		1.00	0.102	ug/L			01/23/14 01:46	2
Carbon disulfide	**1.01**		1.00	0.300	ug/L			01/23/14 01:46	2
Carbon tetrachloride	ND		1.00	0.106	ug/L			01/23/14 01:46	2
Chlorobenzene	ND		1.00	0.240	ug/L			01/23/14 01:46	2
Chlorodibromomethane	ND		1.00	0.320	ug/L			01/23/14 01:46	2
Chloroethane	ND		1.00	0.140	ug/L			01/23/14 01:46	2
Chloroform	ND		1.00	0.280	ug/L			01/23/14 01:46	2
Chloromethane	ND		1.00	0.126	ug/L			01/23/14 01:46	2
cis-1,2-Dichloroethene	**21.9**		1.00	0.240	ug/L			01/23/14 01:46	2
cis-1,3-Dichloropropene	ND		1.00	0.160	ug/L			01/23/14 01:46	2
Dibromomethane	ND		1.00	0.340	ug/L			01/23/14 01:46	2
Dichlorodifluoromethane	ND		1.00	0.140	ug/L			01/23/14 01:46	2
Ethyl ether	ND		1.00	0.230	ug/L			01/23/14 01:46	2

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Client Sample ID: CC-03 (Raw)

Lab Sample ID: 490-44859-1

Date Collected: 01/15/14 11:40
Matrix: Water
Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.00	0.220	ug/L			01/23/14 01:46	2
Hexachlorobutadiene	ND		1.00	0.220	ug/L			01/23/14 01:46	2
Iodomethane	ND		1.00	0.300	ug/L			01/23/14 01:46	2
Isopropylbenzene	ND		1.00	0.106	ug/L			01/23/14 01:46	2
Methyl tert-butyl ether	**0.570**	**J**	1.00	0.240	ug/L			01/23/14 01:46	2
Methylene Chloride	**1.13**		1.00	0.500	ug/L			01/23/14 01:46	2
m-Xylene & p-Xylene	ND		2.00	0.174	ug/L			01/23/14 01:46	2
Naphthalene	ND		1.00	0.120	ug/L			01/23/14 01:46	2
n-Butylbenzene	ND		1.00	0.162	ug/L			01/23/14 01:46	2
N-Propylbenzene	ND		1.00	0.114	ug/L			01/23/14 01:46	2
o-Xylene	ND		1.00	0.0880	ug/L			01/23/14 01:46	2
sec-Butylbenzene	ND		1.00	0.136	ug/L			01/23/14 01:46	2
Styrene	ND		1.00	0.0880	ug/L			01/23/14 01:46	2
t-Butanol	ND		20.0	4.91	ug/L			01/23/14 01:46	2
tert-Butylbenzene	ND		1.00	0.120	ug/L			01/23/14 01:46	2
Tetrachloroethene	ND		1.00	0.134	ug/L			01/23/14 01:46	2
Toluene	ND		1.00	0.200	ug/L			01/23/14 01:46	2
trans-1,2-Dichloroethene	**0.613**	**J**	1.00	0.260	ug/L			01/23/14 01:46	2
trans-1,3-Dichloropropene	ND		1.00	0.200	ug/L			01/23/14 01:46	2
trans-1,4-Dichloro-2-butene	ND		5.00	2.50	ug/L			01/23/14 01:46	2
Trichloroethene	**1.55**		1.00	0.120	ug/L			01/23/14 01:46	2
Trichlorofluoromethane	ND		1.00	0.0880	ug/L			01/23/14 01:46	2
Vinyl acetate	ND		5.00	0.344	ug/L			01/23/14 01:46	2
Vinyl chloride	ND		1.00	0.118	ug/L			01/23/14 01:46	2
Xylenes, Total	ND		2.00	0.400	ug/L			01/23/14 01:46	2
Trihalomethanes, Total	ND		4.00	2.00	ug/L			01/23/14 01:46	2
Dichlorofluoromethane	ND		1.00	0.268	ug/L			01/23/14 01:46	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/23/14 01:46*	*2*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*01/23/14 01:46*	*2*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.319**		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 13:43	1
Manganese	**0.0488**	**B**	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 13:43	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Client Sample ID: CC-03 (Post Filter)

Lab Sample ID: 490-44859-2

Date Collected: 01/15/14 11:55

Matrix: Water

Date Received: 01/18/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.0845		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 13:46	1
Manganese	0.0414	B	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 13:46	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Client Sample ID: CC-03 (GAC 1)

Lab Sample ID: 490-44859-3

Date Collected: 01/15/14 11:45
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 15:48	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 15:48	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 15:48	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 15:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 15:48	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 15:48	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 15:48	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 15:48	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 15:48	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 15:48	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 15:48	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 15:48	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 15:48	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 15:48	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 15:48	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 15:48	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 15:48	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 15:48	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 15:48	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 15:48	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 15:48	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 15:48	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 15:48	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 15:48	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 15:48	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 15:48	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 15:48	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 15:48	1
Acetone	ND		2.50	0.537	ug/L			01/22/14 15:48	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 15:48	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 15:48	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 15:48	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 15:48	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 15:48	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 15:48	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 15:48	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 15:48	1
Carbon disulfide	**0.160**	**J**	0.500	0.150	ug/L			01/22/14 15:48	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 15:48	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 15:48	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 15:48	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 15:48	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 15:48	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 15:48	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 15:48	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 15:48	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 15:48	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 15:48	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 15:48	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Client Sample ID: CC-03 (GAC 1)

Lab Sample ID: 490-44859-3

Date Collected: 01/15/14 11:45

Matrix: Water

Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 15:48	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 15:48	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 15:48	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 15:48	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 15:48	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 15:48	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 15:48	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 15:48	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 15:48	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 15:48	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 15:48	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 15:48	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 15:48	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 15:48	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 15:48	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 15:48	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 15:48	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 15:48	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 15:48	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 15:48	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 15:48	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 15:48	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 15:48	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 15:48	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 15:48	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 15:48	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/22/14 15:48*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*01/22/14 15:48*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Client Sample ID: CC-03 (GAC 2)

Lab Sample ID: 490-44859-4

Date Collected: 01/15/14 11:50
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 16:13	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 16:13	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 16:13	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 16:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 16:13	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 16:13	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 16:13	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 16:13	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 16:13	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 16:13	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 16:13	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 16:13	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 16:13	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 16:13	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 16:13	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 16:13	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 16:13	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 16:13	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 16:13	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 16:13	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 16:13	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 16:13	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 16:13	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 16:13	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 16:13	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 16:13	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 16:13	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 16:13	1
Acetone	ND		2.50	0.537	ug/L			01/22/14 16:13	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 16:13	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 16:13	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 16:13	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 16:13	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 16:13	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 16:13	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 16:13	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 16:13	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 16:13	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 16:13	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 16:13	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 16:13	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 16:13	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 16:13	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 16:13	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 16:13	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 16:13	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 16:13	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 16:13	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 16:13	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Client Sample ID: CC-03 (GAC 2)

Lab Sample ID: 490-44859-4

Date Collected: 01/15/14 11:50
Matrix: Water
Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 16:13	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 16:13	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 16:13	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 16:13	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 16:13	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 16:13	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 16:13	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 16:13	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 16:13	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 16:13	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 16:13	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 16:13	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 16:13	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 16:13	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 16:13	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 16:13	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 16:13	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 16:13	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 16:13	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 16:13	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 16:13	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 16:13	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 16:13	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 16:13	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 16:13	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 16:13	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*01/22/14 16:13*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*01/22/14 16:13*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162698/6
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 11:01	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 11:01	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 11:01	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 11:01	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 11:01	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 11:01	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 11:01	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 11:01	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 11:01	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 11:01	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 11:01	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 11:01	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 11:01	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 11:01	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 11:01	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 11:01	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 11:01	1
Acetone	ND		2.50	0.537	ug/L			01/22/14 11:01	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 11:01	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 11:01	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 11:01	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 11:01	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 11:01	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 11:01	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 11:01	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 11:01	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 11:01	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 11:01	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 11:01	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162698/6
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 11:01	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 11:01	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 11:01	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 11:01	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 11:01	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 11:01	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 11:01	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 11:01	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 11:01	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 11:01	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 11:01	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 11:01	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 11:01	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 11:01	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 11:01	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 11:01	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 11:01	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 11:01	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/22/14 11:01*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/22/14 11:01*	*1*

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.221		ug/L		106	70 - 130
1,1,1-Trichloroethane	4.00	4.264		ug/L		107	70 - 130
1,1,2,2-Tetrachloroethane	4.00	4.013		ug/L		100	70 - 130
1,1,2-Trichloroethane	4.00	4.036		ug/L		101	70 - 130
1,1-Dichloroethane	4.00	4.120		ug/L		103	70 - 130
1,1-Dichloroethene	4.00	3.988		ug/L		100	70 - 130
1,1-Dichloropropene	4.00	4.511		ug/L		113	70 - 130
1,2,3-Trichlorobenzene	4.00	4.372		ug/L		109	70 - 130
1,2,3-Trichloropropane	4.00	4.177		ug/L		104	70 - 130
1,2,4-Trichlorobenzene	4.00	4.364		ug/L		109	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	4.059		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.271		ug/L		107	70 - 130
1,2-Dibromoethane	4.00	4.119		ug/L		103	70 - 130
1,2-Dichlorobenzene	4.00	4.021		ug/L		101	70 - 130
1,2-Dichloroethane	4.00	4.030		ug/L		101	70 - 130
1,2-Dichloropropane	4.00	4.076		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	4.00	4.113		ug/L		103	70 - 130
1,3-Dichlorobenzene	4.00	3.928		ug/L		98	70 - 130
1,3-Dichloropropane	4.00	4.092		ug/L		102	70 - 130
1,4-Dichlorobenzene	4.00	3.949		ug/L		99	70 - 130
2,2-Dichloropropane	4.00	4.435		ug/L		111	70 - 130
2-Butanone (MEK)	20.0	21.00		ug/L		105	70 - 130
2-Chlorotoluene	4.00	4.077		ug/L		102	70 - 130
2-Hexanone	20.0	21.65		ug/L		108	70 - 130
4-Chlorotoluene	4.00	4.011		ug/L		100	70 - 130
4-Isopropyltoluene	4.00	4.185		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	20.69		ug/L		103	70 - 130
Acetone	20.0	21.23		ug/L		106	70 - 130
Benzene	4.00	3.998		ug/L		100	70 - 130
Bromobenzene	4.00	4.014		ug/L		100	70 - 130
Bromochloromethane	4.00	3.872		ug/L		97	70 - 130
Dichlorobromomethane	4.00	4.010		ug/L		100	70 - 130
Bromoform	4.00	3.962		ug/L		99	70 - 130
Bromomethane	4.00	5.075		ug/L		127	70 - 130
Carbon disulfide	4.00	3.999		ug/L		100	70 - 130
Carbon tetrachloride	4.00	4.432		ug/L		111	70 - 130
Chlorobenzene	4.00	4.063		ug/L		102	70 - 130
Chlorodibromomethane	3.92	3.958		ug/L		101	70 - 130
Chloroethane	4.00	3.835		ug/L		96	70 - 130
Chloroform	4.00	3.946		ug/L		99	70 - 130
Chloromethane	4.00	3.772		ug/L		94	70 - 130
cis-1,2-Dichloroethene	4.00	4.154		ug/L		104	70 - 130
cis-1,3-Dichloropropene	4.00	4.359		ug/L		109	70 - 130
Dibromomethane	4.00	4.036		ug/L		101	70 - 130
Dichlorodifluoromethane	4.00	3.786		ug/L		95	70 - 130
Ethylbenzene	4.00	4.138		ug/L		103	70 - 130
Hexachlorobutadiene	4.00	4.449		ug/L		111	70 - 130
Isopropylbenzene	4.00	4.330		ug/L		108	70 - 130
Methyl tert-butyl ether	4.00	4.275		ug/L		107	70 - 130
Methylene Chloride	4.00	4.020		ug/L		101	70 - 130
Naphthalene	4.00	4.512		ug/L		113	70 - 130
n-Butylbenzene	4.00	4.197		ug/L		105	70 - 130
N-Propylbenzene	4.00	4.047		ug/L		101	70 - 130
sec-Butylbenzene	4.00	4.247		ug/L		106	70 - 130
Styrene	4.00	4.179		ug/L		104	70 - 130
tert-Butylbenzene	4.00	4.244		ug/L		106	70 - 130
Tetrachloroethene	4.00	4.130		ug/L		103	70 - 130
Toluene	4.00	4.160		ug/L		104	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	4.041		ug/L		101	70 - 130
trans-1,3-Dichloropropene	4.00	4.768		ug/L		119	70 - 130
Trichloroethene	4.00	4.041		ug/L		101	70 - 130
Trichlorofluoromethane	4.00	3.917		ug/L		98	70 - 130
Vinyl chloride	4.00	3.944		ug/L		99	70 - 130
Xylenes, Total	8.00	8.427		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*98*		*80 - 120*

Lab Sample ID: MB 480-162845/4
Matrix: Water
Analysis Batch: 162845

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 23:55	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 23:55	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 23:55	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 23:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 23:55	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 23:55	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 23:55	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 23:55	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 23:55	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 23:55	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 23:55	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 23:55	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 23:55	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 23:55	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 23:55	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 23:55	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 23:55	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 23:55	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 23:55	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 23:55	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 23:55	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 23:55	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 23:55	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 23:55	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 23:55	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 23:55	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 23:55	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 23:55	1
Acetone	ND		2.50	0.537	ug/L			01/22/14 23:55	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 23:55	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 23:55	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 23:55	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162845/4
Matrix: Water
Analysis Batch: 162845

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 23:55	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 23:55	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 23:55	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 23:55	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 23:55	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 23:55	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 23:55	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 23:55	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 23:55	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 23:55	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 23:55	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 23:55	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 23:55	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 23:55	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 23:55	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 23:55	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 23:55	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 23:55	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 23:55	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 23:55	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 23:55	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 23:55	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 23:55	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 23:55	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 23:55	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 23:55	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 23:55	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 23:55	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 23:55	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 23:55	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 23:55	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 23:55	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 23:55	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 23:55	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 23:55	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 23:55	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 23:55	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 23:55	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 23:55	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 23:55	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 23:55	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 23:55	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 23:55	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 23:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/22/14 23:55*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*01/22/14 23:55*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162845/3
Matrix: Water
Analysis Batch: 162845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.366		ug/L		109	70 - 130
1,1,1-Trichloroethane	4.00	4.597		ug/L		115	70 - 130
1,1,2,2-Tetrachloroethane	4.00	4.059		ug/L		101	70 - 130
1,1,2-Trichloroethane	4.00	4.053		ug/L		101	70 - 130
1,1-Dichloroethane	4.00	4.365		ug/L		109	70 - 130
1,1-Dichloroethene	4.00	4.401		ug/L		110	70 - 130
1,1-Dichloropropene	4.00	4.860		ug/L		121	70 - 130
1,2,3-Trichlorobenzene	4.00	4.597		ug/L		115	70 - 130
1,2,3-Trichloropropane	4.00	4.393		ug/L		110	70 - 130
1,2,4-Trichlorobenzene	4.00	4.504		ug/L		113	70 - 130
1,2,4-Trimethylbenzene	4.00	4.337		ug/L		108	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.392		ug/L		110	70 - 130
1,2-Dibromoethane	4.00	4.073		ug/L		102	70 - 130
1,2-Dichlorobenzene	4.00	4.226		ug/L		106	70 - 130
1,2-Dichloroethane	4.00	4.262		ug/L		107	70 - 130
1,2-Dichloropropane	4.00	4.264		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	4.00	4.423		ug/L		111	70 - 130
1,3-Dichlorobenzene	4.00	4.181		ug/L		105	70 - 130
1,3-Dichloropropane	4.00	4.131		ug/L		103	70 - 130
1,4-Dichlorobenzene	4.00	4.193		ug/L		105	70 - 130
2,2-Dichloropropane	4.00	5.046		ug/L		126	70 - 130
2-Butanone (MEK)	20.0	20.05		ug/L		100	70 - 130
2-Chlorotoluene	4.00	4.373		ug/L		109	70 - 130
2-Hexanone	20.0	21.45		ug/L		107	70 - 130
4-Chlorotoluene	4.00	4.297		ug/L		107	70 - 130
4-Isopropyltoluene	4.00	4.543		ug/L		114	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	20.59		ug/L		103	70 - 130
Acetone	20.0	20.22		ug/L		101	70 - 130
Benzene	4.00	4.205		ug/L		105	70 - 130
Bromobenzene	4.00	4.205		ug/L		105	70 - 130
Bromochloromethane	4.00	4.060		ug/L		102	70 - 130
Dichlorobromomethane	4.00	4.153		ug/L		104	70 - 130
Bromoform	4.00	3.930		ug/L		98	70 - 130
Bromomethane	4.00	5.107		ug/L		128	70 - 130
Carbon disulfide	4.00	4.349		ug/L		109	70 - 130
Carbon tetrachloride	4.00	4.793		ug/L		120	70 - 130
Chlorobenzene	4.00	4.183		ug/L		105	70 - 130
Chlorodibromomethane	3.92	3.901		ug/L		100	70 - 130
Chloroethane	4.00	4.084		ug/L		102	70 - 130
Chloroform	4.00	4.217		ug/L		105	70 - 130
Chloromethane	4.00	4.275		ug/L		107	70 - 130
cis-1,2-Dichloroethene	4.00	4.360		ug/L		109	70 - 130
cis-1,3-Dichloropropene	4.00	4.492		ug/L		112	70 - 130
Dibromomethane	4.00	4.103		ug/L		103	70 - 130
Dichlorodifluoromethane	4.00	4.378		ug/L		109	70 - 130
Ethylbenzene	4.00	4.380		ug/L		109	70 - 130
Hexachlorobutadiene	4.00	4.823		ug/L		121	70 - 130
Isopropylbenzene	4.00	4.561		ug/L		114	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162845/3
Matrix: Water
Analysis Batch: 162845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	4.00	4.428		ug/L		111	70 - 130
Methylene Chloride	4.00	4.395		ug/L		110	70 - 130
Naphthalene	4.00	4.649		ug/L		116	70 - 130
n-Butylbenzene	4.00	4.560		ug/L		114	70 - 130
N-Propylbenzene	4.00	4.385		ug/L		110	70 - 130
sec-Butylbenzene	4.00	4.589		ug/L		115	70 - 130
Styrene	4.00	4.310		ug/L		108	70 - 130
tert-Butylbenzene	4.00	4.635		ug/L		116	70 - 130
Tetrachloroethene	4.00	4.351		ug/L		109	70 - 130
Toluene	4.00	4.378		ug/L		109	70 - 130
trans-1,2-Dichloroethene	4.00	4.433		ug/L		111	70 - 130
trans-1,3-Dichloropropene	4.00	4.927		ug/L		123	70 - 130
Trichloroethene	4.00	4.299		ug/L		107	70 - 130
Trichlorofluoromethane	4.00	4.564		ug/L		114	70 - 130
Vinyl chloride	4.00	4.535		ug/L		113	70 - 130
Xylenes, Total	8.00	8.769		ug/L		110	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*

Lab Sample ID: LCSD 480-162845/13
Matrix: Water
Analysis Batch: 162845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	4.364		ug/L		109	70 - 130	0	20
1,1,1-Trichloroethane	4.00	4.528		ug/L		113	70 - 130	2	20
1,1,2,2-Tetrachloroethane	4.00	4.035		ug/L		101	70 - 130	1	20
1,1,2-Trichloroethane	4.00	4.012		ug/L		100	70 - 130	1	20
1,1-Dichloroethane	4.00	4.299		ug/L		107	70 - 130	2	20
1,1-Dichloroethene	4.00	4.344		ug/L		109	70 - 130	1	20
1,1-Dichloropropene	4.00	4.830		ug/L		121	70 - 130	1	20
1,2,3-Trichlorobenzene	4.00	4.649		ug/L		116	70 - 130	1	20
1,2,3-Trichloropropane	4.00	4.248		ug/L		106	70 - 130	3	20
1,2,4-Trichlorobenzene	4.00	4.559		ug/L		114	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	4.242		ug/L		106	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	4.00	4.484		ug/L		112	70 - 130	2	20
1,2-Dibromoethane	4.00	4.158		ug/L		104	70 - 130	2	20
1,2-Dichlorobenzene	4.00	4.139		ug/L		103	70 - 130	2	20
1,2-Dichloroethane	4.00	4.313		ug/L		108	70 - 130	1	20
1,2-Dichloropropane	4.00	4.216		ug/L		105	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	4.378		ug/L		109	70 - 130	1	20
1,3-Dichlorobenzene	4.00	4.110		ug/L		103	70 - 130	2	20
1,3-Dichloropropane	4.00	4.179		ug/L		104	70 - 130	1	20
1,4-Dichlorobenzene	4.00	4.119		ug/L		103	70 - 130	2	20
2,2-Dichloropropane	4.00	4.640		ug/L		116	70 - 130	8	20
2-Butanone (MEK)	20.0	21.28		ug/L		106	70 - 130	6	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162845/13
Matrix: Water
Analysis Batch: 162845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorotoluene	4.00	4.293		ug/L		107	70 - 130	2	20
2-Hexanone	20.0	20.98		ug/L		105	70 - 130	2	20
4-Chlorotoluene	4.00	4.254		ug/L		106	70 - 130	1	20
4-Isopropyltoluene	4.00	4.422		ug/L		111	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	20.0	21.11		ug/L		106	70 - 130	2	20
Acetone	20.0	23.00		ug/L		115	70 - 130	13	20
Benzene	4.00	4.169		ug/L		104	70 - 130	1	20
Bromobenzene	4.00	4.177		ug/L		104	70 - 130	1	20
Bromochloromethane	4.00	4.133		ug/L		103	70 - 130	2	20
Dichlorobromomethane	4.00	4.104		ug/L		103	70 - 130	1	20
Bromoform	4.00	3.725		ug/L		93	70 - 130	5	20
Bromomethane	4.00	4.707		ug/L		118	70 - 130	8	20
Carbon disulfide	4.00	4.233		ug/L		106	70 - 130	3	20
Carbon tetrachloride	4.00	4.875		ug/L		122	70 - 130	2	20
Chlorobenzene	4.00	4.116		ug/L		103	70 - 130	2	20
Chlorodibromomethane	3.92	3.918		ug/L		100	70 - 130	0	20
Chloroethane	4.00	4.189		ug/L		105	70 - 130	3	20
Chloroform	4.00	4.181		ug/L		105	70 - 130	1	20
Chloromethane	4.00	4.157		ug/L		104	70 - 130	3	20
cis-1,2-Dichloroethene	4.00	4.357		ug/L		109	70 - 130	0	20
cis-1,3-Dichloropropene	4.00	4.407		ug/L		110	70 - 130	2	20
Dibromomethane	4.00	4.137		ug/L		103	70 - 130	1	20
Dichlorodifluoromethane	4.00	4.358		ug/L		109	70 - 130	0	20
Ethylbenzene	4.00	4.279		ug/L		107	70 - 130	2	20
Hexachlorobutadiene	4.00	4.869		ug/L		122	70 - 130	1	20
Isopropylbenzene	4.00	4.512		ug/L		113	70 - 130	1	20
Methyl tert-butyl ether	4.00	4.564		ug/L		114	70 - 130	3	20
Methylene Chloride	4.00	4.664		ug/L		117	70 - 130	6	20
Naphthalene	4.00	4.653		ug/L		116	70 - 130	0	20
n-Butylbenzene	4.00	4.460		ug/L		111	70 - 130	2	20
N-Propylbenzene	4.00	4.329		ug/L		108	70 - 130	1	20
sec-Butylbenzene	4.00	4.533		ug/L		113	70 - 130	1	20
Styrene	4.00	4.196		ug/L		105	70 - 130	3	20
tert-Butylbenzene	4.00	4.534		ug/L		113	70 - 130	2	20
Tetrachloroethene	4.00	4.283		ug/L		107	70 - 130	2	20
Toluene	4.00	4.285		ug/L		107	70 - 130	2	20
trans-1,2-Dichloroethene	4.00	4.390		ug/L		110	70 - 130	1	20
trans-1,3-Dichloropropene	4.00	4.836		ug/L		121	70 - 130	2	20
Trichloroethene	4.00	4.258		ug/L		106	70 - 130	1	20
Trichlorofluoromethane	4.00	4.590		ug/L		115	70 - 130	1	20
Vinyl chloride	4.00	4.392		ug/L		110	70 - 130	3	20
Xylenes, Total	8.00	8.669		ug/L		108	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-163121/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 12:17	1
Manganese	0.0008700	J	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 12:17	1

Lab Sample ID: LCS 480-163121/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.10		mg/L		101	85 - 115
Manganese	0.200	0.2029		mg/L		101	85 - 115

Lab Sample ID: 490-44858-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		10.0	10.12		mg/L		101	70 - 130
Manganese	0.000780	J B	0.200	0.2018		mg/L		100	70 - 130

Lab Sample ID: 490-44858-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.900		mg/L		99	70 - 130	2	20
Manganese	0.000780	J B	0.200	0.1965		mg/L		98	70 - 130	3	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

GC/MS VOA

Analysis Batch: 162698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44859-3	CC-03 (GAC 1)	Total/NA	Water	524.2	
490-44859-4	CC-03 (GAC 2)	Total/NA	Water	524.2	
LCS 480-162698/4	Lab Control Sample	Total/NA	Water	524.2	
MB 480-162698/6	Method Blank	Total/NA	Water	524.2	

Analysis Batch: 162845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44859-1	CC-03 (Raw)	Total/NA	Water	524.2	
LCS 480-162845/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162845/13	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162845/4	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 163121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44858-A-2-B MS	Matrix Spike	Total/NA	Water	200.7	
490-44858-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
490-44859-1	CC-03 (Raw)	Total/NA	Water	200.7	
490-44859-2	CC-03 (Post Filter)	Total/NA	Water	200.7	
LCS 480-163121/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-163121/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 163392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44858-A-2-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	163121
490-44858-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	163121
490-44859-1	CC-03 (Raw)	Total/NA	Water	200.7 Rev 4.4	163121
490-44859-2	CC-03 (Post Filter)	Total/NA	Water	200.7 Rev 4.4	163121
LCS 480-163121/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	163121
MB 480-163121/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	163121

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Client Sample ID: CC-03 (Raw)

Lab Sample ID: 490-44859-1
Date Collected: 01/15/14 11:40
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		2	25 mL	25 mL	162845	01/23/14 01:46	TRB	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	163121	01/24/14 11:10	SS1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	163392	01/27/14 13:43	LMH	TAL BUF

Client Sample ID: CC-03 (Post Filter)

Lab Sample ID: 490-44859-2
Date Collected: 01/15/14 11:55
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	163121	01/24/14 11:10	SS1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	163392	01/27/14 13:46	LMH	TAL BUF

Client Sample ID: CC-03 (GAC 1)

Lab Sample ID: 490-44859-3
Date Collected: 01/15/14 11:45
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162698	01/22/14 15:48	CDC	TAL BUF

Client Sample ID: CC-03 (GAC 2)

Lab Sample ID: 490-44859-4
Date Collected: 01/15/14 11:50
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162698	01/22/14 16:13	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44859-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
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

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zakurian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000725.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list (A)	200.7 - 200.7 Fe and Mn (D)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
CC-03 (Raw)	1/15/14	1140	G	W			3	1	4	
CC-03 (Post filter)	1/15/14	1155	G	W				1	1	
CC-03 (GAC1)	1/15/14	1145	G	W			3		3	
CC-03 (GAC2)	1/15/14	1150	G	W			3		3	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by	Date/Time	Company	Received by: [signature]	Date/Time: 1/18/14 0900	Company: TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44859-1

Login Number: 44859
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44859-1

Login Number: 44859
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:38 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	True	LAB TO CHECK

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44859-1

Login Number: 44859
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:39 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-44860-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 4:30:38 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44860-1	CC-15 (Raw)	Water	01/15/14 12:05	01/18/14 09:00
490-44860-2	CC-15 (Post Filter)	Water	01/15/14 12:10	01/18/14 09:00
490-44860-3	CC-15 (GAC 1)	Water	01/15/14 12:15	01/18/14 09:00
490-44860-4	CC-15 (GAC 2)	Water	01/15/14 12:20	01/18/14 09:00

Job ID: 490-44860-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44860-1

Comments
No additional comments.

Receipt
The samples were received on 1/18/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-15 (Raw) (490-44860-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-163121 contained total manganese 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 CC-15 (Post Filter) (490-44860-2), CC-15 (Raw) (490-44860-1) was not performed.

No other analytical or quality issues were noted.

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.

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.
¤	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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

Client Sample ID: CC-15 (Raw)

Date Collected: 01/15/14 12:05
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44860-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.50	0.700	ug/L			01/22/14 16:39	5
1,1,1-Trichloroethane	ND		2.50	0.315	ug/L			01/22/14 16:39	5
1,1,2,2-Tetrachloroethane	ND		2.50	0.350	ug/L			01/22/14 16:39	5
1,1,2-Trichloroethane	ND		2.50	0.850	ug/L			01/22/14 16:39	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.50	0.850	ug/L			01/22/14 16:39	5
1,1-Dichloroethane	ND		2.50	0.370	ug/L			01/22/14 16:39	5
1,1-Dichloroethene	ND		2.50	0.295	ug/L			01/22/14 16:39	5
1,1-Dichloropropene	ND		2.50	0.315	ug/L			01/22/14 16:39	5
1,2,3-Trichlorobenzene	ND		2.50	0.285	ug/L			01/22/14 16:39	5
1,2,3-Trichloropropane	ND		2.50	0.610	ug/L			01/22/14 16:39	5
1,2,4-Trichlorobenzene	ND		2.50	0.635	ug/L			01/22/14 16:39	5
1,2,4-Trimethylbenzene	ND		2.50	0.450	ug/L			01/22/14 16:39	5
1,2-Dibromo-3-Chloropropane	ND		2.50	1.05	ug/L			01/22/14 16:39	5
1,2-Dibromoethane	ND		2.50	0.700	ug/L			01/22/14 16:39	5
1,2-Dichlorobenzene	ND		2.50	0.800	ug/L			01/22/14 16:39	5
1,2-Dichloroethane	ND		2.50	0.700	ug/L			01/22/14 16:39	5
1,2-Dichloropropane	ND		2.50	0.550	ug/L			01/22/14 16:39	5
1,3,5-Trimethylbenzene	ND		2.50	0.215	ug/L			01/22/14 16:39	5
1,3-Dichlorobenzene	ND		2.50	0.650	ug/L			01/22/14 16:39	5
1,3-Dichloropropane	ND		2.50	0.750	ug/L			01/22/14 16:39	5
1,4-Dichlorobenzene	ND		2.50	0.650	ug/L			01/22/14 16:39	5
2,2-Dichloropropane	ND		2.50	0.240	ug/L			01/22/14 16:39	5
2-Butanone (MEK)	ND		12.5	1.25	ug/L			01/22/14 16:39	5
2-Chlorotoluene	ND		2.50	0.250	ug/L			01/22/14 16:39	5
2-Hexanone	ND		12.5	1.16	ug/L			01/22/14 16:39	5
4-Chlorotoluene	ND		2.50	0.250	ug/L			01/22/14 16:39	5
4-Isopropyltoluene	ND		2.50	0.315	ug/L			01/22/14 16:39	5
4-Methyl-2-pentanone (MIBK)	ND		12.5	1.31	ug/L			01/22/14 16:39	5
Acetone	**5.00**	**J**	12.5	2.69	ug/L			01/22/14 16:39	5
Acrylonitrile	ND		50.0	1.14	ug/L			01/22/14 16:39	5
Allyl chloride	ND		2.50	0.455	ug/L			01/22/14 16:39	5
Benzene	ND		2.50	0.650	ug/L			01/22/14 16:39	5
Bromobenzene	ND		2.50	0.650	ug/L			01/22/14 16:39	5
Bromochloromethane	ND		2.50	0.550	ug/L			01/22/14 16:39	5
Dichlorobromomethane	ND		2.50	0.700	ug/L			01/22/14 16:39	5
Bromoform	ND		2.50	0.650	ug/L			01/22/14 16:39	5
Bromomethane	ND		2.50	0.255	ug/L			01/22/14 16:39	5
Carbon disulfide	ND		2.50	0.750	ug/L			01/22/14 16:39	5
Carbon tetrachloride	ND		2.50	0.265	ug/L			01/22/14 16:39	5
Chlorobenzene	ND		2.50	0.600	ug/L			01/22/14 16:39	5
Chlorodibromomethane	ND		2.50	0.800	ug/L			01/22/14 16:39	5
Chloroethane	ND		2.50	0.350	ug/L			01/22/14 16:39	5
Chloroform	ND		2.50	0.700	ug/L			01/22/14 16:39	5
Chloromethane	ND		2.50	0.315	ug/L			01/22/14 16:39	5
cis-1,2-Dichloroethene	**60.2**		2.50	0.600	ug/L			01/22/14 16:39	5
cis-1,3-Dichloropropene	ND		2.50	0.400	ug/L			01/22/14 16:39	5
Dibromomethane	ND		2.50	0.850	ug/L			01/22/14 16:39	5
Dichlorodifluoromethane	ND		2.50	0.350	ug/L			01/22/14 16:39	5
Ethyl ether	ND		2.50	0.575	ug/L			01/22/14 16:39	5

Client Sample ID: CC-15 (Raw)

Lab Sample ID: 490-44860-1

Date Collected: 01/15/14 12:05

Matrix: Water

Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		2.50	0.550	ug/L			01/22/14 16:39	5
Hexachlorobutadiene	ND		2.50	0.550	ug/L			01/22/14 16:39	5
Iodomethane	ND		2.50	0.750	ug/L			01/22/14 16:39	5
Isopropylbenzene	ND		2.50	0.265	ug/L			01/22/14 16:39	5
Methyl tert-butyl ether	ND		2.50	0.600	ug/L			01/22/14 16:39	5
Methylene Chloride	ND		2.50	1.25	ug/L			01/22/14 16:39	5
m-Xylene & p-Xylene	ND		5.00	0.435	ug/L			01/22/14 16:39	5
Naphthalene	ND		2.50	0.300	ug/L			01/22/14 16:39	5
n-Butylbenzene	ND		2.50	0.405	ug/L			01/22/14 16:39	5
N-Propylbenzene	ND		2.50	0.285	ug/L			01/22/14 16:39	5
o-Xylene	ND		2.50	0.220	ug/L			01/22/14 16:39	5
sec-Butylbenzene	ND		2.50	0.340	ug/L			01/22/14 16:39	5
Styrene	ND		2.50	0.220	ug/L			01/22/14 16:39	5
t-Butanol	ND		50.0	12.3	ug/L			01/22/14 16:39	5
tert-Butylbenzene	ND		2.50	0.300	ug/L			01/22/14 16:39	5
Tetrachloroethene	ND		2.50	0.335	ug/L			01/22/14 16:39	5
Toluene	ND		2.50	0.500	ug/L			01/22/14 16:39	5
trans-1,2-Dichloroethene	**1.65**	**J**	2.50	0.650	ug/L			01/22/14 16:39	5
trans-1,3-Dichloropropene	ND		2.50	0.500	ug/L			01/22/14 16:39	5
trans-1,4-Dichloro-2-butene	ND		12.5	6.25	ug/L			01/22/14 16:39	5
Trichloroethene	**5.13**		2.50	0.300	ug/L			01/22/14 16:39	5
Trichlorofluoromethane	ND		2.50	0.220	ug/L			01/22/14 16:39	5
Vinyl acetate	ND		12.5	0.860	ug/L			01/22/14 16:39	5
Vinyl chloride	ND		2.50	0.295	ug/L			01/22/14 16:39	5
Xylenes, Total	ND		5.00	1.00	ug/L			01/22/14 16:39	5
Trihalomethanes, Total	ND		10.0	5.00	ug/L			01/22/14 16:39	5
Dichlorofluoromethane	ND		2.50	0.670	ug/L			01/22/14 16:39	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/22/14 16:39*	*5*
1,2-Dichlorobenzene-d4	*104*		*80 - 120*		*01/22/14 16:39*	*5*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 13:37	1
Manganese	**0.102**	**B**	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 13:37	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

Client Sample ID: CC-15 (Post Filter)

Lab Sample ID: 490-44860-2

Date Collected: 01/15/14 12:10

Matrix: Water

Date Received: 01/18/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 13:40	1
Manganese	**0.104**	**B**	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 13:40	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

Client Sample ID: CC-15 (GAC 1)

Lab Sample ID: 490-44860-3

Date Collected: 01/15/14 12:15
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 17:04	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 17:04	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 17:04	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 17:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 17:04	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 17:04	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 17:04	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 17:04	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 17:04	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 17:04	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 17:04	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 17:04	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 17:04	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 17:04	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 17:04	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 17:04	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 17:04	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 17:04	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 17:04	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 17:04	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 17:04	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 17:04	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 17:04	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 17:04	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 17:04	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 17:04	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 17:04	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 17:04	1
Acetone	**0.656**	**J**	2.50	0.537	ug/L			01/22/14 17:04	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 17:04	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 17:04	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 17:04	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 17:04	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 17:04	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 17:04	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 17:04	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 17:04	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 17:04	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 17:04	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 17:04	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 17:04	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 17:04	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 17:04	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 17:04	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 17:04	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 17:04	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 17:04	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 17:04	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 17:04	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

Client Sample ID: CC-15 (GAC 1)

Lab Sample ID: 490-44860-3

Date Collected: 01/15/14 12:15

Matrix: Water

Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 17:04	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 17:04	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 17:04	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 17:04	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 17:04	1
Methylene Chloride	**0.277**	**J**	0.500	0.250	ug/L			01/22/14 17:04	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 17:04	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 17:04	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 17:04	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 17:04	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 17:04	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 17:04	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 17:04	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 17:04	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 17:04	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 17:04	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 17:04	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 17:04	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 17:04	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 17:04	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 17:04	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 17:04	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 17:04	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 17:04	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 17:04	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 17:04	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*01/22/14 17:04*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/22/14 17:04*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

Client Sample ID: CC-15 (GAC 2)

Lab Sample ID: 490-44860-4

Date Collected: 01/15/14 12:20
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 17:28	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 17:28	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 17:28	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 17:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 17:28	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 17:28	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 17:28	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 17:28	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 17:28	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 17:28	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 17:28	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 17:28	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 17:28	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 17:28	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 17:28	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 17:28	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 17:28	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 17:28	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 17:28	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 17:28	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 17:28	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 17:28	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 17:28	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 17:28	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 17:28	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 17:28	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 17:28	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 17:28	1
Acetone	**0.572**	**J**	2.50	0.537	ug/L			01/22/14 17:28	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 17:28	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 17:28	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 17:28	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 17:28	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 17:28	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 17:28	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 17:28	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 17:28	1
Carbon disulfide	**0.191**	**J**	0.500	0.150	ug/L			01/22/14 17:28	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 17:28	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 17:28	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 17:28	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 17:28	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 17:28	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 17:28	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 17:28	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 17:28	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 17:28	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 17:28	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 17:28	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

Client Sample ID: CC-15 (GAC 2)

Lab Sample ID: 490-44860-4

Date Collected: 01/15/14 12:20
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 17:28	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 17:28	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 17:28	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 17:28	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 17:28	1
Methylene Chloride	**0.436**	**J**	0.500	0.250	ug/L			01/22/14 17:28	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 17:28	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 17:28	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 17:28	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 17:28	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 17:28	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 17:28	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 17:28	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 17:28	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 17:28	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 17:28	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 17:28	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 17:28	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 17:28	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 17:28	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 17:28	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 17:28	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 17:28	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 17:28	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 17:28	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 17:28	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*80 - 120*		*01/22/14 17:28*	*1*
1,2-Dichlorobenzene-d4	*106*		*80 - 120*		*01/22/14 17:28*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162698/6
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 11:01	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 11:01	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 11:01	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 11:01	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 11:01	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 11:01	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 11:01	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 11:01	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 11:01	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 11:01	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 11:01	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 11:01	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 11:01	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 11:01	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 11:01	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 11:01	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 11:01	1
Acetone	ND		2.50	0.537	ug/L			01/22/14 11:01	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 11:01	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 11:01	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 11:01	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 11:01	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 11:01	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 11:01	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 11:01	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 11:01	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 11:01	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 11:01	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 11:01	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162698/6
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 11:01	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 11:01	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 11:01	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 11:01	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 11:01	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 11:01	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 11:01	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 11:01	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 11:01	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 11:01	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 11:01	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 11:01	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 11:01	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 11:01	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 11:01	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 11:01	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 11:01	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 11:01	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/22/14 11:01*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/22/14 11:01*	*1*

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.221		ug/L		106	70 - 130
1,1,1-Trichloroethane	4.00	4.264		ug/L		107	70 - 130
1,1,2,2-Tetrachloroethane	4.00	4.013		ug/L		100	70 - 130
1,1,2-Trichloroethane	4.00	4.036		ug/L		101	70 - 130
1,1-Dichloroethane	4.00	4.120		ug/L		103	70 - 130
1,1-Dichloroethene	4.00	3.988		ug/L		100	70 - 130
1,1-Dichloropropene	4.00	4.511		ug/L		113	70 - 130
1,2,3-Trichlorobenzene	4.00	4.372		ug/L		109	70 - 130
1,2,3-Trichloropropane	4.00	4.177		ug/L		104	70 - 130
1,2,4-Trichlorobenzene	4.00	4.364		ug/L		109	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	4.059		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.271		ug/L		107	70 - 130
1,2-Dibromoethane	4.00	4.119		ug/L		103	70 - 130
1,2-Dichlorobenzene	4.00	4.021		ug/L		101	70 - 130
1,2-Dichloroethane	4.00	4.030		ug/L		101	70 - 130
1,2-Dichloropropane	4.00	4.076		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	4.00	4.113		ug/L		103	70 - 130
1,3-Dichlorobenzene	4.00	3.928		ug/L		98	70 - 130
1,3-Dichloropropane	4.00	4.092		ug/L		102	70 - 130
1,4-Dichlorobenzene	4.00	3.949		ug/L		99	70 - 130
2,2-Dichloropropane	4.00	4.435		ug/L		111	70 - 130
2-Butanone (MEK)	20.0	21.00		ug/L		105	70 - 130
2-Chlorotoluene	4.00	4.077		ug/L		102	70 - 130
2-Hexanone	20.0	21.65		ug/L		108	70 - 130
4-Chlorotoluene	4.00	4.011		ug/L		100	70 - 130
4-Isopropyltoluene	4.00	4.185		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	20.69		ug/L		103	70 - 130
Acetone	20.0	21.23		ug/L		106	70 - 130
Benzene	4.00	3.998		ug/L		100	70 - 130
Bromobenzene	4.00	4.014		ug/L		100	70 - 130
Bromochloromethane	4.00	3.872		ug/L		97	70 - 130
Dichlorobromomethane	4.00	4.010		ug/L		100	70 - 130
Bromoform	4.00	3.962		ug/L		99	70 - 130
Bromomethane	4.00	5.075		ug/L		127	70 - 130
Carbon disulfide	4.00	3.999		ug/L		100	70 - 130
Carbon tetrachloride	4.00	4.432		ug/L		111	70 - 130
Chlorobenzene	4.00	4.063		ug/L		102	70 - 130
Chlorodibromomethane	3.92	3.958		ug/L		101	70 - 130
Chloroethane	4.00	3.835		ug/L		96	70 - 130
Chloroform	4.00	3.946		ug/L		99	70 - 130
Chloromethane	4.00	3.772		ug/L		94	70 - 130
cis-1,2-Dichloroethene	4.00	4.154		ug/L		104	70 - 130
cis-1,3-Dichloropropene	4.00	4.359		ug/L		109	70 - 130
Dibromomethane	4.00	4.036		ug/L		101	70 - 130
Dichlorodifluoromethane	4.00	3.786		ug/L		95	70 - 130
Ethylbenzene	4.00	4.138		ug/L		103	70 - 130
Hexachlorobutadiene	4.00	4.449		ug/L		111	70 - 130
Isopropylbenzene	4.00	4.330		ug/L		108	70 - 130
Methyl tert-butyl ether	4.00	4.275		ug/L		107	70 - 130
Methylene Chloride	4.00	4.020		ug/L		101	70 - 130
Naphthalene	4.00	4.512		ug/L		113	70 - 130
n-Butylbenzene	4.00	4.197		ug/L		105	70 - 130
N-Propylbenzene	4.00	4.047		ug/L		101	70 - 130
sec-Butylbenzene	4.00	4.247		ug/L		106	70 - 130
Styrene	4.00	4.179		ug/L		104	70 - 130
tert-Butylbenzene	4.00	4.244		ug/L		106	70 - 130
Tetrachloroethene	4.00	4.130		ug/L		103	70 - 130
Toluene	4.00	4.160		ug/L		104	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162698/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 162698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	4.041		ug/L		101	70 - 130
trans-1,3-Dichloropropene	4.00	4.768		ug/L		119	70 - 130
Trichloroethene	4.00	4.041		ug/L		101	70 - 130
Trichlorofluoromethane	4.00	3.917		ug/L		98	70 - 130
Vinyl chloride	4.00	3.944		ug/L		99	70 - 130
Xylenes, Total	8.00	8.427		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*98*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-163121/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 12:17	1
Manganese	0.0008700	J	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 12:17	1

Lab Sample ID: LCS 480-163121/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.10		mg/L		101	85 - 115
Manganese	0.200	0.2029		mg/L		101	85 - 115

Lab Sample ID: 490-44858-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		10.0	10.12		mg/L		101	70 - 130
Manganese	0.000780	J B	0.200	0.2018		mg/L		100	70 - 130

Lab Sample ID: 490-44858-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.900		mg/L		99	70 - 130	2	20
Manganese	0.000780	J B	0.200	0.1965		mg/L		98	70 - 130	3	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

GC/MS VOA

Analysis Batch: 162698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44860-1	CC-15 (Raw)	Total/NA	Water	524.2	
490-44860-3	CC-15 (GAC 1)	Total/NA	Water	524.2	
490-44860-4	CC-15 (GAC 2)	Total/NA	Water	524.2	
LCS 480-162698/4	Lab Control Sample	Total/NA	Water	524.2	
MB 480-162698/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 163121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44858-A-2-B MS	Matrix Spike	Total/NA	Water	200.7	
490-44858-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
490-44860-1	CC-15 (Raw)	Total/NA	Water	200.7	
490-44860-2	CC-15 (Post Filter)	Total/NA	Water	200.7	
LCS 480-163121/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-163121/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 163392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44858-A-2-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	163121
490-44858-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	163121
490-44860-1	CC-15 (Raw)	Total/NA	Water	200.7 Rev 4.4	163121
490-44860-2	CC-15 (Post Filter)	Total/NA	Water	200.7 Rev 4.4	163121
LCS 480-163121/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	163121
MB 480-163121/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	163121

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

Client Sample ID: CC-15 (Raw)

Lab Sample ID: 490-44860-1
Date Collected: 01/15/14 12:05
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		5	25 mL	25 mL	162698	01/22/14 16:39	CDC	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	163121	01/24/14 11:10	SS1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	163392	01/27/14 13:37	LMH	TAL BUF

Client Sample ID: CC-15 (Post Filter)

Lab Sample ID: 490-44860-2
Date Collected: 01/15/14 12:10
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	163121	01/24/14 11:10	SS1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	163392	01/27/14 13:40	LMH	TAL BUF

Client Sample ID: CC-15 (GAC 1)

Lab Sample ID: 490-44860-3
Date Collected: 01/15/14 12:15
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162698	01/22/14 17:04	CDC	TAL BUF

Client Sample ID: CC-15 (GAC 2)

Lab Sample ID: 490-44860-4
Date Collected: 01/15/14 12:20
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162698	01/22/14 17:28	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44860-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
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

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zakarian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000723.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-15 (Raw)	1/15/14	1205	G	W			3	1	4	
CC-15 (Post Filter)	1/15/14	1210	G	W				1	1	
CC-15 (GAC 1)	1/15/14	1215	G	W			3		3	
CC-15 (GAC 2)	1/15/14	1220	G	W			3		3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by	Date/Time	Company	Received by: [signature]	Date/Time: 1/18/14 0900	Company: TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by:	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44860-1

Login Number: 44860
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44860-1

Login Number: 44860
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:40 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44860-1

Login Number: 44860
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:40 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-44861-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 4:32:04 PM
Heather Baker, Project Manager I
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heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44861-1	CC-04 (Raw)	Water	01/16/14 13:50	01/18/14 09:00
490-44861-2	CC-04 (Post Softner)	Water	01/16/14 13:55	01/18/14 09:00
490-44861-3	CC-04 (GAC In)	Water	01/16/14 13:45	01/18/14 09:00
490-44861-4	CC-04 (GAC 1)	Water	01/16/14 13:35	01/18/14 09:00
490-44861-5	CC-04 (GAG 2)	Water	01/16/14 13:30	01/18/14 09:00
490-44861-6	Trip Blank	Water	01/16/14 00:01	01/18/14 09:00

Job ID: 490-44861-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44861-1

Comments
No additional comments.

Receipt
The samples were received on 1/18/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-04 (Raw) (490-44861-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-163121 contained total manganese 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 CC-04 (Post Softner) (490-44861-2), CC-04 (Raw) (490-44861-1) was not performed.

No other analytical or quality issues were noted.

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.

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.
¤	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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Client Sample ID: CC-04 (Raw)

Date Collected: 01/16/14 13:50
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44861-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.50	0.700	ug/L			01/22/14 17:53	5
1,1,1-Trichloroethane	ND		2.50	0.315	ug/L			01/22/14 17:53	5
1,1,2,2-Tetrachloroethane	ND		2.50	0.350	ug/L			01/22/14 17:53	5
1,1,2-Trichloroethane	ND		2.50	0.850	ug/L			01/22/14 17:53	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.50	0.850	ug/L			01/22/14 17:53	5
1,1-Dichloroethane	ND		2.50	0.370	ug/L			01/22/14 17:53	5
1,1-Dichloroethene	ND		2.50	0.295	ug/L			01/22/14 17:53	5
1,1-Dichloropropene	ND		2.50	0.315	ug/L			01/22/14 17:53	5
1,2,3-Trichlorobenzene	ND		2.50	0.285	ug/L			01/22/14 17:53	5
1,2,3-Trichloropropane	ND		2.50	0.610	ug/L			01/22/14 17:53	5
1,2,4-Trichlorobenzene	ND		2.50	0.635	ug/L			01/22/14 17:53	5
1,2,4-Trimethylbenzene	ND		2.50	0.450	ug/L			01/22/14 17:53	5
1,2-Dibromo-3-Chloropropane	ND		2.50	1.05	ug/L			01/22/14 17:53	5
1,2-Dibromoethane	ND		2.50	0.700	ug/L			01/22/14 17:53	5
1,2-Dichlorobenzene	ND		2.50	0.800	ug/L			01/22/14 17:53	5
1,2-Dichloroethane	ND		2.50	0.700	ug/L			01/22/14 17:53	5
1,2-Dichloropropane	ND		2.50	0.550	ug/L			01/22/14 17:53	5
1,3,5-Trimethylbenzene	ND		2.50	0.215	ug/L			01/22/14 17:53	5
1,3-Dichlorobenzene	ND		2.50	0.650	ug/L			01/22/14 17:53	5
1,3-Dichloropropane	ND		2.50	0.750	ug/L			01/22/14 17:53	5
1,4-Dichlorobenzene	ND		2.50	0.650	ug/L			01/22/14 17:53	5
2,2-Dichloropropane	ND		2.50	0.240	ug/L			01/22/14 17:53	5
2-Butanone (MEK)	ND		12.5	1.25	ug/L			01/22/14 17:53	5
2-Chlorotoluene	ND		2.50	0.250	ug/L			01/22/14 17:53	5
2-Hexanone	ND		12.5	1.16	ug/L			01/22/14 17:53	5
4-Chlorotoluene	ND		2.50	0.250	ug/L			01/22/14 17:53	5
4-Isopropyltoluene	ND		2.50	0.315	ug/L			01/22/14 17:53	5
4-Methyl-2-pentanone (MIBK)	ND		12.5	1.31	ug/L			01/22/14 17:53	5
Acetone	ND		12.5	2.69	ug/L			01/22/14 17:53	5
Acrylonitrile	ND		50.0	1.14	ug/L			01/22/14 17:53	5
Allyl chloride	ND		2.50	0.455	ug/L			01/22/14 17:53	5
Benzene	ND		2.50	0.650	ug/L			01/22/14 17:53	5
Bromobenzene	ND		2.50	0.650	ug/L			01/22/14 17:53	5
Bromochloromethane	ND		2.50	0.550	ug/L			01/22/14 17:53	5
Dichlorobromomethane	ND		2.50	0.700	ug/L			01/22/14 17:53	5
Bromoform	ND		2.50	0.650	ug/L			01/22/14 17:53	5
Bromomethane	ND		2.50	0.255	ug/L			01/22/14 17:53	5
Carbon disulfide	ND		2.50	0.750	ug/L			01/22/14 17:53	5
Carbon tetrachloride	ND		2.50	0.265	ug/L			01/22/14 17:53	5
Chlorobenzene	ND		2.50	0.600	ug/L			01/22/14 17:53	5
Chlorodibromomethane	ND		2.50	0.800	ug/L			01/22/14 17:53	5
Chloroethane	ND		2.50	0.350	ug/L			01/22/14 17:53	5
Chloroform	ND		2.50	0.700	ug/L			01/22/14 17:53	5
Chloromethane	ND		2.50	0.315	ug/L			01/22/14 17:53	5
cis-1,2-Dichloroethene	**56.7**		2.50	0.600	ug/L			01/22/14 17:53	5
cis-1,3-Dichloropropene	ND		2.50	0.400	ug/L			01/22/14 17:53	5
Dibromomethane	ND		2.50	0.850	ug/L			01/22/14 17:53	5
Dichlorodifluoromethane	ND		2.50	0.350	ug/L			01/22/14 17:53	5
Ethyl ether	ND		2.50	0.575	ug/L			01/22/14 17:53	5

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Client Sample ID: CC-04 (Raw)

Lab Sample ID: 490-44861-1

Date Collected: 01/16/14 13:50
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		2.50	0.550	ug/L			01/22/14 17:53	5
Hexachlorobutadiene	ND		2.50	0.550	ug/L			01/22/14 17:53	5
Iodomethane	ND		2.50	0.750	ug/L			01/22/14 17:53	5
Isopropylbenzene	ND		2.50	0.265	ug/L			01/22/14 17:53	5
Methyl tert-butyl ether	ND		2.50	0.600	ug/L			01/22/14 17:53	5
Methylene Chloride	ND		2.50	1.25	ug/L			01/22/14 17:53	5
m-Xylene & p-Xylene	ND		5.00	0.435	ug/L			01/22/14 17:53	5
Naphthalene	ND		2.50	0.300	ug/L			01/22/14 17:53	5
n-Butylbenzene	ND		2.50	0.405	ug/L			01/22/14 17:53	5
N-Propylbenzene	ND		2.50	0.285	ug/L			01/22/14 17:53	5
o-Xylene	ND		2.50	0.220	ug/L			01/22/14 17:53	5
sec-Butylbenzene	ND		2.50	0.340	ug/L			01/22/14 17:53	5
Styrene	ND		2.50	0.220	ug/L			01/22/14 17:53	5
t-Butanol	ND		50.0	12.3	ug/L			01/22/14 17:53	5
tert-Butylbenzene	ND		2.50	0.300	ug/L			01/22/14 17:53	5
Tetrachloroethene	ND		2.50	0.335	ug/L			01/22/14 17:53	5
Toluene	ND		2.50	0.500	ug/L			01/22/14 17:53	5
trans-1,2-Dichloroethene	**1.01**	**J**	2.50	0.650	ug/L			01/22/14 17:53	5
trans-1,3-Dichloropropene	ND		2.50	0.500	ug/L			01/22/14 17:53	5
trans-1,4-Dichloro-2-butene	ND		12.5	6.25	ug/L			01/22/14 17:53	5
Trichloroethene	**5.43**		2.50	0.300	ug/L			01/22/14 17:53	5
Trichlorofluoromethane	ND		2.50	0.220	ug/L			01/22/14 17:53	5
Vinyl acetate	ND		12.5	0.860	ug/L			01/22/14 17:53	5
Vinyl chloride	ND		2.50	0.295	ug/L			01/22/14 17:53	5
Xylenes, Total	ND		5.00	1.00	ug/L			01/22/14 17:53	5
Trihalomethanes, Total	ND		10.0	5.00	ug/L			01/22/14 17:53	5
Dichlorofluoromethane	ND		2.50	0.670	ug/L			01/22/14 17:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/22/14 17:53*	*5*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/22/14 17:53*	*5*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.152**		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 13:48	1
Manganese	**0.139**	**B**	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 13:48	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Client Sample ID: CC-04 (Post Softner)

Lab Sample ID: 490-44861-2

Date Collected: 01/16/14 13:55

Matrix: Water

Date Received: 01/18/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 13:51	1
Manganese	ND		0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 13:51	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Client Sample ID: CC-04 (GAC In)

Lab Sample ID: 490-44861-3

Date Collected: 01/16/14 13:45
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 18:19	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 18:19	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 18:19	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 18:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 18:19	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 18:19	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 18:19	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 18:19	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 18:19	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 18:19	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 18:19	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 18:19	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 18:19	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 18:19	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 18:19	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 18:19	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 18:19	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 18:19	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 18:19	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 18:19	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 18:19	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 18:19	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 18:19	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 18:19	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 18:19	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 18:19	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 18:19	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 18:19	1
Acetone	**5.39**		2.50	0.537	ug/L			01/22/14 18:19	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 18:19	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 18:19	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 18:19	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 18:19	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 18:19	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 18:19	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 18:19	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 18:19	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 18:19	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 18:19	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 18:19	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 18:19	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 18:19	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 18:19	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 18:19	1
cis-1,2-Dichloroethene	**4.03**		0.500	0.120	ug/L			01/22/14 18:19	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 18:19	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 18:19	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 18:19	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 18:19	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Client Sample ID: CC-04 (GAC In)

Lab Sample ID: 490-44861-3

Date Collected: 01/16/14 13:45
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 18:19	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 18:19	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 18:19	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 18:19	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 18:19	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 18:19	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 18:19	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 18:19	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 18:19	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 18:19	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 18:19	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 18:19	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 18:19	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 18:19	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 18:19	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 18:19	1
Toluene	**0.340**	**J**	0.500	0.100	ug/L			01/22/14 18:19	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 18:19	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 18:19	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 18:19	1
Trichloroethene	**0.222**	**J**	0.500	0.0600	ug/L			01/22/14 18:19	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 18:19	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 18:19	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 18:19	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 18:19	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 18:19	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/22/14 18:19*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*01/22/14 18:19*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Client Sample ID: CC-04 (GAC 1)

Lab Sample ID: 490-44861-4

Date Collected: 01/16/14 13:35
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 18:43	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 18:43	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 18:43	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 18:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 18:43	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 18:43	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 18:43	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 18:43	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 18:43	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 18:43	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 18:43	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 18:43	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 18:43	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 18:43	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 18:43	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 18:43	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 18:43	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 18:43	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 18:43	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 18:43	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 18:43	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 18:43	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 18:43	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 18:43	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 18:43	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 18:43	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 18:43	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 18:43	1
Acetone	**2.12**	**J**	2.50	0.537	ug/L			01/22/14 18:43	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 18:43	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 18:43	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 18:43	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 18:43	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 18:43	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 18:43	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 18:43	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 18:43	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 18:43	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 18:43	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 18:43	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 18:43	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 18:43	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 18:43	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 18:43	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 18:43	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 18:43	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 18:43	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 18:43	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 18:43	1

Client Sample ID: CC-04 (GAC 1)

Lab Sample ID: 490-44861-4

Date Collected: 01/16/14 13:35

Matrix: Water

Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 18:43	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 18:43	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 18:43	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 18:43	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 18:43	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 18:43	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 18:43	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 18:43	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 18:43	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 18:43	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 18:43	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 18:43	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 18:43	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 18:43	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 18:43	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 18:43	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 18:43	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 18:43	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 18:43	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 18:43	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 18:43	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 18:43	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 18:43	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 18:43	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 18:43	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 18:43	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/22/14 18:43*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/22/14 18:43*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Client Sample ID: CC-04 (GAG 2)

Lab Sample ID: 490-44861-5

Date Collected: 01/16/14 13:30
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 19:09	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 19:09	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 19:09	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 19:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 19:09	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 19:09	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 19:09	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 19:09	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 19:09	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 19:09	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 19:09	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 19:09	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 19:09	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 19:09	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 19:09	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 19:09	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 19:09	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 19:09	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 19:09	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 19:09	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 19:09	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 19:09	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 19:09	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 19:09	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 19:09	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 19:09	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 19:09	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 19:09	1
Acetone	**1.08**	**J**	2.50	0.537	ug/L			01/22/14 19:09	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 19:09	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 19:09	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 19:09	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 19:09	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 19:09	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 19:09	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 19:09	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 19:09	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 19:09	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 19:09	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 19:09	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 19:09	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 19:09	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 19:09	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 19:09	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 19:09	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 19:09	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 19:09	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 19:09	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 19:09	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Client Sample ID: CC-04 (GAG 2)

Lab Sample ID: 490-44861-5

Date Collected: 01/16/14 13:30
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 19:09	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 19:09	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 19:09	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 19:09	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 19:09	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 19:09	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 19:09	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 19:09	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 19:09	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 19:09	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 19:09	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 19:09	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 19:09	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 19:09	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 19:09	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 19:09	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 19:09	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 19:09	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 19:09	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 19:09	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 19:09	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 19:09	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 19:09	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 19:09	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 19:09	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 19:09	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 19:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/22/14 19:09*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/22/14 19:09*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-44861-6

Date Collected: 01/16/14 00:01
Date Received: 01/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 19:34	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 19:34	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 19:34	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 19:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 19:34	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 19:34	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 19:34	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 19:34	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 19:34	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 19:34	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 19:34	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 19:34	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 19:34	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 19:34	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 19:34	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 19:34	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 19:34	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 19:34	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 19:34	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 19:34	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 19:34	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 19:34	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 19:34	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 19:34	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 19:34	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 19:34	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 19:34	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 19:34	1
Acetone	**1.17**	**J**	2.50	0.537	ug/L			01/22/14 19:34	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 19:34	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 19:34	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 19:34	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 19:34	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 19:34	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 19:34	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 19:34	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 19:34	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 19:34	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 19:34	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 19:34	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 19:34	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 19:34	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 19:34	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 19:34	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 19:34	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 19:34	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 19:34	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 19:34	1
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 19:34	1

Client Sample ID: Trip Blank

Lab Sample ID: 490-44861-6

Date Collected: 01/16/14 00:01

Matrix: Water

Date Received: 01/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 19:34	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 19:34	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 19:34	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 19:34	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 19:34	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 19:34	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 19:34	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 19:34	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 19:34	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 19:34	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 19:34	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 19:34	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 19:34	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 19:34	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 19:34	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 19:34	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 19:34	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 19:34	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 19:34	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 19:34	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 19:34	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 19:34	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 19:34	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 19:34	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 19:34	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 19:34	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/22/14 19:34*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*01/22/14 19:34*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162698/6
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/22/14 11:01	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/22/14 11:01	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/22/14 11:01	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/22/14 11:01	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/22/14 11:01	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/22/14 11:01	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/22/14 11:01	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/22/14 11:01	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/22/14 11:01	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/22/14 11:01	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/22/14 11:01	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/22/14 11:01	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/22/14 11:01	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 11:01	1
2-Hexanone	ND		2.50	0.231	ug/L			01/22/14 11:01	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/22/14 11:01	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/22/14 11:01	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/22/14 11:01	1
Acetone	ND		2.50	0.537	ug/L			01/22/14 11:01	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/22/14 11:01	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/22/14 11:01	1
Benzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromobenzene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/22/14 11:01	1
Bromoform	ND		0.500	0.130	ug/L			01/22/14 11:01	1
Bromomethane	ND		0.500	0.0510	ug/L			01/22/14 11:01	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/22/14 11:01	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/22/14 11:01	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/22/14 11:01	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/22/14 11:01	1
Chloroethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1
Chloroform	ND		0.500	0.140	ug/L			01/22/14 11:01	1
Chloromethane	ND		0.500	0.0629	ug/L			01/22/14 11:01	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/22/14 11:01	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/22/14 11:01	1
Dibromomethane	ND		0.500	0.170	ug/L			01/22/14 11:01	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/22/14 11:01	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162698/6
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/22/14 11:01	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/22/14 11:01	1
Iodomethane	ND		0.500	0.150	ug/L			01/22/14 11:01	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/22/14 11:01	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/22/14 11:01	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/22/14 11:01	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/22/14 11:01	1
Naphthalene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/22/14 11:01	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/22/14 11:01	1
o-Xylene	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/22/14 11:01	1
Styrene	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
t-Butanol	ND		10.0	2.46	ug/L			01/22/14 11:01	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/22/14 11:01	1
Toluene	ND		0.500	0.100	ug/L			01/22/14 11:01	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/22/14 11:01	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/22/14 11:01	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/22/14 11:01	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/22/14 11:01	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/22/14 11:01	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/22/14 11:01	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/22/14 11:01	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/22/14 11:01	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/22/14 11:01	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/22/14 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*01/22/14 11:01*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*01/22/14 11:01*	*1*

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.221		ug/L		106	70 - 130
1,1,1-Trichloroethane	4.00	4.264		ug/L		107	70 - 130
1,1,2,2-Tetrachloroethane	4.00	4.013		ug/L		100	70 - 130
1,1,2-Trichloroethane	4.00	4.036		ug/L		101	70 - 130
1,1-Dichloroethane	4.00	4.120		ug/L		103	70 - 130
1,1-Dichloroethene	4.00	3.988		ug/L		100	70 - 130
1,1-Dichloropropene	4.00	4.511		ug/L		113	70 - 130
1,2,3-Trichlorobenzene	4.00	4.372		ug/L		109	70 - 130
1,2,3-Trichloropropane	4.00	4.177		ug/L		104	70 - 130
1,2,4-Trichlorobenzene	4.00	4.364		ug/L		109	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162698/4
Matrix: Water
Analysis Batch: 162698

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	4.059		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.271		ug/L		107	70 - 130
1,2-Dibromoethane	4.00	4.119		ug/L		103	70 - 130
1,2-Dichlorobenzene	4.00	4.021		ug/L		101	70 - 130
1,2-Dichloroethane	4.00	4.030		ug/L		101	70 - 130
1,2-Dichloropropane	4.00	4.076		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	4.00	4.113		ug/L		103	70 - 130
1,3-Dichlorobenzene	4.00	3.928		ug/L		98	70 - 130
1,3-Dichloropropane	4.00	4.092		ug/L		102	70 - 130
1,4-Dichlorobenzene	4.00	3.949		ug/L		99	70 - 130
2,2-Dichloropropane	4.00	4.435		ug/L		111	70 - 130
2-Butanone (MEK)	20.0	21.00		ug/L		105	70 - 130
2-Chlorotoluene	4.00	4.077		ug/L		102	70 - 130
2-Hexanone	20.0	21.65		ug/L		108	70 - 130
4-Chlorotoluene	4.00	4.011		ug/L		100	70 - 130
4-Isopropyltoluene	4.00	4.185		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	20.69		ug/L		103	70 - 130
Acetone	20.0	21.23		ug/L		106	70 - 130
Benzene	4.00	3.998		ug/L		100	70 - 130
Bromobenzene	4.00	4.014		ug/L		100	70 - 130
Bromochloromethane	4.00	3.872		ug/L		97	70 - 130
Dichlorobromomethane	4.00	4.010		ug/L		100	70 - 130
Bromoform	4.00	3.962		ug/L		99	70 - 130
Bromomethane	4.00	5.075		ug/L		127	70 - 130
Carbon disulfide	4.00	3.999		ug/L		100	70 - 130
Carbon tetrachloride	4.00	4.432		ug/L		111	70 - 130
Chlorobenzene	4.00	4.063		ug/L		102	70 - 130
Chlorodibromomethane	3.92	3.958		ug/L		101	70 - 130
Chloroethane	4.00	3.835		ug/L		96	70 - 130
Chloroform	4.00	3.946		ug/L		99	70 - 130
Chloromethane	4.00	3.772		ug/L		94	70 - 130
cis-1,2-Dichloroethene	4.00	4.154		ug/L		104	70 - 130
cis-1,3-Dichloropropene	4.00	4.359		ug/L		109	70 - 130
Dibromomethane	4.00	4.036		ug/L		101	70 - 130
Dichlorodifluoromethane	4.00	3.786		ug/L		95	70 - 130
Ethylbenzene	4.00	4.138		ug/L		103	70 - 130
Hexachlorobutadiene	4.00	4.449		ug/L		111	70 - 130
Isopropylbenzene	4.00	4.330		ug/L		108	70 - 130
Methyl tert-butyl ether	4.00	4.275		ug/L		107	70 - 130
Methylene Chloride	4.00	4.020		ug/L		101	70 - 130
Naphthalene	4.00	4.512		ug/L		113	70 - 130
n-Butylbenzene	4.00	4.197		ug/L		105	70 - 130
N-Propylbenzene	4.00	4.047		ug/L		101	70 - 130
sec-Butylbenzene	4.00	4.247		ug/L		106	70 - 130
Styrene	4.00	4.179		ug/L		104	70 - 130
tert-Butylbenzene	4.00	4.244		ug/L		106	70 - 130
Tetrachloroethene	4.00	4.130		ug/L		103	70 - 130
Toluene	4.00	4.160		ug/L		104	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162698/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 162698

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	4.041		ug/L		101	70 - 130
trans-1,3-Dichloropropene	4.00	4.768		ug/L		119	70 - 130
Trichloroethene	4.00	4.041		ug/L		101	70 - 130
Trichlorofluoromethane	4.00	3.917		ug/L		98	70 - 130
Vinyl chloride	4.00	3.944		ug/L		99	70 - 130
Xylenes, Total	8.00	8.427		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*98*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-163121/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		01/24/14 11:10	01/27/14 12:17	1
Manganese	0.0008700	J	0.00300	0.000400	mg/L		01/24/14 11:10	01/27/14 12:17	1

Lab Sample ID: LCS 480-163121/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.10		mg/L		101	85 - 115
Manganese	0.200	0.2029		mg/L		101	85 - 115

Lab Sample ID: 490-44858-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		10.0	10.12		mg/L		101	70 - 130
Manganese	0.000780	J B	0.200	0.2018		mg/L		100	70 - 130

Lab Sample ID: 490-44858-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 163392 — **Prep Batch: 163121**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.900		mg/L		99	70 - 130	2	20
Manganese	0.000780	J B	0.200	0.1965		mg/L		98	70 - 130	3	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

GC/MS VOA

Analysis Batch: 162698

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44861-1	CC-04 (Raw)	Total/NA	Water	524.2	
490-44861-3	CC-04 (GAC In)	Total/NA	Water	524.2	
490-44861-4	CC-04 (GAC 1)	Total/NA	Water	524.2	
490-44861-5	CC-04 (GAG 2)	Total/NA	Water	524.2	
490-44861-6	Trip Blank	Total/NA	Water	524.2	
LCS 480-162698/4	Lab Control Sample	Total/NA	Water	524.2	
MB 480-162698/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 163121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44858-A-2-B MS	Matrix Spike	Total/NA	Water	200.7	
490-44858-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
490-44861-1	CC-04 (Raw)	Total/NA	Water	200.7	
490-44861-2	CC-04 (Post Softner)	Total/NA	Water	200.7	
LCS 480-163121/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-163121/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 163392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44858-A-2-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	163121
490-44858-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	163121
490-44861-1	CC-04 (Raw)	Total/NA	Water	200.7 Rev 4.4	163121
490-44861-2	CC-04 (Post Softner)	Total/NA	Water	200.7 Rev 4.4	163121
LCS 480-163121/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	163121
MB 480-163121/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	163121

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Client Sample ID: CC-04 (Raw)

Lab Sample ID: 490-44861-1
Date Collected: 01/16/14 13:50
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		5	25 mL	25 mL	162698	01/22/14 17:53	CDC	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	163121	01/24/14 11:10	SS1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	163392	01/27/14 13:48	LMH	TAL BUF

Client Sample ID: CC-04 (Post Softner)

Lab Sample ID: 490-44861-2
Date Collected: 01/16/14 13:55
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	163121	01/24/14 11:10	SS1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	163392	01/27/14 13:51	LMH	TAL BUF

Client Sample ID: CC-04 (GAC In)

Lab Sample ID: 490-44861-3
Date Collected: 01/16/14 13:45
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162698	01/22/14 18:19	CDC	TAL BUF

Client Sample ID: CC-04 (GAC 1)

Lab Sample ID: 490-44861-4
Date Collected: 01/16/14 13:35
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162698	01/22/14 18:43	CDC	TAL BUF

Client Sample ID: CC-04 (GAG 2)

Lab Sample ID: 490-44861-5
Date Collected: 01/16/14 13:30
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162698	01/22/14 19:09	CDC	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 490-44861-6
Date Collected: 01/16/14 00:01
Matrix: Water
Date Received: 01/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162698	01/22/14 19:34	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44861-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
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

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zulkarian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6718	E-Mail: shali.brown@testamericainc.com		Page: 1 of
Company: ARCADIS U.S., Inc.				Job #: MA000725.0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-04 (Raw)	1/16/14	1350	G	W			3	1	4	
CC-04 (Post Softner)	1/16/14	1355	G	W				1	1	
CC-04 (GACIn)	1/16/14	1345	G	W			3		3	
CC-04 (GAC-1)	1/16/14	1395	G	W			3		3	
CC-04 (GAC-2)	1/16/14	1330	G	W			3		3	
Trip Blank									6	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			[signature]	1/18/14 0900	TA
Relinquished by	Date/Time	Company	Received by	Date/Time:	Company
Relinquished by	Date/Time	Company	Received by	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44861-1

Login Number: 44861
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44861-1

Login Number: 44861
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:41 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44861-1

Login Number: 44861
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 09:42 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-51208-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
4/29/2014 4:07:12 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51208-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-51208-1	CC-15 (RAW)	Water	04/17/14 12:20	04/18/14 11:39
490-51208-2	CC-15 (POST FILTER)	Water	04/17/14 12:25	04/18/14 11:39
490-51208-3	CC-15 (GAC 1)	Water	04/17/14 12:30	04/18/14 11:39
490-51208-4	CC-15 (GAC 2)	Water	04/17/14 12:35	04/18/14 11:39
490-51208-5	Trip Blank	Water	04/17/14 00:01	04/18/14 11:39

Job ID: 490-51208-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-51208-1

Comments
No additional comments.

Receipt
The samples were received on 4/18/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3º C.

GC/MS VOA
Method(s) 524.2: The method blank for batch 177850 contained Acetone 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 was not performed.

Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-15 (RAW) (490-51208-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-177044 contained total manganese 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 CC-15 (POST FILTER) (490-51208-2), CC-15 (RAW) (490-51208-1) was not performed.

No other analytical or quality issues were noted.

Definitions/Glossary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51208-1

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.
B	Compound was found in the blank and sample.

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.
¤	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)

Client Sample ID: CC-15 (RAW)

Lab Sample ID: 490-51208-1

Date Collected: 04/17/14 12:20

Matrix: Water

Date Received: 04/18/14 11:39

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.50	0.700	ug/L			04/24/14 00:05	5
1,1,1-Trichloroethane	ND		2.50	0.315	ug/L			04/24/14 00:05	5
1,1,2,2-Tetrachloroethane	ND		2.50	0.350	ug/L			04/24/14 00:05	5
1,1,2-Trichloroethane	ND		2.50	0.850	ug/L			04/24/14 00:05	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.50	0.850	ug/L			04/24/14 00:05	5
1,1-Dichloroethane	ND		2.50	0.370	ug/L			04/24/14 00:05	5
1,1-Dichloroethene	ND		2.50	0.295	ug/L			04/24/14 00:05	5
1,1-Dichloropropene	ND		2.50	0.315	ug/L			04/24/14 00:05	5
1,2,3-Trichlorobenzene	ND		2.50	0.285	ug/L			04/24/14 00:05	5
1,2,3-Trichloropropane	ND		2.50	0.610	ug/L			04/24/14 00:05	5
1,2,4-Trichlorobenzene	ND		2.50	0.635	ug/L			04/24/14 00:05	5
1,2,4-Trimethylbenzene	ND		2.50	0.450	ug/L			04/24/14 00:05	5
1,2-Dibromo-3-Chloropropane	ND		2.50	1.05	ug/L			04/24/14 00:05	5
1,2-Dibromoethane	ND		2.50	0.700	ug/L			04/24/14 00:05	5
1,2-Dichlorobenzene	ND		2.50	0.800	ug/L			04/24/14 00:05	5
1,2-Dichloroethane	ND		2.50	0.700	ug/L			04/24/14 00:05	5
1,2-Dichloropropane	ND		2.50	0.550	ug/L			04/24/14 00:05	5
1,3,5-Trimethylbenzene	ND		2.50	0.215	ug/L			04/24/14 00:05	5
1,3-Dichlorobenzene	ND		2.50	0.650	ug/L			04/24/14 00:05	5
1,3-Dichloropropane	ND		2.50	0.750	ug/L			04/24/14 00:05	5
1,4-Dichlorobenzene	ND		2.50	0.650	ug/L			04/24/14 00:05	5
2,2-Dichloropropane	ND		2.50	0.240	ug/L			04/24/14 00:05	5
2-Butanone (MEK)	ND		12.5	1.25	ug/L			04/24/14 00:05	5
2-Chlorotoluene	ND		2.50	0.250	ug/L			04/24/14 00:05	5
2-Hexanone	ND		12.5	1.16	ug/L			04/24/14 00:05	5
4-Chlorotoluene	ND		2.50	0.250	ug/L			04/24/14 00:05	5
4-Isopropyltoluene	ND		2.50	0.315	ug/L			04/24/14 00:05	5
4-Methyl-2-pentanone (MIBK)	ND		12.5	1.31	ug/L			04/24/14 00:05	5
Acetone	ND		12.5	2.69	ug/L			04/24/14 00:05	5
Acrylonitrile	ND		50.0	2.38	ug/L			04/24/14 00:05	5
Allyl chloride	ND		2.50	0.455	ug/L			04/24/14 00:05	5
Benzene	ND		2.50	0.650	ug/L			04/24/14 00:05	5
Bromobenzene	ND		2.50	0.650	ug/L			04/24/14 00:05	5
Bromochloromethane	ND		2.50	0.550	ug/L			04/24/14 00:05	5
Dichlorobromomethane	ND		2.50	0.700	ug/L			04/24/14 00:05	5
Bromoform	ND		2.50	0.650	ug/L			04/24/14 00:05	5
Bromomethane	ND		2.50	0.255	ug/L			04/24/14 00:05	5
Carbon disulfide	ND		2.50	0.750	ug/L			04/24/14 00:05	5
Carbon tetrachloride	ND		2.50	0.265	ug/L			04/24/14 00:05	5
Chlorobenzene	ND		2.50	0.600	ug/L			04/24/14 00:05	5
Chlorodibromomethane	ND		2.50	0.800	ug/L			04/24/14 00:05	5
Chloroethane	ND		2.50	0.350	ug/L			04/24/14 00:05	5
Chloroform	ND		2.50	0.700	ug/L			04/24/14 00:05	5
Chloromethane	ND		2.50	0.315	ug/L			04/24/14 00:05	5
cis-1,2-Dichloroethene	**46.8**		2.50	0.600	ug/L			04/24/14 00:05	5
cis-1,3-Dichloropropene	ND		2.50	0.400	ug/L			04/24/14 00:05	5
Dibromomethane	ND		2.50	0.850	ug/L			04/24/14 00:05	5
Dichlorodifluoromethane	ND		2.50	0.350	ug/L			04/24/14 00:05	5
Ethyl ether	ND		2.50	0.575	ug/L			04/24/14 00:05	5

Client Sample ID: CC-15 (RAW)

Lab Sample ID: 490-51208-1

Date Collected: 04/17/14 12:20

Matrix: Water

Date Received: 04/18/14 11:39

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		2.50	0.550	ug/L			04/24/14 00:05	5
Hexachlorobutadiene	ND		2.50	0.550	ug/L			04/24/14 00:05	5
Iodomethane	ND		2.50	0.750	ug/L			04/24/14 00:05	5
Isopropylbenzene	ND		2.50	0.265	ug/L			04/24/14 00:05	5
Methyl tert-butyl ether	ND		2.50	0.600	ug/L			04/24/14 00:05	5
Methylene Chloride	ND		2.50	1.25	ug/L			04/24/14 00:05	5
m-Xylene & p-Xylene	ND		5.00	0.435	ug/L			04/24/14 00:05	5
Naphthalene	ND		2.50	0.300	ug/L			04/24/14 00:05	5
n-Butylbenzene	ND		2.50	0.405	ug/L			04/24/14 00:05	5
N-Propylbenzene	ND		2.50	0.285	ug/L			04/24/14 00:05	5
o-Xylene	ND		2.50	0.220	ug/L			04/24/14 00:05	5
sec-Butylbenzene	ND		2.50	0.340	ug/L			04/24/14 00:05	5
Styrene	ND		2.50	0.220	ug/L			04/24/14 00:05	5
t-Butanol	ND		50.0	12.3	ug/L			04/24/14 00:05	5
tert-Butylbenzene	ND		2.50	0.300	ug/L			04/24/14 00:05	5
Tetrachloroethene	ND		2.50	0.335	ug/L			04/24/14 00:05	5
Toluene	ND		2.50	0.500	ug/L			04/24/14 00:05	5
trans-1,2-Dichloroethene	**1.10**	**J**	2.50	0.650	ug/L			04/24/14 00:05	5
trans-1,3-Dichloropropene	ND		2.50	0.500	ug/L			04/24/14 00:05	5
trans-1,4-Dichloro-2-butene	ND		12.5	6.25	ug/L			04/24/14 00:05	5
Trichloroethene	**4.34**		2.50	0.300	ug/L			04/24/14 00:05	5
Trichlorofluoromethane	ND		2.50	0.220	ug/L			04/24/14 00:05	5
Vinyl acetate	ND		12.5	0.860	ug/L			04/24/14 00:05	5
Vinyl chloride	ND		2.50	0.295	ug/L			04/24/14 00:05	5
Xylenes, Total	ND		5.00	1.00	ug/L			04/24/14 00:05	5
Trihalomethanes, Total	ND		10.0	5.00	ug/L			04/24/14 00:05	5
Dichlorofluoromethane	ND		2.50	0.670	ug/L			04/24/14 00:05	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*04/24/14 00:05*	*5*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*04/24/14 00:05*	*5*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 17:31	1
Manganese	**0.0981**	**B**	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 17:31	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51208-1

Client Sample ID: CC-15 (POST FILTER)

Lab Sample ID: 490-51208-2

Date Collected: 04/17/14 12:25

Matrix: Water

Date Received: 04/18/14 11:39

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 17:34	1
Manganese	**0.0998**	**B**	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 17:34	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51208-1

Client Sample ID: CC-15 (GAC 1)

Lab Sample ID: 490-51208-3

Date Collected: 04/17/14 12:30
Date Received: 04/18/14 11:39

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 00:30	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 00:30	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 00:30	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 00:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 00:30	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 00:30	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 00:30	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 00:30	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 00:30	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 00:30	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 00:30	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 00:30	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 00:30	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 00:30	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 00:30	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 00:30	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 00:30	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 00:30	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 00:30	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 00:30	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 00:30	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 00:30	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 00:30	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 00:30	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 00:30	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 00:30	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 00:30	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 00:30	1
Acetone	ND		2.50	0.537	ug/L			04/24/14 00:30	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 00:30	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 00:30	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 00:30	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 00:30	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 00:30	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 00:30	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 00:30	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 00:30	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 00:30	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 00:30	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 00:30	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 00:30	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 00:30	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 00:30	1
Chloromethane	**0.278**	**J**	0.500	0.0629	ug/L			04/24/14 00:30	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 00:30	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 00:30	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 00:30	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 00:30	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 00:30	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51208-1

Client Sample ID: CC-15 (GAC 1)

Lab Sample ID: 490-51208-3

Date Collected: 04/17/14 12:30
Date Received: 04/18/14 11:39

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 00:30	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 00:30	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 00:30	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 00:30	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 00:30	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/24/14 00:30	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 00:30	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 00:30	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 00:30	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 00:30	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 00:30	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 00:30	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 00:30	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 00:30	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 00:30	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 00:30	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 00:30	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 00:30	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 00:30	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 00:30	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 00:30	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 00:30	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 00:30	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 00:30	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 00:30	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 00:30	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*04/24/14 00:30*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*04/24/14 00:30*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51208-1

Client Sample ID: CC-15 (GAC 2)

Lab Sample ID: 490-51208-4

Date Collected: 04/17/14 12:35
Date Received: 04/18/14 11:39

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 00:54	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 00:54	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 00:54	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 00:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 00:54	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 00:54	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 00:54	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 00:54	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 00:54	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 00:54	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 00:54	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 00:54	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 00:54	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 00:54	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 00:54	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 00:54	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 00:54	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 00:54	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 00:54	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 00:54	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 00:54	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 00:54	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 00:54	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 00:54	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 00:54	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 00:54	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 00:54	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 00:54	1
Acetone	**0.934**	**J B**	2.50	0.537	ug/L			04/24/14 00:54	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 00:54	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 00:54	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 00:54	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 00:54	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 00:54	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 00:54	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 00:54	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 00:54	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 00:54	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 00:54	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 00:54	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 00:54	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 00:54	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 00:54	1
Chloromethane	**0.192**	**J**	0.500	0.0629	ug/L			04/24/14 00:54	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 00:54	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 00:54	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 00:54	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 00:54	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 00:54	1

Client Sample ID: CC-15 (GAC 2)

Lab Sample ID: 490-51208-4

Date Collected: 04/17/14 12:35

Matrix: Water

Date Received: 04/18/14 11:39

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 00:54	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 00:54	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 00:54	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 00:54	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 00:54	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/24/14 00:54	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 00:54	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 00:54	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 00:54	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 00:54	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 00:54	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 00:54	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 00:54	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 00:54	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 00:54	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 00:54	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 00:54	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 00:54	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 00:54	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 00:54	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 00:54	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 00:54	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 00:54	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 00:54	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 00:54	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 00:54	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 00:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*04/24/14 00:54*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*04/24/14 00:54*	*1*

Client Sample ID: Trip Blank

Lab Sample ID: 490-51208-5

Date Collected: 04/17/14 00:01

Matrix: Water

Date Received: 04/18/14 11:39

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 01:19	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 01:19	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 01:19	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 01:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 01:19	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 01:19	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 01:19	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 01:19	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 01:19	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 01:19	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 01:19	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 01:19	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 01:19	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 01:19	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 01:19	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 01:19	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 01:19	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 01:19	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 01:19	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 01:19	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 01:19	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 01:19	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 01:19	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 01:19	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 01:19	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 01:19	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 01:19	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 01:19	1
Acetone	ND		2.50	0.537	ug/L			04/24/14 01:19	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 01:19	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 01:19	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 01:19	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 01:19	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 01:19	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 01:19	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 01:19	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 01:19	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 01:19	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 01:19	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 01:19	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 01:19	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 01:19	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 01:19	1
Chloromethane	ND		0.500	0.0629	ug/L			04/24/14 01:19	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 01:19	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 01:19	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 01:19	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 01:19	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 01:19	1

Client Sample ID: Trip Blank

Lab Sample ID: 490-51208-5

Date Collected: 04/17/14 00:01

Matrix: Water

Date Received: 04/18/14 11:39

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 01:19	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 01:19	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 01:19	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 01:19	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 01:19	1
Methylene Chloride	**0.794**		0.500	0.250	ug/L			04/24/14 01:19	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 01:19	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 01:19	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 01:19	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 01:19	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 01:19	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 01:19	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 01:19	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 01:19	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 01:19	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 01:19	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 01:19	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 01:19	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 01:19	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 01:19	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 01:19	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 01:19	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 01:19	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 01:19	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 01:19	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 01:19	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 01:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*04/24/14 01:19*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*04/24/14 01:19*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-177850/6
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/23/14 21:13	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/23/14 21:13	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/23/14 21:13	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/23/14 21:13	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/23/14 21:13	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/23/14 21:13	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/23/14 21:13	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/23/14 21:13	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/23/14 21:13	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/23/14 21:13	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/23/14 21:13	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/23/14 21:13	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/23/14 21:13	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/23/14 21:13	1
2-Hexanone	ND		2.50	0.231	ug/L			04/23/14 21:13	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/23/14 21:13	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/23/14 21:13	1
Acetone	0.5443	J	2.50	0.537	ug/L			04/23/14 21:13	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/23/14 21:13	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/23/14 21:13	1
Benzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
Bromoform	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromomethane	ND		0.500	0.0510	ug/L			04/23/14 21:13	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/23/14 21:13	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/23/14 21:13	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/23/14 21:13	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/23/14 21:13	1
Chloroethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1
Chloroform	ND		0.500	0.140	ug/L			04/23/14 21:13	1
Chloromethane	ND		0.500	0.0629	ug/L			04/23/14 21:13	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/23/14 21:13	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/23/14 21:13	1
Dibromomethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-177850/6
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			04/23/14 21:13	1
Ethylbenzene	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Iodomethane	ND		0.500	0.150	ug/L			04/23/14 21:13	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/23/14 21:13	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/23/14 21:13	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/23/14 21:13	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/23/14 21:13	1
Naphthalene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/23/14 21:13	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/23/14 21:13	1
o-Xylene	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/23/14 21:13	1
Styrene	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
t-Butanol	ND		10.0	2.46	ug/L			04/23/14 21:13	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/23/14 21:13	1
Toluene	ND		0.500	0.100	ug/L			04/23/14 21:13	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/23/14 21:13	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/23/14 21:13	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/23/14 21:13	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/23/14 21:13	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/23/14 21:13	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/23/14 21:13	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/23/14 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*04/23/14 21:13*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*04/23/14 21:13*	*1*

Lab Sample ID: LCS 480-177850/4
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.289		ug/L		107	70 - 130
1,1,1-Trichloroethane	4.00	4.198		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	4.00	4.092		ug/L		102	70 - 130
1,1,2-Trichloroethane	4.00	4.029		ug/L		101	70 - 130
1,1-Dichloroethane	4.00	4.182		ug/L		105	70 - 130
1,1-Dichloroethene	4.00	4.076		ug/L		102	70 - 130
1,1-Dichloropropene	4.00	4.456		ug/L		111	70 - 130
1,2,3-Trichlorobenzene	4.00	3.817		ug/L		95	70 - 130
1,2,3-Trichloropropane	4.00	4.109		ug/L		103	70 - 130
1,2,4-Trichlorobenzene	4.00	3.924		ug/L		98	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-177850/4
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	4.155		ug/L		104	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.306		ug/L		108	70 - 130
1,2-Dibromoethane	4.00	4.035		ug/L		101	70 - 130
1,2-Dichlorobenzene	4.00	4.080		ug/L		102	70 - 130
1,2-Dichloroethane	4.00	4.081		ug/L		102	70 - 130
1,2-Dichloropropane	4.00	4.099		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	4.00	4.140		ug/L		103	70 - 130
1,3-Dichlorobenzene	4.00	4.036		ug/L		101	70 - 130
1,3-Dichloropropane	4.00	4.039		ug/L		101	70 - 130
1,4-Dichlorobenzene	4.00	4.102		ug/L		103	70 - 130
2,2-Dichloropropane	4.00	4.264		ug/L		107	70 - 130
2-Butanone (MEK)	20.0	21.99		ug/L		110	70 - 130
2-Chlorotoluene	4.00	4.150		ug/L		104	70 - 130
2-Hexanone	20.0	22.45		ug/L		112	70 - 130
4-Chlorotoluene	4.00	4.131		ug/L		103	70 - 130
4-Isopropyltoluene	4.00	4.200		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	21.52		ug/L		108	70 - 130
Acetone	20.0	25.71		ug/L		129	70 - 130
Benzene	4.00	4.092		ug/L		102	70 - 130
Bromobenzene	4.00	4.084		ug/L		102	70 - 130
Bromochloromethane	4.00	4.182		ug/L		105	70 - 130
Dichlorobromomethane	4.00	4.142		ug/L		104	70 - 130
Bromoform	4.00	4.045		ug/L		101	70 - 130
Bromomethane	4.00	5.006		ug/L		125	70 - 130
Carbon disulfide	4.00	4.086		ug/L		102	70 - 130
Carbon tetrachloride	4.00	4.372		ug/L		109	70 - 130
Chlorobenzene	4.00	4.033		ug/L		101	70 - 130
Chlorodibromomethane	3.92	4.146		ug/L		106	70 - 130
Chloroethane	4.00	4.334		ug/L		108	70 - 130
Chloroform	4.00	4.130		ug/L		103	70 - 130
Chloromethane	4.00	4.105		ug/L		103	70 - 130
cis-1,2-Dichloroethene	4.00	4.164		ug/L		104	70 - 130
cis-1,3-Dichloropropene	4.00	4.397		ug/L		110	70 - 130
Dibromomethane	4.00	4.075		ug/L		102	70 - 130
Dichlorodifluoromethane	4.00	4.766		ug/L		119	70 - 130
Ethylbenzene	4.00	4.129		ug/L		103	70 - 130
Hexachlorobutadiene	4.00	3.599		ug/L		90	70 - 130
Isopropylbenzene	4.00	4.178		ug/L		104	70 - 130
Methyl tert-butyl ether	4.00	4.288		ug/L		107	70 - 130
Methylene Chloride	4.00	4.018		ug/L		100	70 - 130
Naphthalene	4.00	4.199		ug/L		105	70 - 130
n-Butylbenzene	4.00	4.230		ug/L		106	70 - 130
N-Propylbenzene	4.00	4.194		ug/L		105	70 - 130
sec-Butylbenzene	4.00	4.237		ug/L		106	70 - 130
Styrene	4.00	4.129		ug/L		103	70 - 130
tert-Butylbenzene	4.00	4.199		ug/L		105	70 - 130
Tetrachloroethene	4.00	4.175		ug/L		104	70 - 130
Toluene	4.00	4.110		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-177850/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	4.214		ug/L		105	70 - 130
trans-1,3-Dichloropropene	4.00	4.724		ug/L		118	70 - 130
Trichloroethene	4.00	4.174		ug/L		104	70 - 130
Trichlorofluoromethane	4.00	3.841		ug/L		96	70 - 130
Vinyl chloride	4.00	4.125		ug/L		103	70 - 130
Xylenes, Total	8.00	8.320		ug/L		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-177044/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 16:58	1
Manganese	0.0004300	J	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 16:58	1

Lab Sample ID: LCS 480-177044/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.726		mg/L		97	85 - 115
Manganese	0.200	0.1989		mg/L		99	85 - 115

Lab Sample ID: 490-51218-D-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.137		10.0	9.950		mg/L		98	70 - 130
Manganese	0.0435	B	0.200	0.2414		mg/L		99	70 - 130

Lab Sample ID: 490-51218-D-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.137		10.0	9.945		mg/L		98	70 - 130	0	20
Manganese	0.0435	B	0.200	0.2427		mg/L		100	70 - 130	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51208-1

GC/MS VOA

Analysis Batch: 177850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51208-1	CC-15 (RAW)	Total/NA	Water	524.2	
490-51208-3	CC-15 (GAC 1)	Total/NA	Water	524.2	
490-51208-4	CC-15 (GAC 2)	Total/NA	Water	524.2	
490-51208-5	Trip Blank	Total/NA	Water	524.2	
LCS 480-177850/4	Lab Control Sample	Total/NA	Water	524.2	
MB 480-177850/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 177044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51208-1	CC-15 (RAW)	Total/NA	Water	200.7	
490-51208-2	CC-15 (POST FILTER)	Total/NA	Water	200.7	
490-51218-D-1-B MS	Matrix Spike	Total/NA	Water	200.7	
490-51218-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
LCS 480-177044/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-177044/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 177717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51208-1	CC-15 (RAW)	Total/NA	Water	200.7 Rev 4.4	177044
490-51208-2	CC-15 (POST FILTER)	Total/NA	Water	200.7 Rev 4.4	177044
490-51218-D-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	177044
490-51218-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	177044
LCS 480-177044/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	177044
MB 480-177044/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	177044

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51208-1

Client Sample ID: CC-15 (RAW)

Lab Sample ID: 490-51208-1
Date Collected: 04/17/14 12:20
Matrix: Water
Date Received: 04/18/14 11:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		5	25 mL	25 mL	177850	04/24/14 00:05	TRB	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	177044	04/21/14 09:00	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	177717	04/22/14 17:31	AMH	TAL BUF

Client Sample ID: CC-15 (POST FILTER)

Lab Sample ID: 490-51208-2
Date Collected: 04/17/14 12:25
Matrix: Water
Date Received: 04/18/14 11:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	177044	04/21/14 09:00	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	177717	04/22/14 17:34	AMH	TAL BUF

Client Sample ID: CC-15 (GAC 1)

Lab Sample ID: 490-51208-3
Date Collected: 04/17/14 12:30
Matrix: Water
Date Received: 04/18/14 11:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 00:30	TRB	TAL BUF

Client Sample ID: CC-15 (GAC 2)

Lab Sample ID: 490-51208-4
Date Collected: 04/17/14 12:35
Matrix: Water
Date Received: 04/18/14 11:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 00:54	TRB	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 490-51208-5
Date Collected: 04/17/14 00:01
Matrix: Water
Date Received: 04/18/14 11:39

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 01:19	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51208-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51208-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Acrylonitrile
524.2		Water	Allyl chloride
524.2		Water	Carbon disulfide
524.2		Water	Dichlorofluoromethane
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	Naphthalene
524.2		Water	o-Xylene
524.2		Water	t-Butanol
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

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TAL-4124 (1007)

Client: ARCADIS	Project Manager: CHUCK CASTELLUCCIO	Date: 4/17/14	Chain of Custody Number: 261902
Address: 200 HARVARD MILLS SQ SUITE 430	Telephone Number (Area Code)/Fax Number: 781-218-6962	Lab Number:	Page 1 of 1
City: WAKEFIELD; State: MA; Zip Code: 01880	Site Contact: T ZAKARIAN	Lab Contact:	
Project Name and Location (State): MA000725 NEW HAMPSHIRE	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): 524.2 VOC	IRON + MANGANESE									Special Instructions/ Conditions of Receipt
CC-15 (RAW)	4/17/14	1220		X						X	X				3	1									
CC-15 (POST FILTER)	4/17/14	1225		X						X	X					1									
CC-15 (GAC 1)	4/17/14	1230		X						X	X				3										
CC-15 (GAC 2)	4/17/14	1235		X						X	X				3										
Trip Blank																									

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By: ARCADIS	Date: 4/17/14	Time: 1615	1. Received By: TA BUFF	Date: 4/18/14	Time: 0900
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: #1 4.3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51208-1
SDG Number:

Login Number: 51208
List Number: 1
Creator: Gartner, Cathy

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51208-1
SDG Number:

Login Number: 51208
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 04/18/14 05:23 PM

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	4.3 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51208-1
SDG Number:

Login Number: 51208
List Number: 3
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 04/18/14 05:23 PM

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	4.3 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-51213-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
4/29/2014 4:19:27 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51213-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-51213-1	CC-04 (Raw)	Water	04/17/14 11:50	04/18/14 09:00
490-51213-2	CC-04 (Post Softner)	Water	04/17/14 11:55	04/18/14 09:00
490-51213-3	CC-04 (GAC In)	Water	04/17/14 12:00	04/18/14 09:00
490-51213-4	CC-04 (GAC 1)	Water	04/17/14 12:05	04/18/14 09:00
490-51213-5	CC-04 (GAC 2)	Water	04/17/14 12:10	04/18/14 09:00
490-51213-6	Trip Blank	Water	04/17/14 00:01	04/18/14 09:00

Job ID: 490-51213-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-51213-1

Comments
No additional comments.

Receipt
The samples were received on 4/18/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3º C.

GC/MS VOA
Method(s) 524.2: The method blank for batch 177850 contained Acetone 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 was not performed.

Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-04 (Raw) (490-51213-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-177044 contained total manganese 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 CC-04 (Post Softner) (490-51213-2), CC-04 (Raw) (490-51213-1) was not performed.

No other analytical or quality issues were noted.

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.
B	Compound was found in the blank and sample.

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.
¤	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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51213-1

Client Sample ID: CC-04 (Raw)

Lab Sample ID: 490-51213-1

Date Collected: 04/17/14 11:50
Date Received: 04/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.50	0.700	ug/L			04/24/14 01:45	5
1,1,1-Trichloroethane	ND		2.50	0.315	ug/L			04/24/14 01:45	5
1,1,2,2-Tetrachloroethane	ND		2.50	0.350	ug/L			04/24/14 01:45	5
1,1,2-Trichloroethane	ND		2.50	0.850	ug/L			04/24/14 01:45	5
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.50	0.850	ug/L			04/24/14 01:45	5
1,1-Dichloroethane	ND		2.50	0.370	ug/L			04/24/14 01:45	5
1,1-Dichloroethene	ND		2.50	0.295	ug/L			04/24/14 01:45	5
1,1-Dichloropropene	ND		2.50	0.315	ug/L			04/24/14 01:45	5
1,2,3-Trichlorobenzene	ND		2.50	0.285	ug/L			04/24/14 01:45	5
1,2,3-Trichloropropane	ND		2.50	0.610	ug/L			04/24/14 01:45	5
1,2,4-Trichlorobenzene	ND		2.50	0.635	ug/L			04/24/14 01:45	5
1,2,4-Trimethylbenzene	ND		2.50	0.450	ug/L			04/24/14 01:45	5
1,2-Dibromo-3-Chloropropane	ND		2.50	1.05	ug/L			04/24/14 01:45	5
1,2-Dibromoethane	ND		2.50	0.700	ug/L			04/24/14 01:45	5
1,2-Dichlorobenzene	ND		2.50	0.800	ug/L			04/24/14 01:45	5
1,2-Dichloroethane	ND		2.50	0.700	ug/L			04/24/14 01:45	5
1,2-Dichloropropane	ND		2.50	0.550	ug/L			04/24/14 01:45	5
1,3,5-Trimethylbenzene	ND		2.50	0.215	ug/L			04/24/14 01:45	5
1,3-Dichlorobenzene	ND		2.50	0.650	ug/L			04/24/14 01:45	5
1,3-Dichloropropane	ND		2.50	0.750	ug/L			04/24/14 01:45	5
1,4-Dichlorobenzene	ND		2.50	0.650	ug/L			04/24/14 01:45	5
2,2-Dichloropropane	ND		2.50	0.240	ug/L			04/24/14 01:45	5
2-Butanone (MEK)	ND		12.5	1.25	ug/L			04/24/14 01:45	5
2-Chlorotoluene	ND		2.50	0.250	ug/L			04/24/14 01:45	5
2-Hexanone	ND		12.5	1.16	ug/L			04/24/14 01:45	5
4-Chlorotoluene	ND		2.50	0.250	ug/L			04/24/14 01:45	5
4-Isopropyltoluene	ND		2.50	0.315	ug/L			04/24/14 01:45	5
4-Methyl-2-pentanone (MIBK)	ND		12.5	1.31	ug/L			04/24/14 01:45	5
Acetone	ND		12.5	2.69	ug/L			04/24/14 01:45	5
Acrylonitrile	ND		50.0	2.38	ug/L			04/24/14 01:45	5
Allyl chloride	ND		2.50	0.455	ug/L			04/24/14 01:45	5
Benzene	ND		2.50	0.650	ug/L			04/24/14 01:45	5
Bromobenzene	ND		2.50	0.650	ug/L			04/24/14 01:45	5
Bromochloromethane	ND		2.50	0.550	ug/L			04/24/14 01:45	5
Dichlorobromomethane	ND		2.50	0.700	ug/L			04/24/14 01:45	5
Bromoform	ND		2.50	0.650	ug/L			04/24/14 01:45	5
Bromomethane	ND		2.50	0.255	ug/L			04/24/14 01:45	5
Carbon disulfide	ND		2.50	0.750	ug/L			04/24/14 01:45	5
Carbon tetrachloride	ND		2.50	0.265	ug/L			04/24/14 01:45	5
Chlorobenzene	ND		2.50	0.600	ug/L			04/24/14 01:45	5
Chlorodibromomethane	ND		2.50	0.800	ug/L			04/24/14 01:45	5
Chloroethane	ND		2.50	0.350	ug/L			04/24/14 01:45	5
Chloroform	ND		2.50	0.700	ug/L			04/24/14 01:45	5
Chloromethane	ND		2.50	0.315	ug/L			04/24/14 01:45	5
cis-1,2-Dichloroethene	**54.6**		2.50	0.600	ug/L			04/24/14 01:45	5
cis-1,3-Dichloropropene	ND		2.50	0.400	ug/L			04/24/14 01:45	5
Dibromomethane	ND		2.50	0.850	ug/L			04/24/14 01:45	5
Dichlorodifluoromethane	ND		2.50	0.350	ug/L			04/24/14 01:45	5
Ethyl ether	ND		2.50	0.575	ug/L			04/24/14 01:45	5

Client Sample ID: CC-04 (Raw)

Lab Sample ID: 490-51213-1

Date Collected: 04/17/14 11:50

Matrix: Water

Date Received: 04/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		2.50	0.550	ug/L			04/24/14 01:45	5
Hexachlorobutadiene	ND		2.50	0.550	ug/L			04/24/14 01:45	5
Iodomethane	ND		2.50	0.750	ug/L			04/24/14 01:45	5
Isopropylbenzene	ND		2.50	0.265	ug/L			04/24/14 01:45	5
Methyl tert-butyl ether	ND		2.50	0.600	ug/L			04/24/14 01:45	5
Methylene Chloride	ND		2.50	1.25	ug/L			04/24/14 01:45	5
m-Xylene & p-Xylene	ND		5.00	0.435	ug/L			04/24/14 01:45	5
Naphthalene	ND		2.50	0.300	ug/L			04/24/14 01:45	5
n-Butylbenzene	ND		2.50	0.405	ug/L			04/24/14 01:45	5
N-Propylbenzene	ND		2.50	0.285	ug/L			04/24/14 01:45	5
o-Xylene	ND		2.50	0.220	ug/L			04/24/14 01:45	5
sec-Butylbenzene	ND		2.50	0.340	ug/L			04/24/14 01:45	5
Styrene	ND		2.50	0.220	ug/L			04/24/14 01:45	5
t-Butanol	ND		50.0	12.3	ug/L			04/24/14 01:45	5
tert-Butylbenzene	ND		2.50	0.300	ug/L			04/24/14 01:45	5
Tetrachloroethene	ND		2.50	0.335	ug/L			04/24/14 01:45	5
Toluene	ND		2.50	0.500	ug/L			04/24/14 01:45	5
trans-1,2-Dichloroethene	**0.791**	**J**	2.50	0.650	ug/L			04/24/14 01:45	5
trans-1,3-Dichloropropene	ND		2.50	0.500	ug/L			04/24/14 01:45	5
trans-1,4-Dichloro-2-butene	ND		12.5	6.25	ug/L			04/24/14 01:45	5
Trichloroethene	**5.06**		2.50	0.300	ug/L			04/24/14 01:45	5
Trichlorofluoromethane	ND		2.50	0.220	ug/L			04/24/14 01:45	5
Vinyl acetate	ND		12.5	0.860	ug/L			04/24/14 01:45	5
Vinyl chloride	ND		2.50	0.295	ug/L			04/24/14 01:45	5
Xylenes, Total	ND		5.00	1.00	ug/L			04/24/14 01:45	5
Trihalomethanes, Total	ND		10.0	5.00	ug/L			04/24/14 01:45	5
Dichlorofluoromethane	ND		2.50	0.670	ug/L			04/24/14 01:45	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*04/24/14 01:45*	*5*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*04/24/14 01:45*	*5*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.101**		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 17:37	1
Manganese	**0.130**	**B**	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 17:37	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51213-1

Client Sample ID: CC-04 (Post Softner)

Lab Sample ID: 490-51213-2

Date Collected: 04/17/14 11:55

Matrix: Water

Date Received: 04/18/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.0338	J	0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 17:40	1
Manganese	0.000510	J B	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 17:40	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51213-1

Client Sample ID: CC-04 (GAC In)

Lab Sample ID: 490-51213-3

Date Collected: 04/17/14 12:00
Date Received: 04/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 02:10	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 02:10	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 02:10	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 02:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 02:10	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 02:10	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 02:10	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 02:10	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 02:10	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 02:10	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 02:10	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 02:10	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 02:10	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 02:10	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 02:10	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 02:10	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 02:10	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 02:10	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 02:10	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 02:10	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 02:10	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 02:10	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 02:10	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 02:10	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 02:10	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 02:10	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 02:10	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 02:10	1
Acetone	**2.34**	**J B**	2.50	0.537	ug/L			04/24/14 02:10	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 02:10	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 02:10	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 02:10	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 02:10	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 02:10	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 02:10	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 02:10	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 02:10	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 02:10	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 02:10	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 02:10	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 02:10	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 02:10	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 02:10	1
Chloromethane	**0.284**	**J**	0.500	0.0629	ug/L			04/24/14 02:10	1
cis-1,2-Dichloroethene	**3.82**		0.500	0.120	ug/L			04/24/14 02:10	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 02:10	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 02:10	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 02:10	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 02:10	1

Client Sample ID: CC-04 (GAC In)

Lab Sample ID: 490-51213-3

Date Collected: 04/17/14 12:00

Matrix: Water

Date Received: 04/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 02:10	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 02:10	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 02:10	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 02:10	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 02:10	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/24/14 02:10	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 02:10	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 02:10	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 02:10	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 02:10	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 02:10	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 02:10	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 02:10	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 02:10	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 02:10	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 02:10	1
Toluene	**0.381**	**J**	0.500	0.100	ug/L			04/24/14 02:10	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 02:10	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 02:10	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 02:10	1
Trichloroethene	**0.173**	**J**	0.500	0.0600	ug/L			04/24/14 02:10	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 02:10	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 02:10	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 02:10	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 02:10	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 02:10	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 02:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*04/24/14 02:10*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*04/24/14 02:10*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51213-1

Client Sample ID: CC-04 (GAC 1)

Lab Sample ID: 490-51213-4

Date Collected: 04/17/14 12:05
Date Received: 04/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 02:35	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 02:35	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 02:35	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 02:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 02:35	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 02:35	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 02:35	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 02:35	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 02:35	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 02:35	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 02:35	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 02:35	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 02:35	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 02:35	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 02:35	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 02:35	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 02:35	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 02:35	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 02:35	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 02:35	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 02:35	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 02:35	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 02:35	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 02:35	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 02:35	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 02:35	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 02:35	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 02:35	1
Acetone	**0.667**	**J B**	2.50	0.537	ug/L			04/24/14 02:35	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 02:35	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 02:35	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 02:35	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 02:35	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 02:35	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 02:35	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 02:35	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 02:35	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 02:35	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 02:35	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 02:35	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 02:35	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 02:35	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 02:35	1
Chloromethane	**0.587**		0.500	0.0629	ug/L			04/24/14 02:35	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 02:35	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 02:35	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 02:35	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 02:35	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 02:35	1

Client Sample ID: CC-04 (GAC 1)

Lab Sample ID: 490-51213-4

Date Collected: 04/17/14 12:05

Matrix: Water

Date Received: 04/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 02:35	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 02:35	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 02:35	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 02:35	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 02:35	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/24/14 02:35	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 02:35	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 02:35	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 02:35	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 02:35	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 02:35	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 02:35	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 02:35	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 02:35	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 02:35	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 02:35	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 02:35	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 02:35	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 02:35	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 02:35	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 02:35	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 02:35	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 02:35	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 02:35	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 02:35	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 02:35	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 02:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*04/24/14 02:35*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*04/24/14 02:35*	*1*

Client Sample ID: CC-04 (GAC 2)

Lab Sample ID: 490-51213-5

Date Collected: 04/17/14 12:10

Matrix: Water

Date Received: 04/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 03:00	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 03:00	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 03:00	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 03:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 03:00	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 03:00	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 03:00	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 03:00	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 03:00	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 03:00	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 03:00	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 03:00	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 03:00	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 03:00	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 03:00	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 03:00	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 03:00	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 03:00	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 03:00	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 03:00	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 03:00	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 03:00	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 03:00	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 03:00	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 03:00	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 03:00	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 03:00	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 03:00	1
Acetone	ND		2.50	0.537	ug/L			04/24/14 03:00	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 03:00	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 03:00	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 03:00	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 03:00	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 03:00	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 03:00	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 03:00	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 03:00	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 03:00	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 03:00	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 03:00	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 03:00	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 03:00	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 03:00	1
Chloromethane	**0.200**	**J**	0.500	0.0629	ug/L			04/24/14 03:00	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 03:00	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 03:00	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 03:00	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 03:00	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 03:00	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51213-1

Client Sample ID: CC-04 (GAC 2)

Lab Sample ID: 490-51213-5

Date Collected: 04/17/14 12:10

Matrix: Water

Date Received: 04/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 03:00	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 03:00	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 03:00	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 03:00	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 03:00	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/24/14 03:00	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 03:00	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 03:00	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 03:00	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 03:00	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 03:00	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 03:00	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 03:00	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 03:00	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 03:00	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 03:00	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 03:00	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 03:00	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 03:00	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 03:00	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 03:00	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 03:00	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 03:00	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 03:00	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 03:00	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 03:00	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 03:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*04/24/14 03:00*	*1*
1,2-Dichlorobenzene-d4	*99*		*80 - 120*		*04/24/14 03:00*	*1*

Client Sample ID: Trip Blank

Lab Sample ID: 490-51213-6

Date Collected: 04/17/14 00:01

Matrix: Water

Date Received: 04/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 03:26	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 03:26	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 03:26	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 03:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 03:26	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 03:26	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 03:26	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 03:26	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 03:26	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 03:26	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 03:26	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 03:26	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 03:26	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 03:26	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 03:26	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 03:26	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 03:26	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 03:26	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 03:26	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 03:26	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 03:26	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 03:26	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 03:26	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 03:26	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 03:26	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 03:26	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 03:26	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 03:26	1
Acetone	ND		2.50	0.537	ug/L			04/24/14 03:26	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 03:26	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 03:26	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 03:26	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 03:26	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 03:26	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 03:26	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 03:26	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 03:26	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 03:26	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 03:26	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 03:26	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 03:26	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 03:26	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 03:26	1
Chloromethane	ND		0.500	0.0629	ug/L			04/24/14 03:26	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 03:26	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 03:26	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 03:26	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 03:26	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 03:26	1

Client Sample ID: Trip Blank

Lab Sample ID: 490-51213-6

Date Collected: 04/17/14 00:01

Matrix: Water

Date Received: 04/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 03:26	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 03:26	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 03:26	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 03:26	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 03:26	1
Methylene Chloride	**0.859**		0.500	0.250	ug/L			04/24/14 03:26	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 03:26	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 03:26	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 03:26	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 03:26	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 03:26	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 03:26	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 03:26	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 03:26	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 03:26	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 03:26	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 03:26	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 03:26	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 03:26	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 03:26	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 03:26	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 03:26	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 03:26	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 03:26	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 03:26	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 03:26	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 03:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*04/24/14 03:26*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*04/24/14 03:26*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-177850/6
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/23/14 21:13	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/23/14 21:13	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/23/14 21:13	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/23/14 21:13	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/23/14 21:13	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/23/14 21:13	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/23/14 21:13	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/23/14 21:13	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/23/14 21:13	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/23/14 21:13	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/23/14 21:13	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/23/14 21:13	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/23/14 21:13	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/23/14 21:13	1
2-Hexanone	ND		2.50	0.231	ug/L			04/23/14 21:13	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/23/14 21:13	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/23/14 21:13	1
Acetone	0.5443	J	2.50	0.537	ug/L			04/23/14 21:13	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/23/14 21:13	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/23/14 21:13	1
Benzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
Bromoform	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromomethane	ND		0.500	0.0510	ug/L			04/23/14 21:13	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/23/14 21:13	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/23/14 21:13	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/23/14 21:13	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/23/14 21:13	1
Chloroethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1
Chloroform	ND		0.500	0.140	ug/L			04/23/14 21:13	1
Chloromethane	ND		0.500	0.0629	ug/L			04/23/14 21:13	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/23/14 21:13	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/23/14 21:13	1
Dibromomethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-177850/6
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			04/23/14 21:13	1
Ethylbenzene	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Iodomethane	ND		0.500	0.150	ug/L			04/23/14 21:13	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/23/14 21:13	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/23/14 21:13	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/23/14 21:13	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/23/14 21:13	1
Naphthalene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/23/14 21:13	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/23/14 21:13	1
o-Xylene	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/23/14 21:13	1
Styrene	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
t-Butanol	ND		10.0	2.46	ug/L			04/23/14 21:13	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/23/14 21:13	1
Toluene	ND		0.500	0.100	ug/L			04/23/14 21:13	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/23/14 21:13	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/23/14 21:13	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/23/14 21:13	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/23/14 21:13	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/23/14 21:13	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/23/14 21:13	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/23/14 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*04/23/14 21:13*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*04/23/14 21:13*	*1*

Lab Sample ID: LCS 480-177850/4
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.289		ug/L		107	70 - 130
1,1,1-Trichloroethane	4.00	4.198		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	4.00	4.092		ug/L		102	70 - 130
1,1,2-Trichloroethane	4.00	4.029		ug/L		101	70 - 130
1,1-Dichloroethane	4.00	4.182		ug/L		105	70 - 130
1,1-Dichloroethene	4.00	4.076		ug/L		102	70 - 130
1,1-Dichloropropene	4.00	4.456		ug/L		111	70 - 130
1,2,3-Trichlorobenzene	4.00	3.817		ug/L		95	70 - 130
1,2,3-Trichloropropane	4.00	4.109		ug/L		103	70 - 130
1,2,4-Trichlorobenzene	4.00	3.924		ug/L		98	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-177850/4
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	4.155		ug/L		104	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.306		ug/L		108	70 - 130
1,2-Dibromoethane	4.00	4.035		ug/L		101	70 - 130
1,2-Dichlorobenzene	4.00	4.080		ug/L		102	70 - 130
1,2-Dichloroethane	4.00	4.081		ug/L		102	70 - 130
1,2-Dichloropropane	4.00	4.099		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	4.00	4.140		ug/L		103	70 - 130
1,3-Dichlorobenzene	4.00	4.036		ug/L		101	70 - 130
1,3-Dichloropropane	4.00	4.039		ug/L		101	70 - 130
1,4-Dichlorobenzene	4.00	4.102		ug/L		103	70 - 130
2,2-Dichloropropane	4.00	4.264		ug/L		107	70 - 130
2-Butanone (MEK)	20.0	21.99		ug/L		110	70 - 130
2-Chlorotoluene	4.00	4.150		ug/L		104	70 - 130
2-Hexanone	20.0	22.45		ug/L		112	70 - 130
4-Chlorotoluene	4.00	4.131		ug/L		103	70 - 130
4-Isopropyltoluene	4.00	4.200		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	21.52		ug/L		108	70 - 130
Acetone	20.0	25.71		ug/L		129	70 - 130
Benzene	4.00	4.092		ug/L		102	70 - 130
Bromobenzene	4.00	4.084		ug/L		102	70 - 130
Bromochloromethane	4.00	4.182		ug/L		105	70 - 130
Dichlorobromomethane	4.00	4.142		ug/L		104	70 - 130
Bromoform	4.00	4.045		ug/L		101	70 - 130
Bromomethane	4.00	5.006		ug/L		125	70 - 130
Carbon disulfide	4.00	4.086		ug/L		102	70 - 130
Carbon tetrachloride	4.00	4.372		ug/L		109	70 - 130
Chlorobenzene	4.00	4.033		ug/L		101	70 - 130
Chlorodibromomethane	3.92	4.146		ug/L		106	70 - 130
Chloroethane	4.00	4.334		ug/L		108	70 - 130
Chloroform	4.00	4.130		ug/L		103	70 - 130
Chloromethane	4.00	4.105		ug/L		103	70 - 130
cis-1,2-Dichloroethene	4.00	4.164		ug/L		104	70 - 130
cis-1,3-Dichloropropene	4.00	4.397		ug/L		110	70 - 130
Dibromomethane	4.00	4.075		ug/L		102	70 - 130
Dichlorodifluoromethane	4.00	4.766		ug/L		119	70 - 130
Ethylbenzene	4.00	4.129		ug/L		103	70 - 130
Hexachlorobutadiene	4.00	3.599		ug/L		90	70 - 130
Isopropylbenzene	4.00	4.178		ug/L		104	70 - 130
Methyl tert-butyl ether	4.00	4.288		ug/L		107	70 - 130
Methylene Chloride	4.00	4.018		ug/L		100	70 - 130
Naphthalene	4.00	4.199		ug/L		105	70 - 130
n-Butylbenzene	4.00	4.230		ug/L		106	70 - 130
N-Propylbenzene	4.00	4.194		ug/L		105	70 - 130
sec-Butylbenzene	4.00	4.237		ug/L		106	70 - 130
Styrene	4.00	4.129		ug/L		103	70 - 130
tert-Butylbenzene	4.00	4.199		ug/L		105	70 - 130
Tetrachloroethene	4.00	4.175		ug/L		104	70 - 130
Toluene	4.00	4.110		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-177850/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	4.214		ug/L		105	70 - 130
trans-1,3-Dichloropropene	4.00	4.724		ug/L		118	70 - 130
Trichloroethene	4.00	4.174		ug/L		104	70 - 130
Trichlorofluoromethane	4.00	3.841		ug/L		96	70 - 130
Vinyl chloride	4.00	4.125		ug/L		103	70 - 130
Xylenes, Total	8.00	8.320		ug/L		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-177044/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 16:58	1
Manganese	0.0004300	J	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 16:58	1

Lab Sample ID: LCS 480-177044/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.726		mg/L		97	85 - 115
Manganese	0.200	0.1989		mg/L		99	85 - 115

Lab Sample ID: 490-51218-D-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.137		10.0	9.950		mg/L		98	70 - 130
Manganese	0.0435	B	0.200	0.2414		mg/L		99	70 - 130

Lab Sample ID: 490-51218-D-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.137		10.0	9.945		mg/L		98	70 - 130	0	20
Manganese	0.0435	B	0.200	0.2427		mg/L		100	70 - 130	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51213-1

GC/MS VOA

Analysis Batch: 177850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51213-1	CC-04 (Raw)	Total/NA	Water	524.2	
490-51213-3	CC-04 (GAC In)	Total/NA	Water	524.2	
490-51213-4	CC-04 (GAC 1)	Total/NA	Water	524.2	
490-51213-5	CC-04 (GAC 2)	Total/NA	Water	524.2	
490-51213-6	Trip Blank	Total/NA	Water	524.2	
LCS 480-177850/4	Lab Control Sample	Total/NA	Water	524.2	
MB 480-177850/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 177044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51213-1	CC-04 (Raw)	Total/NA	Water	200.7	
490-51213-2	CC-04 (Post Softner)	Total/NA	Water	200.7	
490-51218-D-1-B MS	Matrix Spike	Total/NA	Water	200.7	
490-51218-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
LCS 480-177044/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-177044/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 177717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51213-1	CC-04 (Raw)	Total/NA	Water	200.7 Rev 4.4	177044
490-51213-2	CC-04 (Post Softner)	Total/NA	Water	200.7 Rev 4.4	177044
490-51218-D-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	177044
490-51218-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	177044
LCS 480-177044/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	177044
MB 480-177044/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	177044

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51213-1

Client Sample ID: CC-04 (Raw)

Lab Sample ID: 490-51213-1
Date Collected: 04/17/14 11:50
Matrix: Water
Date Received: 04/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		5	25 mL	25 mL	177850	04/24/14 01:45	TRB	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	177044	04/21/14 09:00	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	177717	04/22/14 17:37	AMH	TAL BUF

Client Sample ID: CC-04 (Post Softner)

Lab Sample ID: 490-51213-2
Date Collected: 04/17/14 11:55
Matrix: Water
Date Received: 04/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	177044	04/21/14 09:00	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	177717	04/22/14 17:40	AMH	TAL BUF

Client Sample ID: CC-04 (GAC In)

Lab Sample ID: 490-51213-3
Date Collected: 04/17/14 12:00
Matrix: Water
Date Received: 04/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 02:10	TRB	TAL BUF

Client Sample ID: CC-04 (GAC 1)

Lab Sample ID: 490-51213-4
Date Collected: 04/17/14 12:05
Matrix: Water
Date Received: 04/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 02:35	TRB	TAL BUF

Client Sample ID: CC-04 (GAC 2)

Lab Sample ID: 490-51213-5
Date Collected: 04/17/14 12:10
Matrix: Water
Date Received: 04/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 03:00	TRB	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 490-51213-6
Date Collected: 04/17/14 00:01
Matrix: Water
Date Received: 04/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 03:26	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51213-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51213-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14 *
California	NELAP	9	1168CA	10-31-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14 *
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-15
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-09-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	03-31-15
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14 *
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (002)	02-23-17
Tennessee	State Program	4	2008	02-23-17
Texas	NELAP	6	T104704077	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-15
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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	State Program	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	03-31-15
Illinois	NELAP	5	200003	09-30-14

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-15 *
Kentucky (DW)	State Program	4	90029	12-31-14
Kentucky (UST)	State Program	4	30	03-31-15
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-15
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	03-31-15
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	03-31-15
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	02-10-15
West Virginia DEP	State Program	3	252	05-31-14
Wisconsin	State Program	5	998310390	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

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TAL-4124 (1007)

Client: ARCADIS	Project Manager: CHUCK CASTELLUCCIO	Date: 4/17/14	Chain of Custody Number: 261429
Address: 200 HARVARD MILLS SQ SUITE 430	Telephone Number (Area Code)/Fax Number: 781-213-4962	Lab Number:	Page 1 of 1
City: WAKEFIELD; State: MA; Zip Code: 01880	Site Contact: I ZAKARIAN	Lab Contact:	
Project Name and Location (State): MA000725 NEW HAMPSHIRE	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 524.2 VOC	Iron + Manganese	Special Instructions/ Conditions of Receipt
CC-04 (RAW)	4/17/14	1230		X					X	X			3	1	
CC-04 (POST SOFTNER)	4/17/14	1235		X					X	X				1	
CC-04 (GAC IN)	4/17/14	1200		X					X	X			3		
CC-04 (GAC 1)	4/17/14	1205		X					X	X			3		
CC-04 (GAC 2)	4/17/14	1210		X					X	X			3		

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By: ARCADIS	Date: 4/17/14	Time: 1615	1. Received By: TA BUFF.	Date: 4/18/14	Time: 0900
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: #1 4.3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51213-1

Login Number: 51213
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51213-1

Login Number: 51213
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 04/18/14 05:22 PM

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	4.3 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51213-1

Login Number: 51213
List Number: 3
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 04/18/14 05:22 PM

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	4.3 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-51215-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
4/29/2014 4:26:54 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-51215-1	CC-02 (RAW)	Water	04/17/14 11:00	04/18/14 11:51
490-51215-2	CC-02 (POST SOFTNER)	Water	04/17/14 11:05	04/18/14 11:51
490-51215-3	CC-02 (GAC 1)	Water	04/17/14 11:10	04/18/14 11:51
490-51215-4	CC-02 (GAC 2)	Water	04/17/14 11:15	04/18/14 11:51

Job ID: 490-51215-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-51215-1

Comments
No additional comments.

Receipt
The samples were received on 4/18/2014 11:51 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3º C.

GC/MS VOA
Method(s) 524.2: The method blank for batch 177850 contained Acetone 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 was not performed.

Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-02 (RAW) (490-51215-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The Method Blank for batch 480-177044 contained total manganese 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 CC-02 (POST SOFTNER) (490-51215-2), CC-02 (RAW) (490-51215-1) was not performed.

No other analytical or quality issues were noted.

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.

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.
¤	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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Client Sample ID: CC-02 (RAW)

Date Collected: 04/17/14 11:00
Date Received: 04/18/14 11:51

Lab Sample ID: 490-51215-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.00	0.560	ug/L			04/24/14 11:26	4
1,1,1-Trichloroethane	ND		2.00	0.252	ug/L			04/24/14 11:26	4
1,1,2,2-Tetrachloroethane	ND		2.00	0.280	ug/L			04/24/14 11:26	4
1,1,2-Trichloroethane	ND		2.00	0.680	ug/L			04/24/14 11:26	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.00	0.680	ug/L			04/24/14 11:26	4
1,1-Dichloroethane	ND		2.00	0.296	ug/L			04/24/14 11:26	4
1,1-Dichloroethene	ND		2.00	0.236	ug/L			04/24/14 11:26	4
1,1-Dichloropropene	ND		2.00	0.252	ug/L			04/24/14 11:26	4
1,2,3-Trichlorobenzene	ND		2.00	0.228	ug/L			04/24/14 11:26	4
1,2,3-Trichloropropane	ND		2.00	0.488	ug/L			04/24/14 11:26	4
1,2,4-Trichlorobenzene	ND		2.00	0.508	ug/L			04/24/14 11:26	4
1,2,4-Trimethylbenzene	ND		2.00	0.360	ug/L			04/24/14 11:26	4
1,2-Dibromo-3-Chloropropane	ND		2.00	0.840	ug/L			04/24/14 11:26	4
1,2-Dibromoethane	ND		2.00	0.560	ug/L			04/24/14 11:26	4
1,2-Dichlorobenzene	ND		2.00	0.640	ug/L			04/24/14 11:26	4
1,2-Dichloroethane	ND		2.00	0.560	ug/L			04/24/14 11:26	4
1,2-Dichloropropane	ND		2.00	0.440	ug/L			04/24/14 11:26	4
1,3,5-Trimethylbenzene	ND		2.00	0.172	ug/L			04/24/14 11:26	4
1,3-Dichlorobenzene	ND		2.00	0.520	ug/L			04/24/14 11:26	4
1,3-Dichloropropane	ND		2.00	0.600	ug/L			04/24/14 11:26	4
1,4-Dichlorobenzene	ND		2.00	0.520	ug/L			04/24/14 11:26	4
2,2-Dichloropropane	ND		2.00	0.192	ug/L			04/24/14 11:26	4
2-Butanone (MEK)	ND		10.0	0.996	ug/L			04/24/14 11:26	4
2-Chlorotoluene	ND		2.00	0.200	ug/L			04/24/14 11:26	4
2-Hexanone	ND		10.0	0.924	ug/L			04/24/14 11:26	4
4-Chlorotoluene	ND		2.00	0.200	ug/L			04/24/14 11:26	4
4-Isopropyltoluene	ND		2.00	0.252	ug/L			04/24/14 11:26	4
4-Methyl-2-pentanone (MIBK)	ND		10.0	1.05	ug/L			04/24/14 11:26	4
Acetone	**3.38**	**J**	10.0	2.15	ug/L			04/24/14 11:26	4
Acrylonitrile	ND		40.0	1.90	ug/L			04/24/14 11:26	4
Allyl chloride	ND		2.00	0.364	ug/L			04/24/14 11:26	4
Benzene	ND		2.00	0.520	ug/L			04/24/14 11:26	4
Bromobenzene	ND		2.00	0.520	ug/L			04/24/14 11:26	4
Bromochloromethane	ND		2.00	0.440	ug/L			04/24/14 11:26	4
Dichlorobromomethane	ND		2.00	0.560	ug/L			04/24/14 11:26	4
Bromoform	ND		2.00	0.520	ug/L			04/24/14 11:26	4
Bromomethane	ND		2.00	0.204	ug/L			04/24/14 11:26	4
Carbon disulfide	ND		2.00	0.600	ug/L			04/24/14 11:26	4
Carbon tetrachloride	ND		2.00	0.212	ug/L			04/24/14 11:26	4
Chlorobenzene	ND		2.00	0.480	ug/L			04/24/14 11:26	4
Chlorodibromomethane	ND		2.00	0.640	ug/L			04/24/14 11:26	4
Chloroethane	ND		2.00	0.280	ug/L			04/24/14 11:26	4
Chloroform	ND		2.00	0.560	ug/L			04/24/14 11:26	4
Chloromethane	ND		2.00	0.252	ug/L			04/24/14 11:26	4
cis-1,2-Dichloroethene	**54.2**		2.00	0.480	ug/L			04/24/14 11:26	4
cis-1,3-Dichloropropene	ND		2.00	0.320	ug/L			04/24/14 11:26	4
Dibromomethane	ND		2.00	0.680	ug/L			04/24/14 11:26	4
Dichlorodifluoromethane	ND		2.00	0.280	ug/L			04/24/14 11:26	4
Ethyl ether	ND		2.00	0.460	ug/L			04/24/14 11:26	4

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Client Sample ID: CC-02 (RAW)

Date Collected: 04/17/14 11:00
Date Received: 04/18/14 11:51

Lab Sample ID: 490-51215-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		2.00	0.440	ug/L			04/24/14 11:26	4
Hexachlorobutadiene	ND		2.00	0.440	ug/L			04/24/14 11:26	4
Iodomethane	ND		2.00	0.600	ug/L			04/24/14 11:26	4
Isopropylbenzene	ND		2.00	0.212	ug/L			04/24/14 11:26	4
Methyl tert-butyl ether	ND		2.00	0.480	ug/L			04/24/14 11:26	4
Methylene Chloride	ND		2.00	1.00	ug/L			04/24/14 11:26	4
m-Xylene & p-Xylene	ND		4.00	0.348	ug/L			04/24/14 11:26	4
Naphthalene	ND		2.00	0.240	ug/L			04/24/14 11:26	4
n-Butylbenzene	ND		2.00	0.324	ug/L			04/24/14 11:26	4
N-Propylbenzene	ND		2.00	0.228	ug/L			04/24/14 11:26	4
o-Xylene	ND		2.00	0.176	ug/L			04/24/14 11:26	4
sec-Butylbenzene	ND		2.00	0.272	ug/L			04/24/14 11:26	4
Styrene	ND		2.00	0.176	ug/L			04/24/14 11:26	4
t-Butanol	ND		40.0	9.83	ug/L			04/24/14 11:26	4
tert-Butylbenzene	ND		2.00	0.240	ug/L			04/24/14 11:26	4
Tetrachloroethene	ND		2.00	0.268	ug/L			04/24/14 11:26	4
Toluene	ND		2.00	0.400	ug/L			04/24/14 11:26	4
trans-1,2-Dichloroethene	**1.25**	**J**	2.00	0.520	ug/L			04/24/14 11:26	4
trans-1,3-Dichloropropene	ND		2.00	0.400	ug/L			04/24/14 11:26	4
trans-1,4-Dichloro-2-butene	ND		10.0	5.00	ug/L			04/24/14 11:26	4
Trichloroethene	**4.04**		2.00	0.240	ug/L			04/24/14 11:26	4
Trichlorofluoromethane	ND		2.00	0.176	ug/L			04/24/14 11:26	4
Vinyl acetate	ND		10.0	0.688	ug/L			04/24/14 11:26	4
Vinyl chloride	ND		2.00	0.236	ug/L			04/24/14 11:26	4
Xylenes, Total	ND		4.00	0.800	ug/L			04/24/14 11:26	4
Trihalomethanes, Total	ND		8.00	4.00	ug/L			04/24/14 11:26	4
Dichlorofluoromethane	ND		2.00	0.536	ug/L			04/24/14 11:26	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*04/24/14 11:26*	*4*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*04/24/14 11:26*	*4*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 17:26	1
Manganese	**0.114**	**B**	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 17:26	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Client Sample ID: CC-02 (POST SOFTNER)

Lab Sample ID: 490-51215-2

Date Collected: 04/17/14 11:05
Date Received: 04/18/14 11:51

Matrix: Water

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 17:29	1
Manganese	**0.000700**	**J B**	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 17:29	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Client Sample ID: CC-02 (GAC 1)

Lab Sample ID: 490-51215-3

Date Collected: 04/17/14 11:10
Date Received: 04/18/14 11:51

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 04:16	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 04:16	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 04:16	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 04:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 04:16	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 04:16	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 04:16	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 04:16	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 04:16	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 04:16	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 04:16	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 04:16	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 04:16	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 04:16	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 04:16	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 04:16	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 04:16	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 04:16	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 04:16	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 04:16	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 04:16	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 04:16	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 04:16	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 04:16	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 04:16	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 04:16	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 04:16	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 04:16	1
Acetone	ND		2.50	0.537	ug/L			04/24/14 04:16	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 04:16	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 04:16	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 04:16	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 04:16	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 04:16	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 04:16	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 04:16	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 04:16	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 04:16	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 04:16	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 04:16	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 04:16	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 04:16	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 04:16	1
Chloromethane	**0.0654**	**J**	0.500	0.0629	ug/L			04/24/14 04:16	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 04:16	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 04:16	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 04:16	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 04:16	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 04:16	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Client Sample ID: CC-02 (GAC 1)

Lab Sample ID: 490-51215-3

Date Collected: 04/17/14 11:10

Matrix: Water

Date Received: 04/18/14 11:51

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 04:16	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 04:16	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 04:16	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 04:16	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 04:16	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/24/14 04:16	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 04:16	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 04:16	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 04:16	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 04:16	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 04:16	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 04:16	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 04:16	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 04:16	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 04:16	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 04:16	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 04:16	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 04:16	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 04:16	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 04:16	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 04:16	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 04:16	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 04:16	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 04:16	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 04:16	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 04:16	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*04/24/14 04:16*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*04/24/14 04:16*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Client Sample ID: CC-02 (GAC 2)

Lab Sample ID: 490-51215-4

Date Collected: 04/17/14 11:15
Date Received: 04/18/14 11:51

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 04:41	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 04:41	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 04:41	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 04:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 04:41	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 04:41	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 04:41	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 04:41	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 04:41	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 04:41	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 04:41	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 04:41	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 04:41	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 04:41	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 04:41	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 04:41	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 04:41	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 04:41	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 04:41	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 04:41	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 04:41	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 04:41	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 04:41	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 04:41	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 04:41	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 04:41	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 04:41	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 04:41	1
Acetone	ND		2.50	0.537	ug/L			04/24/14 04:41	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 04:41	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 04:41	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 04:41	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 04:41	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 04:41	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 04:41	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 04:41	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 04:41	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 04:41	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 04:41	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 04:41	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 04:41	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 04:41	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 04:41	1
Chloromethane	**0.141**	**J**	0.500	0.0629	ug/L			04/24/14 04:41	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 04:41	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 04:41	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 04:41	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 04:41	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 04:41	1

Client Sample ID: CC-02 (GAC 2)

Lab Sample ID: 490-51215-4

Date Collected: 04/17/14 11:15

Matrix: Water

Date Received: 04/18/14 11:51

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 04:41	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 04:41	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 04:41	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 04:41	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 04:41	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/24/14 04:41	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 04:41	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 04:41	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 04:41	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 04:41	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 04:41	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 04:41	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 04:41	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 04:41	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 04:41	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 04:41	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 04:41	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 04:41	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 04:41	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 04:41	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 04:41	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 04:41	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 04:41	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 04:41	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 04:41	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 04:41	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 04:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*04/24/14 04:41*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*04/24/14 04:41*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-177850/6
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/23/14 21:13	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/23/14 21:13	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/23/14 21:13	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/23/14 21:13	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/23/14 21:13	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/23/14 21:13	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/23/14 21:13	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/23/14 21:13	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/23/14 21:13	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/23/14 21:13	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/23/14 21:13	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/23/14 21:13	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/23/14 21:13	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/23/14 21:13	1
2-Hexanone	ND		2.50	0.231	ug/L			04/23/14 21:13	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/23/14 21:13	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/23/14 21:13	1
Acetone	0.5443	J	2.50	0.537	ug/L			04/23/14 21:13	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/23/14 21:13	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/23/14 21:13	1
Benzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
Bromoform	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromomethane	ND		0.500	0.0510	ug/L			04/23/14 21:13	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/23/14 21:13	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/23/14 21:13	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/23/14 21:13	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/23/14 21:13	1
Chloroethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1
Chloroform	ND		0.500	0.140	ug/L			04/23/14 21:13	1
Chloromethane	ND		0.500	0.0629	ug/L			04/23/14 21:13	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/23/14 21:13	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/23/14 21:13	1
Dibromomethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-177850/6
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			04/23/14 21:13	1
Ethylbenzene	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Iodomethane	ND		0.500	0.150	ug/L			04/23/14 21:13	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/23/14 21:13	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/23/14 21:13	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/23/14 21:13	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/23/14 21:13	1
Naphthalene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/23/14 21:13	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/23/14 21:13	1
o-Xylene	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/23/14 21:13	1
Styrene	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
t-Butanol	ND		10.0	2.46	ug/L			04/23/14 21:13	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/23/14 21:13	1
Toluene	ND		0.500	0.100	ug/L			04/23/14 21:13	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/23/14 21:13	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/23/14 21:13	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/23/14 21:13	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/23/14 21:13	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/23/14 21:13	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/23/14 21:13	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/23/14 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*04/23/14 21:13*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*04/23/14 21:13*	*1*

Lab Sample ID: LCS 480-177850/4
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.289		ug/L		107	70 - 130
1,1,1-Trichloroethane	4.00	4.198		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	4.00	4.092		ug/L		102	70 - 130
1,1,2-Trichloroethane	4.00	4.029		ug/L		101	70 - 130
1,1-Dichloroethane	4.00	4.182		ug/L		105	70 - 130
1,1-Dichloroethene	4.00	4.076		ug/L		102	70 - 130
1,1-Dichloropropene	4.00	4.456		ug/L		111	70 - 130
1,2,3-Trichlorobenzene	4.00	3.817		ug/L		95	70 - 130
1,2,3-Trichloropropane	4.00	4.109		ug/L		103	70 - 130
1,2,4-Trichlorobenzene	4.00	3.924		ug/L		98	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-177850/4
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	4.155		ug/L		104	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.306		ug/L		108	70 - 130
1,2-Dibromoethane	4.00	4.035		ug/L		101	70 - 130
1,2-Dichlorobenzene	4.00	4.080		ug/L		102	70 - 130
1,2-Dichloroethane	4.00	4.081		ug/L		102	70 - 130
1,2-Dichloropropane	4.00	4.099		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	4.00	4.140		ug/L		103	70 - 130
1,3-Dichlorobenzene	4.00	4.036		ug/L		101	70 - 130
1,3-Dichloropropane	4.00	4.039		ug/L		101	70 - 130
1,4-Dichlorobenzene	4.00	4.102		ug/L		103	70 - 130
2,2-Dichloropropane	4.00	4.264		ug/L		107	70 - 130
2-Butanone (MEK)	20.0	21.99		ug/L		110	70 - 130
2-Chlorotoluene	4.00	4.150		ug/L		104	70 - 130
2-Hexanone	20.0	22.45		ug/L		112	70 - 130
4-Chlorotoluene	4.00	4.131		ug/L		103	70 - 130
4-Isopropyltoluene	4.00	4.200		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	21.52		ug/L		108	70 - 130
Acetone	20.0	25.71		ug/L		129	70 - 130
Benzene	4.00	4.092		ug/L		102	70 - 130
Bromobenzene	4.00	4.084		ug/L		102	70 - 130
Bromochloromethane	4.00	4.182		ug/L		105	70 - 130
Dichlorobromomethane	4.00	4.142		ug/L		104	70 - 130
Bromoform	4.00	4.045		ug/L		101	70 - 130
Bromomethane	4.00	5.006		ug/L		125	70 - 130
Carbon disulfide	4.00	4.086		ug/L		102	70 - 130
Carbon tetrachloride	4.00	4.372		ug/L		109	70 - 130
Chlorobenzene	4.00	4.033		ug/L		101	70 - 130
Chlorodibromomethane	3.92	4.146		ug/L		106	70 - 130
Chloroethane	4.00	4.334		ug/L		108	70 - 130
Chloroform	4.00	4.130		ug/L		103	70 - 130
Chloromethane	4.00	4.105		ug/L		103	70 - 130
cis-1,2-Dichloroethene	4.00	4.164		ug/L		104	70 - 130
cis-1,3-Dichloropropene	4.00	4.397		ug/L		110	70 - 130
Dibromomethane	4.00	4.075		ug/L		102	70 - 130
Dichlorodifluoromethane	4.00	4.766		ug/L		119	70 - 130
Ethylbenzene	4.00	4.129		ug/L		103	70 - 130
Hexachlorobutadiene	4.00	3.599		ug/L		90	70 - 130
Isopropylbenzene	4.00	4.178		ug/L		104	70 - 130
Methyl tert-butyl ether	4.00	4.288		ug/L		107	70 - 130
Methylene Chloride	4.00	4.018		ug/L		100	70 - 130
Naphthalene	4.00	4.199		ug/L		105	70 - 130
n-Butylbenzene	4.00	4.230		ug/L		106	70 - 130
N-Propylbenzene	4.00	4.194		ug/L		105	70 - 130
sec-Butylbenzene	4.00	4.237		ug/L		106	70 - 130
Styrene	4.00	4.129		ug/L		103	70 - 130
tert-Butylbenzene	4.00	4.199		ug/L		105	70 - 130
Tetrachloroethene	4.00	4.175		ug/L		104	70 - 130
Toluene	4.00	4.110		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-177850/4
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	4.214		ug/L		105	70 - 130
trans-1,3-Dichloropropene	4.00	4.724		ug/L		118	70 - 130
Trichloroethene	4.00	4.174		ug/L		104	70 - 130
Trichlorofluoromethane	4.00	3.841		ug/L		96	70 - 130
Vinyl chloride	4.00	4.125		ug/L		103	70 - 130
Xylenes, Total	8.00	8.320		ug/L		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: MB 480-177932/6
Matrix: Water
Analysis Batch: 177932

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 10:52	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 10:52	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 10:52	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 10:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 10:52	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 10:52	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 10:52	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 10:52	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 10:52	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 10:52	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 10:52	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 10:52	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 10:52	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 10:52	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 10:52	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 10:52	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 10:52	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 10:52	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 10:52	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 10:52	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 10:52	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 10:52	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 10:52	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 10:52	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 10:52	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 10:52	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 10:52	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 10:52	1
Acetone	ND		2.50	0.537	ug/L			04/24/14 10:52	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 10:52	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 10:52	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 10:52	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-177932/6
Matrix: Water
Analysis Batch: 177932

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 10:52	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 10:52	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 10:52	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 10:52	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 10:52	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 10:52	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 10:52	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 10:52	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 10:52	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 10:52	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 10:52	1
Chloromethane	ND		0.500	0.0629	ug/L			04/24/14 10:52	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 10:52	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 10:52	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 10:52	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 10:52	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 10:52	1
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 10:52	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 10:52	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 10:52	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 10:52	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 10:52	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/24/14 10:52	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 10:52	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 10:52	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 10:52	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 10:52	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 10:52	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 10:52	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 10:52	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 10:52	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 10:52	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 10:52	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 10:52	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 10:52	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 10:52	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 10:52	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 10:52	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 10:52	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 10:52	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 10:52	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 10:52	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 10:52	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 10:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*04/24/14 10:52*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*04/24/14 10:52*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-177932/4
Matrix: Water
Analysis Batch: 177932

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.939		ug/L		98	70 - 130
1,1,1-Trichloroethane	4.00	3.932		ug/L		98	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.648		ug/L		91	70 - 130
1,1,2-Trichloroethane	4.00	3.778		ug/L		94	70 - 130
1,1-Dichloroethane	4.00	3.878		ug/L		97	70 - 130
1,1-Dichloroethene	4.00	3.766		ug/L		94	70 - 130
1,1-Dichloropropene	4.00	4.043		ug/L		101	70 - 130
1,2,3-Trichlorobenzene	4.00	3.786		ug/L		95	70 - 130
1,2,3-Trichloropropane	4.00	3.737		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	3.969		ug/L		99	70 - 130
1,2,4-Trimethylbenzene	4.00	3.774		ug/L		94	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	3.896		ug/L		97	70 - 130
1,2-Dibromoethane	4.00	3.727		ug/L		93	70 - 130
1,2-Dichlorobenzene	4.00	3.875		ug/L		97	70 - 130
1,2-Dichloroethane	4.00	3.754		ug/L		94	70 - 130
1,2-Dichloropropane	4.00	3.696		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.832		ug/L		96	70 - 130
1,3-Dichlorobenzene	4.00	3.762		ug/L		94	70 - 130
1,3-Dichloropropane	4.00	3.645		ug/L		91	70 - 130
1,4-Dichlorobenzene	4.00	3.779		ug/L		94	70 - 130
2,2-Dichloropropane	4.00	4.045		ug/L		101	70 - 130
2-Butanone (MEK)	20.0	18.71		ug/L		94	70 - 130
2-Chlorotoluene	4.00	3.726		ug/L		93	70 - 130
2-Hexanone	20.0	19.69		ug/L		98	70 - 130
4-Chlorotoluene	4.00	3.757		ug/L		94	70 - 130
4-Isopropyltoluene	4.00	3.959		ug/L		99	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	19.53		ug/L		98	70 - 130
Acetone	20.0	18.71		ug/L		94	70 - 130
Benzene	4.00	3.698		ug/L		92	70 - 130
Bromobenzene	4.00	3.631		ug/L		91	70 - 130
Bromochloromethane	4.00	3.834		ug/L		96	70 - 130
Dichlorobromomethane	4.00	3.921		ug/L		98	70 - 130
Bromoform	4.00	3.807		ug/L		95	70 - 130
Bromomethane	4.00	4.071		ug/L		102	70 - 130
Carbon disulfide	4.00	3.617		ug/L		90	70 - 130
Carbon tetrachloride	4.00	4.469		ug/L		112	70 - 130
Chlorobenzene	4.00	3.733		ug/L		93	70 - 130
Chlorodibromomethane	3.92	3.747		ug/L		96	70 - 130
Chloroethane	4.00	3.674		ug/L		92	70 - 130
Chloroform	4.00	3.815		ug/L		95	70 - 130
Chloromethane	4.00	3.523		ug/L		88	70 - 130
cis-1,2-Dichloroethene	4.00	3.815		ug/L		95	70 - 130
cis-1,3-Dichloropropene	4.00	4.016		ug/L		100	70 - 130
Dibromomethane	4.00	3.845		ug/L		96	70 - 130
Dichlorodifluoromethane	4.00	4.603		ug/L		115	70 - 130
Ethylbenzene	4.00	3.774		ug/L		94	70 - 130
Hexachlorobutadiene	4.00	4.117		ug/L		103	70 - 130
Isopropylbenzene	4.00	3.940		ug/L		98	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-177932/4
Matrix: Water
Analysis Batch: 177932

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	4.00	3.932		ug/L		98	70 - 130
Methylene Chloride	4.00	3.652		ug/L		91	70 - 130
Naphthalene	4.00	3.906		ug/L		98	70 - 130
n-Butylbenzene	4.00	4.050		ug/L		101	70 - 130
N-Propylbenzene	4.00	3.703		ug/L		93	70 - 130
sec-Butylbenzene	4.00	3.871		ug/L		97	70 - 130
Styrene	4.00	3.838		ug/L		96	70 - 130
tert-Butylbenzene	4.00	3.850		ug/L		96	70 - 130
Tetrachloroethene	4.00	3.834		ug/L		96	70 - 130
Toluene	4.00	3.785		ug/L		95	70 - 130
trans-1,2-Dichloroethene	4.00	3.848		ug/L		96	70 - 130
trans-1,3-Dichloropropene	4.00	4.384		ug/L		110	70 - 130
Trichloroethene	4.00	3.809		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.157		ug/L		79	70 - 130
Vinyl chloride	4.00	3.676		ug/L		92	70 - 130
Xylenes, Total	8.00	7.704		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*104*		*80 - 120*

Lab Sample ID: LCSD 480-177932/5
Matrix: Water
Analysis Batch: 177932

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	4.036		ug/L		101	70 - 130	2	20
1,1,1-Trichloroethane	4.00	4.171		ug/L		104	70 - 130	6	20
1,1,2,2-Tetrachloroethane	4.00	3.588		ug/L		90	70 - 130	2	20
1,1,2-Trichloroethane	4.00	3.792		ug/L		95	70 - 130	0	20
1,1-Dichloroethane	4.00	3.991		ug/L		100	70 - 130	3	20
1,1-Dichloroethene	4.00	3.928		ug/L		98	70 - 130	4	20
1,1-Dichloropropene	4.00	4.265		ug/L		107	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	3.756		ug/L		94	70 - 130	1	20
1,2,3-Trichloropropane	4.00	3.636		ug/L		91	70 - 130	3	20
1,2,4-Trichlorobenzene	4.00	4.047		ug/L		101	70 - 130	2	20
1,2,4-Trimethylbenzene	4.00	3.917		ug/L		98	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	4.00	3.533		ug/L		88	70 - 130	10	20
1,2-Dibromoethane	4.00	3.755		ug/L		94	70 - 130	1	20
1,2-Dichlorobenzene	4.00	3.842		ug/L		96	70 - 130	1	20
1,2-Dichloroethane	4.00	3.775		ug/L		94	70 - 130	1	20
1,2-Dichloropropane	4.00	3.681		ug/L		92	70 - 130	0	20
1,3,5-Trimethylbenzene	4.00	3.912		ug/L		98	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.778		ug/L		94	70 - 130	0	20
1,3-Dichloropropane	4.00	3.672		ug/L		92	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.825		ug/L		96	70 - 130	1	20
2,2-Dichloropropane	4.00	4.203		ug/L		105	70 - 130	4	20
2-Butanone (MEK)	20.0	16.76		ug/L		84	70 - 130	11	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-177932/5
Matrix: Water
Analysis Batch: 177932

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Chlorotoluene	4.00	3.865		ug/L		97	70 - 130	4	20
2-Hexanone	20.0	19.26		ug/L		96	70 - 130	2	20
4-Chlorotoluene	4.00	3.847		ug/L		96	70 - 130	2	20
4-Isopropyltoluene	4.00	4.140		ug/L		104	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.47		ug/L		92	70 - 130	6	20
Acetone	20.0	17.33		ug/L		87	70 - 130	8	20
Benzene	4.00	3.839		ug/L		96	70 - 130	4	20
Bromobenzene	4.00	3.718		ug/L		93	70 - 130	2	20
Bromochloromethane	4.00	3.767		ug/L		94	70 - 130	2	20
Dichlorobromomethane	4.00	3.906		ug/L		98	70 - 130	0	20
Bromoform	4.00	3.709		ug/L		93	70 - 130	3	20
Bromomethane	4.00	4.832		ug/L		121	70 - 130	17	20
Carbon disulfide	4.00	3.957		ug/L		99	70 - 130	9	20
Carbon tetrachloride	4.00	4.791		ug/L		120	70 - 130	7	20
Chlorobenzene	4.00	3.803		ug/L		95	70 - 130	2	20
Chlorodibromomethane	3.92	3.811		ug/L		97	70 - 130	2	20
Chloroethane	4.00	3.982		ug/L		100	70 - 130	8	20
Chloroform	4.00	3.868		ug/L		97	70 - 130	1	20
Chloromethane	4.00	3.660		ug/L		92	70 - 130	4	20
cis-1,2-Dichloroethene	4.00	3.881		ug/L		97	70 - 130	2	20
cis-1,3-Dichloropropene	4.00	4.120		ug/L		103	70 - 130	3	20
Dibromomethane	4.00	3.803		ug/L		95	70 - 130	1	20
Dichlorodifluoromethane	4.00	4.721		ug/L		118	70 - 130	3	20
Ethylbenzene	4.00	3.902		ug/L		98	70 - 130	3	20
Hexachlorobutadiene	4.00	4.256		ug/L		106	70 - 130	3	20
Isopropylbenzene	4.00	4.111		ug/L		103	70 - 130	4	20
Methyl tert-butyl ether	4.00	3.859		ug/L		96	70 - 130	2	20
Methylene Chloride	4.00	3.695		ug/L		92	70 - 130	1	20
Naphthalene	4.00	3.732		ug/L		93	70 - 130	5	20
n-Butylbenzene	4.00	4.190		ug/L		105	70 - 130	3	20
N-Propylbenzene	4.00	3.922		ug/L		98	70 - 130	6	20
sec-Butylbenzene	4.00	4.090		ug/L		102	70 - 130	6	20
Styrene	4.00	3.836		ug/L		96	70 - 130	0	20
tert-Butylbenzene	4.00	4.010		ug/L		100	70 - 130	4	20
Tetrachloroethene	4.00	3.954		ug/L		99	70 - 130	3	20
Toluene	4.00	3.892		ug/L		97	70 - 130	3	20
trans-1,2-Dichloroethene	4.00	4.044		ug/L		101	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	4.561		ug/L		114	70 - 130	4	20
Trichloroethene	4.00	3.982		ug/L		100	70 - 130	4	20
Trichlorofluoromethane	4.00	3.190		ug/L		80	70 - 130	1	20
Vinyl chloride	4.00	3.892		ug/L		97	70 - 130	6	20
Xylenes, Total	8.00	7.842		ug/L		98	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-177044/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 16:58	1
Manganese	0.0004300	J	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 16:58	1

Lab Sample ID: LCS 480-177044/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.726		mg/L		97	85 - 115
Manganese	0.200	0.1989		mg/L		99	85 - 115

Lab Sample ID: 490-51218-D-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.137		10.0	9.950		mg/L		98	70 - 130
Manganese	0.0435	B	0.200	0.2414		mg/L		99	70 - 130

Lab Sample ID: 490-51218-D-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.137		10.0	9.945		mg/L		98	70 - 130	0	20
Manganese	0.0435	B	0.200	0.2427		mg/L		100	70 - 130	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

GC/MS VOA

Analysis Batch: 177850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51215-3	CC-02 (GAC 1)	Total/NA	Water	524.2	
490-51215-4	CC-02 (GAC 2)	Total/NA	Water	524.2	
LCS 480-177850/4	Lab Control Sample	Total/NA	Water	524.2	
MB 480-177850/6	Method Blank	Total/NA	Water	524.2	

Analysis Batch: 177932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51215-1	CC-02 (RAW)	Total/NA	Water	524.2	
LCS 480-177932/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-177932/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-177932/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 177044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51215-1	CC-02 (RAW)	Total/NA	Water	200.7	
490-51215-2	CC-02 (POST SOFTNER)	Total/NA	Water	200.7	
490-51218-D-1-B MS	Matrix Spike	Total/NA	Water	200.7	
490-51218-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
LCS 480-177044/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-177044/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 177717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51215-1	CC-02 (RAW)	Total/NA	Water	200.7 Rev 4.4	177044
490-51215-2	CC-02 (POST SOFTNER)	Total/NA	Water	200.7 Rev 4.4	177044
490-51218-D-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	177044
490-51218-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	177044
LCS 480-177044/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	177044
MB 480-177044/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	177044

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Client Sample ID: CC-02 (RAW)

Lab Sample ID: 490-51215-1
Date Collected: 04/17/14 11:00
Matrix: Water
Date Received: 04/18/14 11:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		4	25 mL	25 mL	177932	04/24/14 11:26	CDC	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	177044	04/21/14 09:00	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	177717	04/22/14 17:26	AMH	TAL BUF

Client Sample ID: CC-02 (POST SOFTNER)

Lab Sample ID: 490-51215-2
Date Collected: 04/17/14 11:05
Matrix: Water
Date Received: 04/18/14 11:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	177044	04/21/14 09:00	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	177717	04/22/14 17:29	AMH	TAL BUF

Client Sample ID: CC-02 (GAC 1)

Lab Sample ID: 490-51215-3
Date Collected: 04/17/14 11:10
Matrix: Water
Date Received: 04/18/14 11:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 04:16	TRB	TAL BUF

Client Sample ID: CC-02 (GAC 2)

Lab Sample ID: 490-51215-4
Date Collected: 04/17/14 11:15
Matrix: Water
Date Received: 04/18/14 11:51

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 04:41	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51215-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Acrylonitrile
524.2		Water	Allyl chloride
524.2		Water	Carbon disulfide
524.2		Water	Dichlorofluoromethane
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	Naphthalene
524.2		Water	o-Xylene
524.2		Water	t-Butanol
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: ARCADIS	Project Manager: Chuck Castellucio	Date: 4/17/14	Chain of Custody Number: 261427
Address: 200 Harvard Mills Sq. Suite 430	Telephone Number (Area Code)/Fax Number: 781-213-4962	Lab Number:	Page 1 of 1
City: Wakefield; State: MA; Zip Code: 01880	Site Contact: T Zakarian	Lab Contact:	
Project Name and Location (State): MA000725 New Hampshire	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Analysis (Attach list if more space is needed): 524.2 VOC; Iron + Manganese

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	524.2 VOC	Iron + Manganese
CC-02 (Raw)	4/17/14	1100		X					X	X			3	1
CC-02 (Post Softner)	4/17/14	1105		X					X	X				1
CC-02 (GAC 1)	4/17/14	1110		X					X	X			3	
CC-02 (GAC 2)	4/17/14	1115		X					X	X			3	

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature] /ARCADIS	4/17/14	1645	1. Received By: [signature] TA BUFF.	4/18/14	0900
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments: #1 4.3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51215-1
SDG Number:

Login Number: 51215
List Number: 1
Creator: Gartner, Cathy

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51215-1
SDG Number:

Login Number: 51215
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 04/18/14 05:21 PM

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	4.3 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51215-1
SDG Number:

Login Number: 51215
List Number: 3
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 04/18/14 05:21 PM

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	4.3 C
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	
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 Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-51218-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
4/29/2014 4:42:40 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51218-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-51218-1	CC-03 (Raw)	Water	04/17/14 12:50	04/18/14 09:00
490-51218-2	CC-03 (Post Filter)	Water	04/17/14 12:55	04/18/14 09:00
490-51218-3	CC-03 (GAC 1)	Water	04/17/14 13:00	04/18/14 09:00
490-51218-4	CC-03 (GAC 2)	Water	04/17/14 13:05	04/18/14 09:00

Job ID: 490-51218-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-51218-1

Comments
No additional comments.

Receipt
The samples were received on 4/18/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3º C.

GC/MS VOA
Method(s) 524.2: The method blank for batch 177850 contained Acetone 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 was not performed.

Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-03 (Raw) (490-51218-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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.

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.
¤	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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51218-1

Client Sample ID: CC-03 (Raw)

Date Collected: 04/17/14 12:50
Date Received: 04/18/14 09:00

Lab Sample ID: 490-51218-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.00	0.280	ug/L			04/24/14 05:06	2
1,1,1-Trichloroethane	ND		1.00	0.126	ug/L			04/24/14 05:06	2
1,1,2,2-Tetrachloroethane	ND		1.00	0.140	ug/L			04/24/14 05:06	2
1,1,2-Trichloroethane	ND		1.00	0.340	ug/L			04/24/14 05:06	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.340	ug/L			04/24/14 05:06	2
1,1-Dichloroethane	ND		1.00	0.148	ug/L			04/24/14 05:06	2
1,1-Dichloroethene	ND		1.00	0.118	ug/L			04/24/14 05:06	2
1,1-Dichloropropene	ND		1.00	0.126	ug/L			04/24/14 05:06	2
1,2,3-Trichlorobenzene	ND		1.00	0.114	ug/L			04/24/14 05:06	2
1,2,3-Trichloropropane	ND		1.00	0.244	ug/L			04/24/14 05:06	2
1,2,4-Trichlorobenzene	ND		1.00	0.254	ug/L			04/24/14 05:06	2
1,2,4-Trimethylbenzene	ND		1.00	0.180	ug/L			04/24/14 05:06	2
1,2-Dibromo-3-Chloropropane	ND		1.00	0.420	ug/L			04/24/14 05:06	2
1,2-Dibromoethane	ND		1.00	0.280	ug/L			04/24/14 05:06	2
1,2-Dichlorobenzene	ND		1.00	0.320	ug/L			04/24/14 05:06	2
1,2-Dichloroethane	ND		1.00	0.280	ug/L			04/24/14 05:06	2
1,2-Dichloropropane	ND		1.00	0.220	ug/L			04/24/14 05:06	2
1,3,5-Trimethylbenzene	ND		1.00	0.0860	ug/L			04/24/14 05:06	2
1,3-Dichlorobenzene	ND		1.00	0.260	ug/L			04/24/14 05:06	2
1,3-Dichloropropane	ND		1.00	0.300	ug/L			04/24/14 05:06	2
1,4-Dichlorobenzene	ND		1.00	0.260	ug/L			04/24/14 05:06	2
2,2-Dichloropropane	ND		1.00	0.0960	ug/L			04/24/14 05:06	2
2-Butanone (MEK)	ND		5.00	0.498	ug/L			04/24/14 05:06	2
2-Chlorotoluene	ND		1.00	0.100	ug/L			04/24/14 05:06	2
2-Hexanone	ND		5.00	0.462	ug/L			04/24/14 05:06	2
4-Chlorotoluene	ND		1.00	0.100	ug/L			04/24/14 05:06	2
4-Isopropyltoluene	ND		1.00	0.126	ug/L			04/24/14 05:06	2
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.524	ug/L			04/24/14 05:06	2
Acetone	ND		5.00	1.07	ug/L			04/24/14 05:06	2
Acrylonitrile	ND		20.0	0.952	ug/L			04/24/14 05:06	2
Allyl chloride	ND		1.00	0.182	ug/L			04/24/14 05:06	2
Benzene	**0.451**	**J**	1.00	0.260	ug/L			04/24/14 05:06	2
Bromobenzene	ND		1.00	0.260	ug/L			04/24/14 05:06	2
Bromochloromethane	ND		1.00	0.220	ug/L			04/24/14 05:06	2
Dichlorobromomethane	ND		1.00	0.280	ug/L			04/24/14 05:06	2
Bromoform	ND		1.00	0.260	ug/L			04/24/14 05:06	2
Bromomethane	ND		1.00	0.102	ug/L			04/24/14 05:06	2
Carbon disulfide	**0.663**	**J**	1.00	0.300	ug/L			04/24/14 05:06	2
Carbon tetrachloride	ND		1.00	0.106	ug/L			04/24/14 05:06	2
Chlorobenzene	ND		1.00	0.240	ug/L			04/24/14 05:06	2
Chlorodibromomethane	ND		1.00	0.320	ug/L			04/24/14 05:06	2
Chloroethane	ND		1.00	0.140	ug/L			04/24/14 05:06	2
Chloroform	ND		1.00	0.280	ug/L			04/24/14 05:06	2
Chloromethane	**0.177**	**J**	1.00	0.126	ug/L			04/24/14 05:06	2
cis-1,2-Dichloroethene	**20.8**		1.00	0.240	ug/L			04/24/14 05:06	2
cis-1,3-Dichloropropene	ND		1.00	0.160	ug/L			04/24/14 05:06	2
Dibromomethane	ND		1.00	0.340	ug/L			04/24/14 05:06	2
Dichlorodifluoromethane	ND		1.00	0.140	ug/L			04/24/14 05:06	2
Ethyl ether	ND		1.00	0.230	ug/L			04/24/14 05:06	2

Client Sample ID: CC-03 (Raw)

Lab Sample ID: 490-51218-1

Date Collected: 04/17/14 12:50

Matrix: Water

Date Received: 04/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.00	0.220	ug/L			04/24/14 05:06	2
Hexachlorobutadiene	ND		1.00	0.220	ug/L			04/24/14 05:06	2
Iodomethane	ND		1.00	0.300	ug/L			04/24/14 05:06	2
Isopropylbenzene	ND		1.00	0.106	ug/L			04/24/14 05:06	2
Methyl tert-butyl ether	**0.423**	**J**	1.00	0.240	ug/L			04/24/14 05:06	2
Methylene Chloride	ND		1.00	0.500	ug/L			04/24/14 05:06	2
m-Xylene & p-Xylene	ND		2.00	0.174	ug/L			04/24/14 05:06	2
Naphthalene	ND		1.00	0.120	ug/L			04/24/14 05:06	2
n-Butylbenzene	ND		1.00	0.162	ug/L			04/24/14 05:06	2
N-Propylbenzene	ND		1.00	0.114	ug/L			04/24/14 05:06	2
o-Xylene	ND		1.00	0.0880	ug/L			04/24/14 05:06	2
sec-Butylbenzene	ND		1.00	0.136	ug/L			04/24/14 05:06	2
Styrene	ND		1.00	0.0880	ug/L			04/24/14 05:06	2
t-Butanol	ND		20.0	4.91	ug/L			04/24/14 05:06	2
tert-Butylbenzene	ND		1.00	0.120	ug/L			04/24/14 05:06	2
Tetrachloroethene	ND		1.00	0.134	ug/L			04/24/14 05:06	2
Toluene	ND		1.00	0.200	ug/L			04/24/14 05:06	2
trans-1,2-Dichloroethene	**0.545**	**J**	1.00	0.260	ug/L			04/24/14 05:06	2
trans-1,3-Dichloropropene	ND		1.00	0.200	ug/L			04/24/14 05:06	2
trans-1,4-Dichloro-2-butene	ND		5.00	2.50	ug/L			04/24/14 05:06	2
Trichloroethene	**1.46**		1.00	0.120	ug/L			04/24/14 05:06	2
Trichlorofluoromethane	ND		1.00	0.0880	ug/L			04/24/14 05:06	2
Vinyl acetate	ND		5.00	0.344	ug/L			04/24/14 05:06	2
Vinyl chloride	ND		1.00	0.118	ug/L			04/24/14 05:06	2
Xylenes, Total	ND		2.00	0.400	ug/L			04/24/14 05:06	2
Trihalomethanes, Total	ND		4.00	2.00	ug/L			04/24/14 05:06	2
Dichlorofluoromethane	ND		1.00	0.268	ug/L			04/24/14 05:06	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*04/24/14 05:06*	*2*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*04/24/14 05:06*	*2*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.137**		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 17:03	1
Manganese	**0.0435**	**B**	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 17:03	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51218-1

Client Sample ID: CC-03 (Post Filter)

Lab Sample ID: 490-51218-2

Date Collected: 04/17/14 12:55

Matrix: Water

Date Received: 04/18/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.0977		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 17:17	1
Manganese	0.0436	B	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 17:17	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51218-1

Client Sample ID: CC-03 (GAC 1)

Lab Sample ID: 490-51218-3

Date Collected: 04/17/14 13:00
Date Received: 04/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 05:31	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 05:31	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 05:31	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 05:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 05:31	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 05:31	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 05:31	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 05:31	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 05:31	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 05:31	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 05:31	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 05:31	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 05:31	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 05:31	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 05:31	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 05:31	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 05:31	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 05:31	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 05:31	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 05:31	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 05:31	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 05:31	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 05:31	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 05:31	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 05:31	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 05:31	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 05:31	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 05:31	1
Acetone	ND		2.50	0.537	ug/L			04/24/14 05:31	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 05:31	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 05:31	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 05:31	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 05:31	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 05:31	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 05:31	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 05:31	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 05:31	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 05:31	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 05:31	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 05:31	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 05:31	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 05:31	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 05:31	1
Chloromethane	**0.217**	**J**	0.500	0.0629	ug/L			04/24/14 05:31	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 05:31	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 05:31	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 05:31	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 05:31	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 05:31	1

Client Sample ID: CC-03 (GAC 1)

Lab Sample ID: 490-51218-3

Date Collected: 04/17/14 13:00

Matrix: Water

Date Received: 04/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 05:31	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 05:31	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 05:31	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 05:31	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 05:31	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/24/14 05:31	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 05:31	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 05:31	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 05:31	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 05:31	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 05:31	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 05:31	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 05:31	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 05:31	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 05:31	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 05:31	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 05:31	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 05:31	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 05:31	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 05:31	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 05:31	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 05:31	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 05:31	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 05:31	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 05:31	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 05:31	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 05:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*04/24/14 05:31*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*04/24/14 05:31*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51218-1

Client Sample ID: CC-03 (GAC 2)

Lab Sample ID: 490-51218-4

Date Collected: 04/17/14 13:05
Date Received: 04/18/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/24/14 05:56	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/24/14 05:56	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/24/14 05:56	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/24/14 05:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/24/14 05:56	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/24/14 05:56	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/24/14 05:56	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/24/14 05:56	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/24/14 05:56	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/24/14 05:56	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/24/14 05:56	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/24/14 05:56	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/24/14 05:56	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/24/14 05:56	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/24/14 05:56	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/24/14 05:56	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/24/14 05:56	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/24/14 05:56	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 05:56	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/24/14 05:56	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/24/14 05:56	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/24/14 05:56	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/24/14 05:56	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 05:56	1
2-Hexanone	ND		2.50	0.231	ug/L			04/24/14 05:56	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/24/14 05:56	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/24/14 05:56	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/24/14 05:56	1
Acetone	ND		2.50	0.537	ug/L			04/24/14 05:56	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/24/14 05:56	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/24/14 05:56	1
Benzene	ND		0.500	0.130	ug/L			04/24/14 05:56	1
Bromobenzene	ND		0.500	0.130	ug/L			04/24/14 05:56	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/24/14 05:56	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/24/14 05:56	1
Bromoform	ND		0.500	0.130	ug/L			04/24/14 05:56	1
Bromomethane	ND		0.500	0.0510	ug/L			04/24/14 05:56	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/24/14 05:56	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/24/14 05:56	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/24/14 05:56	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/24/14 05:56	1
Chloroethane	ND		0.500	0.0700	ug/L			04/24/14 05:56	1
Chloroform	ND		0.500	0.140	ug/L			04/24/14 05:56	1
Chloromethane	**0.379**	**J**	0.500	0.0629	ug/L			04/24/14 05:56	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/24/14 05:56	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/24/14 05:56	1
Dibromomethane	ND		0.500	0.170	ug/L			04/24/14 05:56	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/24/14 05:56	1
Ethyl ether	ND		0.500	0.115	ug/L			04/24/14 05:56	1

Client Sample ID: CC-03 (GAC 2)

Lab Sample ID: 490-51218-4

Date Collected: 04/17/14 13:05

Matrix: Water

Date Received: 04/18/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			04/24/14 05:56	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/24/14 05:56	1
Iodomethane	ND		0.500	0.150	ug/L			04/24/14 05:56	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/24/14 05:56	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/24/14 05:56	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/24/14 05:56	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/24/14 05:56	1
Naphthalene	ND		0.500	0.0600	ug/L			04/24/14 05:56	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/24/14 05:56	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/24/14 05:56	1
o-Xylene	ND		0.500	0.0440	ug/L			04/24/14 05:56	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/24/14 05:56	1
Styrene	ND		0.500	0.0440	ug/L			04/24/14 05:56	1
t-Butanol	ND		10.0	2.46	ug/L			04/24/14 05:56	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/24/14 05:56	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/24/14 05:56	1
Toluene	ND		0.500	0.100	ug/L			04/24/14 05:56	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/24/14 05:56	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/24/14 05:56	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/24/14 05:56	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/24/14 05:56	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/24/14 05:56	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/24/14 05:56	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/24/14 05:56	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/24/14 05:56	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/24/14 05:56	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/24/14 05:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*04/24/14 05:56*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*04/24/14 05:56*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-177850/6
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			04/23/14 21:13	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			04/23/14 21:13	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			04/23/14 21:13	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			04/23/14 21:13	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			04/23/14 21:13	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			04/23/14 21:13	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			04/23/14 21:13	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			04/23/14 21:13	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			04/23/14 21:13	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			04/23/14 21:13	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			04/23/14 21:13	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			04/23/14 21:13	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			04/23/14 21:13	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			04/23/14 21:13	1
2-Hexanone	ND		2.50	0.231	ug/L			04/23/14 21:13	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			04/23/14 21:13	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			04/23/14 21:13	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			04/23/14 21:13	1
Acetone	0.5443	J	2.50	0.537	ug/L			04/23/14 21:13	1
Acrylonitrile	ND		10.0	0.476	ug/L			04/23/14 21:13	1
Allyl chloride	ND		0.500	0.0910	ug/L			04/23/14 21:13	1
Benzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromobenzene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromochloromethane	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			04/23/14 21:13	1
Bromoform	ND		0.500	0.130	ug/L			04/23/14 21:13	1
Bromomethane	ND		0.500	0.0510	ug/L			04/23/14 21:13	1
Carbon disulfide	ND		0.500	0.150	ug/L			04/23/14 21:13	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			04/23/14 21:13	1
Chlorobenzene	ND		0.500	0.120	ug/L			04/23/14 21:13	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			04/23/14 21:13	1
Chloroethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1
Chloroform	ND		0.500	0.140	ug/L			04/23/14 21:13	1
Chloromethane	ND		0.500	0.0629	ug/L			04/23/14 21:13	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			04/23/14 21:13	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			04/23/14 21:13	1
Dibromomethane	ND		0.500	0.170	ug/L			04/23/14 21:13	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			04/23/14 21:13	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-177850/6
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			04/23/14 21:13	1
Ethylbenzene	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			04/23/14 21:13	1
Iodomethane	ND		0.500	0.150	ug/L			04/23/14 21:13	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			04/23/14 21:13	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			04/23/14 21:13	1
Methylene Chloride	ND		0.500	0.250	ug/L			04/23/14 21:13	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			04/23/14 21:13	1
Naphthalene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			04/23/14 21:13	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			04/23/14 21:13	1
o-Xylene	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			04/23/14 21:13	1
Styrene	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
t-Butanol	ND		10.0	2.46	ug/L			04/23/14 21:13	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			04/23/14 21:13	1
Toluene	ND		0.500	0.100	ug/L			04/23/14 21:13	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			04/23/14 21:13	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			04/23/14 21:13	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			04/23/14 21:13	1
Trichloroethene	ND		0.500	0.0600	ug/L			04/23/14 21:13	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			04/23/14 21:13	1
Vinyl acetate	ND		2.50	0.172	ug/L			04/23/14 21:13	1
Vinyl chloride	ND		0.500	0.0590	ug/L			04/23/14 21:13	1
Xylenes, Total	ND		1.00	0.200	ug/L			04/23/14 21:13	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			04/23/14 21:13	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			04/23/14 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*04/23/14 21:13*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*04/23/14 21:13*	*1*

Lab Sample ID: LCS 480-177850/4
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.289		ug/L		107	70 - 130
1,1,1-Trichloroethane	4.00	4.198		ug/L		105	70 - 130
1,1,2,2-Tetrachloroethane	4.00	4.092		ug/L		102	70 - 130
1,1,2-Trichloroethane	4.00	4.029		ug/L		101	70 - 130
1,1-Dichloroethane	4.00	4.182		ug/L		105	70 - 130
1,1-Dichloroethene	4.00	4.076		ug/L		102	70 - 130
1,1-Dichloropropene	4.00	4.456		ug/L		111	70 - 130
1,2,3-Trichlorobenzene	4.00	3.817		ug/L		95	70 - 130
1,2,3-Trichloropropane	4.00	4.109		ug/L		103	70 - 130
1,2,4-Trichlorobenzene	4.00	3.924		ug/L		98	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-177850/4
Matrix: Water
Analysis Batch: 177850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	4.155		ug/L		104	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.306		ug/L		108	70 - 130
1,2-Dibromoethane	4.00	4.035		ug/L		101	70 - 130
1,2-Dichlorobenzene	4.00	4.080		ug/L		102	70 - 130
1,2-Dichloroethane	4.00	4.081		ug/L		102	70 - 130
1,2-Dichloropropane	4.00	4.099		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	4.00	4.140		ug/L		103	70 - 130
1,3-Dichlorobenzene	4.00	4.036		ug/L		101	70 - 130
1,3-Dichloropropane	4.00	4.039		ug/L		101	70 - 130
1,4-Dichlorobenzene	4.00	4.102		ug/L		103	70 - 130
2,2-Dichloropropane	4.00	4.264		ug/L		107	70 - 130
2-Butanone (MEK)	20.0	21.99		ug/L		110	70 - 130
2-Chlorotoluene	4.00	4.150		ug/L		104	70 - 130
2-Hexanone	20.0	22.45		ug/L		112	70 - 130
4-Chlorotoluene	4.00	4.131		ug/L		103	70 - 130
4-Isopropyltoluene	4.00	4.200		ug/L		105	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	21.52		ug/L		108	70 - 130
Acetone	20.0	25.71		ug/L		129	70 - 130
Benzene	4.00	4.092		ug/L		102	70 - 130
Bromobenzene	4.00	4.084		ug/L		102	70 - 130
Bromochloromethane	4.00	4.182		ug/L		105	70 - 130
Dichlorobromomethane	4.00	4.142		ug/L		104	70 - 130
Bromoform	4.00	4.045		ug/L		101	70 - 130
Bromomethane	4.00	5.006		ug/L		125	70 - 130
Carbon disulfide	4.00	4.086		ug/L		102	70 - 130
Carbon tetrachloride	4.00	4.372		ug/L		109	70 - 130
Chlorobenzene	4.00	4.033		ug/L		101	70 - 130
Chlorodibromomethane	3.92	4.146		ug/L		106	70 - 130
Chloroethane	4.00	4.334		ug/L		108	70 - 130
Chloroform	4.00	4.130		ug/L		103	70 - 130
Chloromethane	4.00	4.105		ug/L		103	70 - 130
cis-1,2-Dichloroethene	4.00	4.164		ug/L		104	70 - 130
cis-1,3-Dichloropropene	4.00	4.397		ug/L		110	70 - 130
Dibromomethane	4.00	4.075		ug/L		102	70 - 130
Dichlorodifluoromethane	4.00	4.766		ug/L		119	70 - 130
Ethylbenzene	4.00	4.129		ug/L		103	70 - 130
Hexachlorobutadiene	4.00	3.599		ug/L		90	70 - 130
Isopropylbenzene	4.00	4.178		ug/L		104	70 - 130
Methyl tert-butyl ether	4.00	4.288		ug/L		107	70 - 130
Methylene Chloride	4.00	4.018		ug/L		100	70 - 130
Naphthalene	4.00	4.199		ug/L		105	70 - 130
n-Butylbenzene	4.00	4.230		ug/L		106	70 - 130
N-Propylbenzene	4.00	4.194		ug/L		105	70 - 130
sec-Butylbenzene	4.00	4.237		ug/L		106	70 - 130
Styrene	4.00	4.129		ug/L		103	70 - 130
tert-Butylbenzene	4.00	4.199		ug/L		105	70 - 130
Tetrachloroethene	4.00	4.175		ug/L		104	70 - 130
Toluene	4.00	4.110		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-177850/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	4.214		ug/L		105	70 - 130
trans-1,3-Dichloropropene	4.00	4.724		ug/L		118	70 - 130
Trichloroethene	4.00	4.174		ug/L		104	70 - 130
Trichlorofluoromethane	4.00	3.841		ug/L		96	70 - 130
Vinyl chloride	4.00	4.125		ug/L		103	70 - 130
Xylenes, Total	8.00	8.320		ug/L		104	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-177044/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		04/21/14 09:00	04/22/14 16:58	1
Manganese	0.0004300	J	0.00300	0.000400	mg/L		04/21/14 09:00	04/22/14 16:58	1

Lab Sample ID: LCS 480-177044/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.726		mg/L		97	85 - 115
Manganese	0.200	0.1989		mg/L		99	85 - 115

Lab Sample ID: 490-51218-1 MS — **Client Sample ID: CC-03 (Raw)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.137		10.0	9.950		mg/L		98	70 - 130
Manganese	0.0435	B	0.200	0.2414		mg/L		99	70 - 130

Lab Sample ID: 490-51218-1 MSD — **Client Sample ID: CC-03 (Raw)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 177717 — **Prep Batch: 177044**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.137		10.0	9.945		mg/L		98	70 - 130	0	20
Manganese	0.0435	B	0.200	0.2427		mg/L		100	70 - 130	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51218-1

GC/MS VOA

Analysis Batch: 177850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51218-1	CC-03 (Raw)	Total/NA	Water	524.2	
490-51218-3	CC-03 (GAC 1)	Total/NA	Water	524.2	
490-51218-4	CC-03 (GAC 2)	Total/NA	Water	524.2	
LCS 480-177850/4	Lab Control Sample	Total/NA	Water	524.2	
MB 480-177850/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 177044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51218-1	CC-03 (Raw)	Total/NA	Water	200.7	
490-51218-1 MS	CC-03 (Raw)	Total/NA	Water	200.7	
490-51218-1 MSD	CC-03 (Raw)	Total/NA	Water	200.7	
490-51218-2	CC-03 (Post Filter)	Total/NA	Water	200.7	
LCS 480-177044/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-177044/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 177717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-51218-1	CC-03 (Raw)	Total/NA	Water	200.7 Rev 4.4	177044
490-51218-1 MS	CC-03 (Raw)	Total/NA	Water	200.7 Rev 4.4	177044
490-51218-1 MSD	CC-03 (Raw)	Total/NA	Water	200.7 Rev 4.4	177044
490-51218-2	CC-03 (Post Filter)	Total/NA	Water	200.7 Rev 4.4	177044
LCS 480-177044/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	177044
MB 480-177044/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	177044

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51218-1

Client Sample ID: CC-03 (Raw)

Lab Sample ID: 490-51218-1
Date Collected: 04/17/14 12:50
Matrix: Water
Date Received: 04/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		2	25 mL	25 mL	177850	04/24/14 05:06	TRB	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	177044	04/21/14 09:00	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	177717	04/22/14 17:03	AMH	TAL BUF

Client Sample ID: CC-03 (Post Filter)

Lab Sample ID: 490-51218-2
Date Collected: 04/17/14 12:55
Matrix: Water
Date Received: 04/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	177044	04/21/14 09:00	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	177717	04/22/14 17:17	AMH	TAL BUF

Client Sample ID: CC-03 (GAC 1)

Lab Sample ID: 490-51218-3
Date Collected: 04/17/14 13:00
Matrix: Water
Date Received: 04/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 05:31	TRB	TAL BUF

Client Sample ID: CC-03 (GAC 2)

Lab Sample ID: 490-51218-4
Date Collected: 04/17/14 13:05
Matrix: Water
Date Received: 04/18/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	177850	04/24/14 05:56	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51218-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-51218-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14 *
California	NELAP	9	1168CA	10-31-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14 *
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-15
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	02-24-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-09-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	03-31-15
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14 *
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (002)	02-23-17
Tennessee	State Program	4	2008	02-23-17
Texas	NELAP	6	T104704077	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-15
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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	State Program	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	03-31-15
Illinois	NELAP	5	200003	09-30-14

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	01-31-15 *
Kentucky (DW)	State Program	4	90029	12-31-14
Kentucky (UST)	State Program	4	30	03-31-15
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-15
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	03-31-15
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	03-31-15
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	02-10-15
West Virginia DEP	State Program	3	252	05-31-14
Wisconsin	State Program	5	998310390	08-31-14

* Expired certification is currently pending renewal and is considered valid.

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: ARCADIS	Project Manager: Chuck Castellucci	Date: 4/17/14	Chain of Custody Number: 261428
Address: 200 Harvard Mills Sq. Suite 430	Telephone Number (Area Code)/Fax Number: 781-213-4962	Lab Number:	Page 1 of 1
City: Wakefield; State: MA; Zip Code: 01880	Site Contact: T Zuleuian	Lab Contact:	
Project Name and Location (State): MA000725 New Hampshire	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 524.2 VOC	Iron + Manganese	Special Instructions/ Conditions of Receipt
CC-03 (Raw)	4/17/14	1250		X					X	X			3	1	
CC-03 (Post Filter)	4/17/14	1255		X					X	X				1	
CC-03 (GAC 1)	4/17/14	1300		X					X	X			3		
CC-03 (GAC 2)	4/17/14	1305		X					X	X			3		

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By: ARCADIS	Date: 4/17/14	Time: 1645	1. Received By: TA BUFF.	Date: 4/18/14	Time: 0900
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments: #1 4.3

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51218-1

Login Number: 51218
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51218-1

Login Number: 51218
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 04/18/14 05:18 PM

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	4.3 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-51218-1

Login Number: 51218
List Number: 3
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 04/18/14 05:19 PM

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	4.3 C
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	
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	

NELSON ANALYTICAL LAB

490 E. Industrial Park Drive
Manchester, NH 03109
www.testNH.com

New Hampshire Environmental Lab Accreditation Program
NELAC Accreditation #NH1005

(603) 622-0200 phone
info@nelsonanalytical.com

REPORT OF ANALYSIS

Secondwind Water Systems
photos@secondwindwater.com
ALD@secondwindwater.com

103854

Date Collected: 5/02/14
Collected By: SECONDWIND
Date Received 5/02/14
Date Reported 5/05/14
Laboratory ID: 3405-00136-

Sample Description: TREATED WATER - ROBINSON, 40 CEDAR CREEK, BARRINGTON, NH

Temp rec'd: 6 oC-

PARAMETERS	RESULTS	ACCEPTABLE LIMIT	UNITS	DATE ANALYZED	TEST METHOD	TEST TYPE	TEST REMARKS
Total Coliform	ABSENT	ABSENT	/100ml	5/02/14	9223B	PRI	ACCEPTABLE-
E. coli	ABSENT	ABSENT	/100ml	5/02/14	9223B	PRI	ACCEPTABLE-

Sample Description: RAW WATER - ROBINSON, 40 CEDAR CREEK, BARRINGTON, NH

PARAMETERS	RESULTS	ACCEPTABLE LIMIT	UNITS	DATE ANALYZED	TEST METHOD	TEST TYPE	TEST REMARKS
Total Coliform	ABSENT	ABSENT	/100ml	5/02/14	9223B	PRI	ACCEPTABLE-
E. coli	ABSENT	ABSENT	/100ml	5/02/14	9223B	PRI	ACCEPTABLE-

TEST TYPES: PRI: EPA Primary - a regulated health related test
SEC: EPA Secondary - a non-health related Aesthetic test-

Respectfully Submitted

Andrew O. Nelson, Laboratory Director-

NOTE: mg/l = ppm, ug/l = ppb. "<" denotes "less than". This report of analysis may not be modified in any way, or reproduced except in full, without written approval from Nelson Analytical, LLC. Results as reported above relate only to samples as submitted, unless specifically noted otherwise. Nelson Analytical,LLC is currently accredited by the New Hampshire Environmental Lab Accreditation Program for the following tests on drinking water: Total Coliform/E.coli,Arsenic,Copper,Iron,Lead,Manganese,Aluminum,Antimony,Barium,Beryllium,Cadmium,Chromium,Nickel, Selenium,Silver,Vanadium,Zinc,Sodium,Chloride,Fluoride,Nitrite,pH,Alkalinity,Hardness,Calcium,Magnesium,Conductivity. Sampling performed by the lab is according to the lab's document entitled "Water Sampling Instructions". NELAC standards require pH & chlorine to be tested immediately after sample collection. Samples will be tested as quickly as laboratory operations allow. More information can be found at www.epa.gov & www.des.state.nh.us & www.nelac-institute.org
SUB–Analysis has been Subcontracted: SB1-NH1012;SB2–NH2530;SB3–NH2206/NH2003;SB4–NH2955;SB5-NH3000;SB6-NH1004;SB7-NH2018;SB8-NH1002;S10-NH2980;S11-NH1007

ACCREDITED IN ACCORDANCE WITH nelac

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-52427-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
5/14/2014 1:54:50 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52427-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-52427-1	CC-06 (GAC-in) M3NA3	Water	05/05/14 09:15	05/06/14 10:15
490-52427-2	CC-06 (Raw) M3NA4	Water	05/05/14 09:15	05/06/14 10:15

Job ID: 490-52427-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-52427-1

Comments
Radon was analyzed by TestAmerica in Richland, WA.

Receipt
The samples were received on 5/6/2014 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 2.4º C.

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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)

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52427-1

Method	Method Description	Protocol	Laboratory
Radon	General Sub Contract Method	NONE	TAL RCH

Protocol References:

NONE = NONE

Laboratory References:

TAL RCH = TestAmerica Richland, 2800 George Washington Way, Richland, WA 99352, TEL (509)375-3131

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52427-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

Laboratory: TestAmerica Richland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA	IHLAP		187436	08-01-15
Arizona	State Program	9	AZ0709	07-02-14
California	State Program	9	E87829	05-31-14
Colorado	State Program	8	N/A	09-30-14
Florida	NELAP	4	E87829	06-30-14
Hawaii	State Program	9	N/A	01-09-15
L-A-B	DoD ELAP		L2291	06-30-17
Michigan	State Program	5	N/A	08-13-14
Nevada	State Program	9	WA011162014	07-31-14
New Mexico	State Program	6	WA00023	01-09-15
New York	NELAP	2	12016	03-31-15
Oregon	NELAP	10	WA100002	01-09-15
Pennsylvania	NELAP	3	68-04849	08-31-14
Tennessee	State Program	4	TN04011	08-13-14
Texas	NELAP	6	T104704493-10-1	12-31-14
USDA	Federal		P330-11-00043	03-06-17
Utah	NELAP	8	QUAN8	01-31-15
Virginia	State Program	3	00100	06-30-14
Washington	State Program	10	WA01116	08-14-14
Washington (CLIA)	State Program	10	50D0661626	06-30-15

Analytical Data Package Prepared For

TestAmerica-Nashville

Radiochemical Analysis By

TestAmerica Inc

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Assigned Laboratory Code: TARL

Data Package Contains _____ Pages

Report No.: 60154

Results in this report relate only to the sample(s) analyzed.

SDG No.	Order No.	Client Sample ID (List Order)	Lot-Sa No.	Work Order	Report DB ID	Batch No.
48174		CC-06 (GAC-in)	J4E060413-1	M3NA31AA	9M3NA310	4126061
		CC-06 (RAW)	J4E060413-2	M3NA41AA	9M3NA410	4126061

Certificate of Analysis

May 13, 2014

TestAmerica – Nashville
2960 Foster Creighton Road
Nashville, TN 37204

Attention: Shali Brown

Date Received by Lab	:	May 6, 2014
Sample Number/Matrix	:	Two (2) Water
SDG Number	:	48174
Chain Of Custody	:	211243
Project Name	:	Tibbetts Road Site – NH
Job #	:	490-52427-1

CASE NARRATIVE

I. Introduction

On May 6, 2014, two water sample was received at the TestAmerica Richland laboratory for radiochemical analysis. Upon receipt, the sample was assigned the TestAmerica identification number as described on the cover page of the Analytical Data Package report form. The sample was assigned to Lot Number J4E060413

II. Sample Receipt

The sample was received in good condition and no anomalies were noted during sample check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information; analytical results and the appropriate associated statistical uncertainties.

The analyses requested were:

Liquid Scintillation Counting
Radon 222 by method RL-LSC-019

IV. Quality Control

The analytical result for each analysis performed includes a minimum of one laboratory control sample (LCS), and one reagent blank sample analysis. Any exceptions have been noted in the "Comments" section.

V. Comments

Liquid Scintillation Counting

Radon 222 by method RL-LSC-019:
The LCS, batch blank, sample and sample duplicate results are within analytical acceptance limits.

I certify that this Certificate of Analysis is in compliance with the SOW and/or NELAC, both technically and for completeness, for other than the conditions detailed above. The Laboratory Manager or a designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Reviewed and approved:

_____
Robin Ebert-Mays
Project Manager

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**TestAmerica Richland's SOP No.**
EPA 901.1	Cs-134, I-131	RL-GAM-001
EPA 900.0	Alpha & Beta	RL-GPC-001
EPA 00-02	Gross Alpha (Coprecipitation)	RL-GPC-002
EPA 903.0	Total Alpha Radium (Ra-226)	RL-RA-002
EPA 903.1	Ra-226	RL-RA-001
EPA 904.0	Ra-228	RL-RA-001
EPA 905.0	Sr-89/90	RL-GPC-003
ASTM D5174	Uranium	RL-KPA-003
EPA 906.0	Tritium	RL-LSC-005

Results in this report relate only to the sample(s) analyzed.

Uncertainty Estimation

TestAmerica Richland has adopted the internationally accepted approach to estimating uncertainties described in “NIST Technical Note 1297, 1994 Edition”. The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/?n), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or TestAmerica.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) ***u_c – Combined Uncertainty.***	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, *u_c the combined uncertainty*. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or TestAmerica "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2$ + $TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by TestAmerica upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

Sample Results Summary

Date: 13-May-14

TestAmerica Inc TARL

Ordered by Method, Batch No., Client Sample ID.

Report No. : 60154 **SDG No:** 48174

Batch	Client Id Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	MDL	CRDL	RER2
4126061 E913.0									
CC-06 (GAC-in)									
	M3NA31AA	Rn-222	3.96E+01 +- 1.7E+01	J	pCi/L	100%	3.06E+01	5.00E+01	
CC-06 (GAC-in) DUP									
	M3NA31AC	Rn-222	3.10E+01 +- 1.6E+01	U	pCi/L	100%	3.10E+01	5.00E+01	1.6
CC-06 (RAW)									
	M3NA41AA	Rn-222	1.25E+04 +- 7.1E+02		pCi/L	100%	3.14E+01	5.00E+01	

No. of Results: 3

TestAmerica Inc

rptTALRchSaSummary2 V5.3.2 A2002

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.

J Qual - No U or < qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

QC Results Summary

TestAmerica Inc TARL

Ordered by Method, Batch No, QC Type,.

Date: 13-May-14

Report No. : 60154

SDG No.: 48174

Batch Work Order	Parameter	Result +- Uncertainty (2s)	Qual	Units	Tracer Yield	LCS Recovery	Bias	MDL
E913.0								
4126061 BLANK QC,								
M3NDT1AA	Rn-222	2.41E+01 +- 1.2E+01	U	pCi/L	100%			2.41E+01
4126061 LCS,								
M3NDT1AE	Rn-222	4.76E+03 +- 2.8E+02		pCi/L	100%	84%	-0.2	2.57E+01
M3NDT1AC	Rn-222	4.41E+03 +- 2.6E+02		pCi/L	100%	82%	-0.2	2.44E+01

No. of Results: 3

TestAmerica Inc

rptSTLRchQcSummary V5.3.2 A2002

Bias - (Result/Expected)-1 as defined by ANSI N13.30.

U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 13-May-14

Lab Name:	**TestAmerica Inc**	**SDG:**	48174	**Collection Date:**	5/5/2014 9:15:00 AM
Lot-Sample No.:	**J4E060413-1**	**Report No. :**	60154	**Received Date:**	5/6/2014 10:15:00 AM
Client Sample ID:	**CC-06 (GAC-in)**	**COC No. :**		**Matrix:**	WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4126061	E913.0			**Work Order:**	M3NA31AA		**Report DB ID:**	9M3NA310				
Rn-222	**3.96E+01**	J	1.4E+01	1.7E+01	3.06E+01	pCi/L	100%	*(1.3)*	5/7/14 01:22 p		0.01	LSC9
						1.46E+01	5.00E+01	*(4.7)*			L	

No. of Results: 1 **Comments:**

TestAmerica Inc
rptSTLRchSample
V5.3.2 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U or < qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM I

SAMPLE RESULTS

Date: 13-May-14

Lab Name:	**TestAmerica Inc**	**SDG:**	48174	**Collection Date:**	5/5/2014 9:13:00 AM
Lot-Sample No.:	**J4E060413-2**	**Report No. :**	60154	**Received Date:**	5/6/2014 10:15:00 AM
Client Sample ID:	**CC-06 (RAW)**	**COC No. :**		**Matrix:**	WATER

Ordered by Client Sample ID, Batch No.

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, Lc	Yield CRDL(RL)	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4126061	E913.0			**Work Order:**	M3NA41AA		**Report DB ID:**	9M3NA410				
Rn-222	**1.25E+04**		1.1E+02	7.1E+02	3.14E+01	pCi/L	100%	*(397.7)*	5/7/14 04:51 p		0.01	LSC9
						1.50E+01	5.00E+01	*(35.2)*			L	

No. of Results: 1 **Comments:**

TestAmerica Inc
rptSTLRchSample
V5.3.2 A2002

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U or < qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

Date: 13-May-14

DUPLICATE RESULTS

Lab Name:	**TestAmerica Inc**	**SDG:**	48174	**Collection Date:**	5/5/2014 9:15:00 AM
Lot-Sample No.:	**J4E060413-1**	**Report No. :**	60154	**Received Date:**	5/6/2014 10:15:00 AM
Client Sample ID:	**CC-06 (GAC-in) DUP**	**COC No. :**		**Matrix:**	WATER

Parameter	Result, Orig Rst	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Action Lev	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4126061	E913.0			**Work Order:** M3NA31AC		**Report DB ID:** M3NA31CR			**Orig Sa DB ID:** 9M3NA310			
Rn-222	3.10E+01	U	1.4E+01	1.6E+01	3.10E+01	pCi/L	100%	0.68	5/7/14 03:06 p		0.01	LSC9
	3.96E+01	J	**RER2 1.6**			5.00E+01		(2.6)			L	

No. of Results: 1 **Comments:**

RER2 - Replicate Error Ratio = (S-D)/[sqrt(sq(TPUs)+sq(TPUd))] as defined by ICPT BOA.
MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
J Qual - No U or < qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

BLANK RESULTS

Date: 13-May-14

Lab Name: TestAmerica Inc

SDG: 48174

Matrix: WATER

Report No. : 60154

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL, Lc	Rpt Unit, CRDL	Yield	Rst/MDL, Rst/TotUcert	Analysis, Prep Date	Total Sa Size	Aliquot Size	Primary Detector
Batch: 4126061	E913.0			**Work Order:**	M3NDT1AA		**Report DB ID:**	M3NDT1AB				
Rn-222	2.41E+01	U	9.8E+00	1.2E+01	2.41E+01	pCi/L	100%	-0.22	5/7/14 09:52 a		0.01	LSC9
					1.15E+01	5.00E+01		-0.92			L	

No. of Results: 1 **Comments:**

MDC|MDA,Lc - Detection, Decision Level based on instrument background or blank, adjusted by the sample Efficiency, Yield, and Volume.
U Qual - Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

FORM II

LCS RESULTS

Date: 13-May-14

Lab Name: TestAmerica Inc

SDG: 48174

Matrix: WATER

Report No. : 60154

Parameter	Result	Qual	Count Error (2 s)	Total Uncert(2 s)	MDL	Report Unit	Yield	Expected	Expected Uncert	Recovery, Bias	Analysis, Prep Date	Aliquot Size	Primary Detector
Batch: 4126061	E913.0			**Work Order:**	M3NDT1AC		**Report DB ID:**	M3NDT1CS					
Rn-222	4.41E+03		5.9E+01	2.6E+02	2.44E+01	pCi/L	100%	5.36E+03	5.47E+01	82%	5/7/14 11:37 a	0.01	LSC9
							Rec Limits:	75	125	-0.2		L	
Batch: 4126061	E913.0			**Work Order:**	M3NDT1AE		**Report DB ID:**	M3NDT1ES					
Rn-222	4.76E+03		6.3E+01	2.8E+02	2.57E+01	pCi/L	100%	5.67E+03	5.79E+01	84%	5/7/14 06:36 p	0.01	LSC9
							Rec Limits:	75	125	-0.2		L	

No. of Results: 2 **Comments:**

TestAmerica Inc **Bias** **- (Result/Expected)-1 as defined by ANSI N13.30.**

rptSTLRchLcs
V5.3.2 A2002

[redacted]

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt _____

Drinking Water? Yes ☒ No ☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Job# 490-52427-1

Client: ARCADIS	Project Manager: Chuck Castelluccio	Date: 5/5/14	Chain of Custody Number: 211243
Address: One Executive Drive, Ste 303	Telephone Number (Area Code)/Fax Number: 781-213-4962	Lab Number:	Page 1 of 1
City: Chelmsford; State: MA; Zip Code: 01824	Site Contact: Ian Martz	Lab Contact: Shali Brown	
Project Name and Location (State): Tibbetts Road Site, NH	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): Radon 222	Special Instructions/ Conditions of Receipt
CC-06 (GAC-In) M3NA3	5/5/14	0915		X			2						X	
CC-06 (Raw) M3NA4	5/5/14	0913		X			2						X	

J4E060413
SDG-49174
due 6-3-14

J4E060413

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	5/5/14	1400	1. Received By: J. Bock TAL	5-6-14	1015
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Sample Check-in List

Date/Time Received: 5-6-14 | 1015 Container GM Screen Result: (Airlock) 40 cpm Initials [B]
Sample GM Screen Result (Sample Receiving) 40 cpm Initials [B]

Client: TA-NTN SDG #: 48174 SAF #: _____ NA [B]

Lot Number: J4E060413

Chain of Custody # 211243

Shipping Container ID or Air Bill Number: Ced Ex - 1 cooler NA [B]

Samples received inside shipping container/cooler/box Yes [B] Continue with 1 through 4. Initial appropriate response.
No [ ] Go to 5, add comment to #16.

1. Custody Seals on shipping container intact? Yes [B] No [ ] No Custody Seal [ ]
2. Custody Seals dated and signed? Yes [B] No [ ] No Custody Seal [ ]
3. Cooler temperature: 2.4 °C NA [ ]
4. Vermiculite/packing materials is NA [ ] Wet [B] Dry [ ] IC

Item 5 through 16 for samples. Initial appropriate response.

5. Chain of Custody record present? Yes [B] No [ ]
6. Number of samples received (Each sample may contain multiple bottles): 2
7. Containers received: 4 x Vial 40
8. Sample holding times exceeded? NA [ ] Yes [B] ? No [B] See #14
9. Samples have: ____tape ____hazard labels ____custody seals [B] appropriate sample labels
10. Matrix: ____A (FLT, Wipe, Solid, Soil) [B] I (Water) ____S (Air, Niosh 7400) ____T (Biological, Ni-63)
11. Samples:
    [B] are in good condition ____are leaking ____are broken
    ____have air bubbles (Only for samples requiring no head space) ____Other _____
12. Sample pH appropriate for analysis requested Yes [ ] No [ ] NA [B]
    (If acidification is necessary go to pH area & document sample ID, initial pH, amount of HNO_3 added and pH after addition on table)
13. Were any anomalies identified in sample receipt? Yes [B] No [ ]
14. Description of anomalies (include sample numbers): NA [ ] Sample Dates on Bottles are 5-2-14, which would put them out of the 72hr. hold time.
15. Sample Location, Sample Collector Listed on COC? * Yes [ ] No [B]
    *For documentation only. No corrective action needed.
16. Additional Information: N/A

[ ] Client/Courier denied temperature check. [ ] Client/Courier unpack cooler.

Sample Check-in List completed by Sample Custodian:
Signature: Susan Beck Date: 5-6-14

Client Notification needed? Yes [ ] No [ ] Date: _____
By: _____
Person contacted: _____

[X] No action necessary; process as is

Project Manager Erika Ord Date 5-7-14

LS-023 Rev. 17, 05/13

Page 1 of 1

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☒ No ☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: ARCADIS	Project Manager: Chuck Castelluccio	Date: 5/5/14	Chain of Custody Number: 211243
Address: One Executive Drive, Ste 303	Telephone Number (Area Code)/Fax Number: 781-213-4962	Lab Number:	Page 1 of 1
City: Chelmsford; State: MA; Zip Code: 01824	Site Contact: Ian Martz	Lab Contact: Shali Brown	
Project Name and Location (State): Tibbetts Road Site, NH	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.:			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): Radon 222	Special Instructions/ Conditions of Receipt
CC-06 (GAC-in) M3NA3	5/5/14	0915		X			2						X	
CC-06 (Raw) M3NA4	5/5/14	0913		X			2						X	
J4E060413														
SDG-48174														
due 6-3-14														

J4E060413

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☒ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: [signature]	5/5/14	1400	1. Received By: J. Bock J. Bock TALR	5-6-14	1015
2. Relinquished By:			2. Received By:		
3. Relinquished By:			3. Received By:		

Comments:

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-52278-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
5/14/2014 4:17:14 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-52278-1	CC-06 (raw)	Water	05/02/14 09:16	05/03/14 08:00
490-52278-2	CC-06 (GAC in)	Water	05/02/14 09:25	05/03/14 08:00
490-52278-3	CC-06 (post filler)	Water	05/02/14 09:30	05/03/14 08:00
490-52278-4	CC-06 (GAC 1)	Water	05/02/14 09:31	05/03/14 08:00
490-52278-5	CC-06 (GAC 2)	Water	05/02/14 09:36	05/03/14 08:00
490-52278-6	Trip Blank	Water	05/02/14 00:01	05/03/14 08:00

Job ID: 490-52278-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-52278-1

Comments
No additional comments.

Receipt
The samples were received on 5/3/2014 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5º C.

GC/MS VOA
Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-06 (raw) (490-52278-1). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

Metals
Method(s) 200.7 Rev 4.4: The method blank for batch 181086 contained total manganese 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 CC-06 (post filler) (490-52278-3), CC-06 (raw) (490-52278-1) was not performed.

No other analytical or quality issues were noted.

General Chemistry
Method(s) SM 2320B: The method blank for batch 180723 contained alkalinity 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 was not performed.CC-06 (GAC 2) (490-52278-5), CC-06 (raw) (490-52278-1)

Method(s) SM 4500 H+ B: The following sample(s) was received outside of holding time: CC-06 (GAC 2) (490-52278-5), CC-06 (raw) (490-52278-1).

No other analytical or quality issues were noted.

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.

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.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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.
¤	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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Client Sample ID: CC-06 (raw)

Date Collected: 05/02/14 09:16
Date Received: 05/03/14 08:00

Lab Sample ID: 490-52278-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.00	0.560	ug/L			05/09/14 19:51	4
1,1,1-Trichloroethane	ND		2.00	0.252	ug/L			05/09/14 19:51	4
1,1,2,2-Tetrachloroethane	ND		2.00	0.280	ug/L			05/09/14 19:51	4
1,1,2-Trichloroethane	ND		2.00	0.680	ug/L			05/09/14 19:51	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.00	0.680	ug/L			05/09/14 19:51	4
1,1-Dichloroethane	ND		2.00	0.296	ug/L			05/09/14 19:51	4
1,1-Dichloroethene	ND		2.00	0.236	ug/L			05/09/14 19:51	4
1,1-Dichloropropene	ND		2.00	0.252	ug/L			05/09/14 19:51	4
1,2,3-Trichlorobenzene	ND		2.00	0.228	ug/L			05/09/14 19:51	4
1,2,3-Trichloropropane	ND		2.00	0.488	ug/L			05/09/14 19:51	4
1,2,4-Trichlorobenzene	ND		2.00	0.508	ug/L			05/09/14 19:51	4
1,2,4-Trimethylbenzene	ND		2.00	0.360	ug/L			05/09/14 19:51	4
1,2-Dibromo-3-Chloropropane	ND		2.00	0.840	ug/L			05/09/14 19:51	4
1,2-Dibromoethane	ND		2.00	0.560	ug/L			05/09/14 19:51	4
1,2-Dichlorobenzene	ND		2.00	0.640	ug/L			05/09/14 19:51	4
1,2-Dichloroethane	ND		2.00	0.560	ug/L			05/09/14 19:51	4
1,2-Dichloropropane	ND		2.00	0.440	ug/L			05/09/14 19:51	4
1,3,5-Trimethylbenzene	ND		2.00	0.172	ug/L			05/09/14 19:51	4
1,3-Dichlorobenzene	ND		2.00	0.520	ug/L			05/09/14 19:51	4
1,3-Dichloropropane	ND		2.00	0.600	ug/L			05/09/14 19:51	4
1,4-Dichlorobenzene	ND		2.00	0.520	ug/L			05/09/14 19:51	4
2,2-Dichloropropane	ND		2.00	0.192	ug/L			05/09/14 19:51	4
2-Butanone (MEK)	ND		10.0	0.996	ug/L			05/09/14 19:51	4
2-Chlorotoluene	ND		2.00	0.200	ug/L			05/09/14 19:51	4
2-Hexanone	ND		10.0	0.924	ug/L			05/09/14 19:51	4
4-Chlorotoluene	ND		2.00	0.200	ug/L			05/09/14 19:51	4
4-Isopropyltoluene	ND		2.00	0.252	ug/L			05/09/14 19:51	4
4-Methyl-2-pentanone (MIBK)	ND		10.0	1.05	ug/L			05/09/14 19:51	4
Acetone	ND		10.0	2.15	ug/L			05/09/14 19:51	4
Acrylonitrile	ND		40.0	1.90	ug/L			05/09/14 19:51	4
Allyl chloride	ND		2.00	0.364	ug/L			05/09/14 19:51	4
Benzene	**0.568**	**J**	2.00	0.520	ug/L			05/09/14 19:51	4
Bromobenzene	ND		2.00	0.520	ug/L			05/09/14 19:51	4
Bromochloromethane	ND		2.00	0.440	ug/L			05/09/14 19:51	4
Dichlorobromomethane	ND		2.00	0.560	ug/L			05/09/14 19:51	4
Bromoform	ND		2.00	0.520	ug/L			05/09/14 19:51	4
Bromomethane	ND		2.00	0.204	ug/L			05/09/14 19:51	4
Carbon disulfide	ND		2.00	0.600	ug/L			05/09/14 19:51	4
Carbon tetrachloride	ND		2.00	0.212	ug/L			05/09/14 19:51	4
Chlorobenzene	ND		2.00	0.480	ug/L			05/09/14 19:51	4
Chlorodibromomethane	ND		2.00	0.640	ug/L			05/09/14 19:51	4
Chloroethane	ND		2.00	0.280	ug/L			05/09/14 19:51	4
Chloroform	**0.584**	**J**	2.00	0.560	ug/L			05/09/14 19:51	4
Chloromethane	ND		2.00	0.252	ug/L			05/09/14 19:51	4
cis-1,2-Dichloroethene	**60.3**		2.00	0.480	ug/L			05/09/14 19:51	4
cis-1,3-Dichloropropene	ND		2.00	0.320	ug/L			05/09/14 19:51	4
Dibromomethane	ND		2.00	0.680	ug/L			05/09/14 19:51	4
Dichlorodifluoromethane	ND		2.00	0.280	ug/L			05/09/14 19:51	4
Ethyl ether	ND		2.00	0.460	ug/L			05/09/14 19:51	4

Client Sample ID: CC-06 (raw)

Lab Sample ID: 490-52278-1

Date Collected: 05/02/14 09:16

Matrix: Water

Date Received: 05/03/14 08:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		2.00	0.440	ug/L			05/09/14 19:51	4
Hexachlorobutadiene	ND		2.00	0.440	ug/L			05/09/14 19:51	4
Iodomethane	ND		2.00	0.600	ug/L			05/09/14 19:51	4
Isopropylbenzene	ND		2.00	0.212	ug/L			05/09/14 19:51	4
Methyl tert-butyl ether	ND		2.00	0.480	ug/L			05/09/14 19:51	4
Methylene Chloride	ND		2.00	1.00	ug/L			05/09/14 19:51	4
m-Xylene & p-Xylene	ND		4.00	0.348	ug/L			05/09/14 19:51	4
Naphthalene	ND		2.00	0.240	ug/L			05/09/14 19:51	4
n-Butylbenzene	ND		2.00	0.324	ug/L			05/09/14 19:51	4
N-Propylbenzene	ND		2.00	0.228	ug/L			05/09/14 19:51	4
o-Xylene	ND		2.00	0.176	ug/L			05/09/14 19:51	4
sec-Butylbenzene	ND		2.00	0.272	ug/L			05/09/14 19:51	4
Styrene	ND		2.00	0.176	ug/L			05/09/14 19:51	4
t-Butanol	ND		40.0	9.83	ug/L			05/09/14 19:51	4
tert-Butylbenzene	ND		2.00	0.240	ug/L			05/09/14 19:51	4
Tetrachloroethene	ND		2.00	0.268	ug/L			05/09/14 19:51	4
Toluene	ND		2.00	0.400	ug/L			05/09/14 19:51	4
trans-1,2-Dichloroethene	**1.37**	**J**	2.00	0.520	ug/L			05/09/14 19:51	4
trans-1,3-Dichloropropene	ND		2.00	0.400	ug/L			05/09/14 19:51	4
trans-1,4-Dichloro-2-butene	ND		10.0	5.00	ug/L			05/09/14 19:51	4
Trichloroethene	**4.46**		2.00	0.240	ug/L			05/09/14 19:51	4
Trichlorofluoromethane	ND		2.00	0.176	ug/L			05/09/14 19:51	4
Vinyl acetate	ND		10.0	0.688	ug/L			05/09/14 19:51	4
Vinyl chloride	ND		2.00	0.236	ug/L			05/09/14 19:51	4
Xylenes, Total	ND		4.00	0.800	ug/L			05/09/14 19:51	4
Trihalomethanes, Total	ND		8.00	4.00	ug/L			05/09/14 19:51	4
Dichlorofluoromethane	ND		2.00	0.536	ug/L			05/09/14 19:51	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*05/09/14 19:51*	*4*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*05/09/14 19:51*	*4*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.0476**	**J**	0.0500	0.0193	mg/L		05/08/14 10:00	05/09/14 01:34	1
Manganese	**0.0689**	**B**	0.00300	0.000400	mg/L		05/08/14 10:00	05/09/14 01:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**70.9**	**B**	5.00	0.790	mg/L			05/07/14 15:57	1
Hardness as calcium carbonate	**60.0**		4.00	1.05	mg/L			05/13/14 08:45	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.84**	**HF**	0.100	0.100	SU			05/06/14 23:37	1

Client Sample ID: CC-06 (GAC in)

Lab Sample ID: 490-52278-2

Date Collected: 05/02/14 09:25

Matrix: Water

Date Received: 05/03/14 08:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			05/09/14 20:16	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			05/09/14 20:16	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			05/09/14 20:16	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			05/09/14 20:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			05/09/14 20:16	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			05/09/14 20:16	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			05/09/14 20:16	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			05/09/14 20:16	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			05/09/14 20:16	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			05/09/14 20:16	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			05/09/14 20:16	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			05/09/14 20:16	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			05/09/14 20:16	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			05/09/14 20:16	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			05/09/14 20:16	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			05/09/14 20:16	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			05/09/14 20:16	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			05/09/14 20:16	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			05/09/14 20:16	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			05/09/14 20:16	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			05/09/14 20:16	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			05/09/14 20:16	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			05/09/14 20:16	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			05/09/14 20:16	1
2-Hexanone	ND		2.50	0.231	ug/L			05/09/14 20:16	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			05/09/14 20:16	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			05/09/14 20:16	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			05/09/14 20:16	1
Acetone	**10.7**		2.50	0.537	ug/L			05/09/14 20:16	1
Acrylonitrile	ND		10.0	0.476	ug/L			05/09/14 20:16	1
Allyl chloride	ND		0.500	0.0910	ug/L			05/09/14 20:16	1
Benzene	ND		0.500	0.130	ug/L			05/09/14 20:16	1
Bromobenzene	ND		0.500	0.130	ug/L			05/09/14 20:16	1
Bromochloromethane	ND		0.500	0.110	ug/L			05/09/14 20:16	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			05/09/14 20:16	1
Bromoform	ND		0.500	0.130	ug/L			05/09/14 20:16	1
Bromomethane	ND		0.500	0.0510	ug/L			05/09/14 20:16	1
Carbon disulfide	ND		0.500	0.150	ug/L			05/09/14 20:16	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			05/09/14 20:16	1
Chlorobenzene	ND		0.500	0.120	ug/L			05/09/14 20:16	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			05/09/14 20:16	1
Chloroethane	ND		0.500	0.0700	ug/L			05/09/14 20:16	1
Chloroform	ND		0.500	0.140	ug/L			05/09/14 20:16	1
Chloromethane	**0.162**	**J**	0.500	0.0629	ug/L			05/09/14 20:16	1
cis-1,2-Dichloroethene	**4.09**		0.500	0.120	ug/L			05/09/14 20:16	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			05/09/14 20:16	1
Dibromomethane	ND		0.500	0.170	ug/L			05/09/14 20:16	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			05/09/14 20:16	1
Ethyl ether	ND		0.500	0.115	ug/L			05/09/14 20:16	1

Client Sample ID: CC-06 (GAC in)

Lab Sample ID: 490-52278-2

Date Collected: 05/02/14 09:25

Matrix: Water

Date Received: 05/03/14 08:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			05/09/14 20:16	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			05/09/14 20:16	1
Iodomethane	ND		0.500	0.150	ug/L			05/09/14 20:16	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			05/09/14 20:16	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			05/09/14 20:16	1
Methylene Chloride	ND		0.500	0.250	ug/L			05/09/14 20:16	1
m-Xylene & p-Xylene	**0.243**	**J**	1.00	0.0870	ug/L			05/09/14 20:16	1
Naphthalene	ND		0.500	0.0600	ug/L			05/09/14 20:16	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			05/09/14 20:16	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			05/09/14 20:16	1
o-Xylene	**0.107**	**J**	0.500	0.0440	ug/L			05/09/14 20:16	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			05/09/14 20:16	1
Styrene	ND		0.500	0.0440	ug/L			05/09/14 20:16	1
t-Butanol	ND		10.0	2.46	ug/L			05/09/14 20:16	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			05/09/14 20:16	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			05/09/14 20:16	1
Toluene	ND		0.500	0.100	ug/L			05/09/14 20:16	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			05/09/14 20:16	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			05/09/14 20:16	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			05/09/14 20:16	1
Trichloroethene	**0.154**	**J**	0.500	0.0600	ug/L			05/09/14 20:16	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			05/09/14 20:16	1
Vinyl acetate	ND		2.50	0.172	ug/L			05/09/14 20:16	1
Vinyl chloride	ND		0.500	0.0590	ug/L			05/09/14 20:16	1
Xylenes, Total	**0.350**	**J**	1.00	0.200	ug/L			05/09/14 20:16	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			05/09/14 20:16	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			05/09/14 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*05/09/14 20:16*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*05/09/14 20:16*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Client Sample ID: CC-06 (post filler)

Lab Sample ID: 490-52278-3

Date Collected: 05/02/14 09:30

Matrix: Water

Date Received: 05/03/14 08:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.0343	J	0.0500	0.0193	mg/L		05/08/14 10:00	05/09/14 01:47	1
Manganese	0.0747	B	0.00300	0.000400	mg/L		05/08/14 10:00	05/09/14 01:47	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Client Sample ID: CC-06 (GAC 1)

Lab Sample ID: 490-52278-4

Date Collected: 05/02/14 09:31
Matrix: Water
Date Received: 05/03/14 08:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			05/09/14 20:41	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			05/09/14 20:41	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			05/09/14 20:41	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			05/09/14 20:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			05/09/14 20:41	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			05/09/14 20:41	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			05/09/14 20:41	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			05/09/14 20:41	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			05/09/14 20:41	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			05/09/14 20:41	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			05/09/14 20:41	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			05/09/14 20:41	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			05/09/14 20:41	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			05/09/14 20:41	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			05/09/14 20:41	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			05/09/14 20:41	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			05/09/14 20:41	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			05/09/14 20:41	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			05/09/14 20:41	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			05/09/14 20:41	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			05/09/14 20:41	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			05/09/14 20:41	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			05/09/14 20:41	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			05/09/14 20:41	1
2-Hexanone	ND		2.50	0.231	ug/L			05/09/14 20:41	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			05/09/14 20:41	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			05/09/14 20:41	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			05/09/14 20:41	1
Acetone	ND		2.50	0.537	ug/L			05/09/14 20:41	1
Acrylonitrile	ND		10.0	0.476	ug/L			05/09/14 20:41	1
Allyl chloride	ND		0.500	0.0910	ug/L			05/09/14 20:41	1
Benzene	ND		0.500	0.130	ug/L			05/09/14 20:41	1
Bromobenzene	ND		0.500	0.130	ug/L			05/09/14 20:41	1
Bromochloromethane	ND		0.500	0.110	ug/L			05/09/14 20:41	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			05/09/14 20:41	1
Bromoform	ND		0.500	0.130	ug/L			05/09/14 20:41	1
Bromomethane	ND		0.500	0.0510	ug/L			05/09/14 20:41	1
Carbon disulfide	ND		0.500	0.150	ug/L			05/09/14 20:41	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			05/09/14 20:41	1
Chlorobenzene	ND		0.500	0.120	ug/L			05/09/14 20:41	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			05/09/14 20:41	1
Chloroethane	ND		0.500	0.0700	ug/L			05/09/14 20:41	1
Chloroform	ND		0.500	0.140	ug/L			05/09/14 20:41	1
Chloromethane	**0.204**	**J**	0.500	0.0629	ug/L			05/09/14 20:41	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			05/09/14 20:41	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			05/09/14 20:41	1
Dibromomethane	ND		0.500	0.170	ug/L			05/09/14 20:41	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			05/09/14 20:41	1
Ethyl ether	ND		0.500	0.115	ug/L			05/09/14 20:41	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Client Sample ID: CC-06 (GAC 1)

Lab Sample ID: 490-52278-4

Date Collected: 05/02/14 09:31
Matrix: Water
Date Received: 05/03/14 08:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			05/09/14 20:41	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			05/09/14 20:41	1
Iodomethane	ND		0.500	0.150	ug/L			05/09/14 20:41	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			05/09/14 20:41	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			05/09/14 20:41	1
Methylene Chloride	ND		0.500	0.250	ug/L			05/09/14 20:41	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			05/09/14 20:41	1
Naphthalene	ND		0.500	0.0600	ug/L			05/09/14 20:41	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			05/09/14 20:41	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			05/09/14 20:41	1
o-Xylene	ND		0.500	0.0440	ug/L			05/09/14 20:41	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			05/09/14 20:41	1
Styrene	ND		0.500	0.0440	ug/L			05/09/14 20:41	1
t-Butanol	ND		10.0	2.46	ug/L			05/09/14 20:41	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			05/09/14 20:41	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			05/09/14 20:41	1
Toluene	ND		0.500	0.100	ug/L			05/09/14 20:41	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			05/09/14 20:41	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			05/09/14 20:41	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			05/09/14 20:41	1
Trichloroethene	ND		0.500	0.0600	ug/L			05/09/14 20:41	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			05/09/14 20:41	1
Vinyl acetate	ND		2.50	0.172	ug/L			05/09/14 20:41	1
Vinyl chloride	ND		0.500	0.0590	ug/L			05/09/14 20:41	1
Xylenes, Total	ND		1.00	0.200	ug/L			05/09/14 20:41	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			05/09/14 20:41	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			05/09/14 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*05/09/14 20:41*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*05/09/14 20:41*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Client Sample ID: CC-06 (GAC 2)

Lab Sample ID: 490-52278-5

Date Collected: 05/02/14 09:36
Matrix: Water
Date Received: 05/03/14 08:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			05/09/14 21:06	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			05/09/14 21:06	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			05/09/14 21:06	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			05/09/14 21:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			05/09/14 21:06	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			05/09/14 21:06	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			05/09/14 21:06	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			05/09/14 21:06	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			05/09/14 21:06	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			05/09/14 21:06	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			05/09/14 21:06	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			05/09/14 21:06	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			05/09/14 21:06	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			05/09/14 21:06	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			05/09/14 21:06	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			05/09/14 21:06	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			05/09/14 21:06	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			05/09/14 21:06	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			05/09/14 21:06	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			05/09/14 21:06	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			05/09/14 21:06	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			05/09/14 21:06	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			05/09/14 21:06	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			05/09/14 21:06	1
2-Hexanone	ND		2.50	0.231	ug/L			05/09/14 21:06	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			05/09/14 21:06	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			05/09/14 21:06	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			05/09/14 21:06	1
Acetone	**0.738**	**J**	2.50	0.537	ug/L			05/09/14 21:06	1
Acrylonitrile	ND		10.0	0.476	ug/L			05/09/14 21:06	1
Allyl chloride	ND		0.500	0.0910	ug/L			05/09/14 21:06	1
Benzene	ND		0.500	0.130	ug/L			05/09/14 21:06	1
Bromobenzene	ND		0.500	0.130	ug/L			05/09/14 21:06	1
Bromochloromethane	ND		0.500	0.110	ug/L			05/09/14 21:06	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			05/09/14 21:06	1
Bromoform	ND		0.500	0.130	ug/L			05/09/14 21:06	1
Bromomethane	ND		0.500	0.0510	ug/L			05/09/14 21:06	1
Carbon disulfide	ND		0.500	0.150	ug/L			05/09/14 21:06	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			05/09/14 21:06	1
Chlorobenzene	ND		0.500	0.120	ug/L			05/09/14 21:06	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			05/09/14 21:06	1
Chloroethane	ND		0.500	0.0700	ug/L			05/09/14 21:06	1
Chloroform	ND		0.500	0.140	ug/L			05/09/14 21:06	1
Chloromethane	**0.0988**	**J**	0.500	0.0629	ug/L			05/09/14 21:06	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			05/09/14 21:06	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			05/09/14 21:06	1
Dibromomethane	ND		0.500	0.170	ug/L			05/09/14 21:06	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			05/09/14 21:06	1
Ethyl ether	ND		0.500	0.115	ug/L			05/09/14 21:06	1

Client Sample ID: CC-06 (GAC 2)

Lab Sample ID: 490-52278-5

Date Collected: 05/02/14 09:36

Matrix: Water

Date Received: 05/03/14 08:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			05/09/14 21:06	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			05/09/14 21:06	1
Iodomethane	ND		0.500	0.150	ug/L			05/09/14 21:06	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			05/09/14 21:06	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			05/09/14 21:06	1
Methylene Chloride	ND		0.500	0.250	ug/L			05/09/14 21:06	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			05/09/14 21:06	1
Naphthalene	ND		0.500	0.0600	ug/L			05/09/14 21:06	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			05/09/14 21:06	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			05/09/14 21:06	1
o-Xylene	ND		0.500	0.0440	ug/L			05/09/14 21:06	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			05/09/14 21:06	1
Styrene	ND		0.500	0.0440	ug/L			05/09/14 21:06	1
t-Butanol	ND		10.0	2.46	ug/L			05/09/14 21:06	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			05/09/14 21:06	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			05/09/14 21:06	1
Toluene	ND		0.500	0.100	ug/L			05/09/14 21:06	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			05/09/14 21:06	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			05/09/14 21:06	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			05/09/14 21:06	1
Trichloroethene	ND		0.500	0.0600	ug/L			05/09/14 21:06	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			05/09/14 21:06	1
Vinyl acetate	ND		2.50	0.172	ug/L			05/09/14 21:06	1
Vinyl chloride	ND		0.500	0.0590	ug/L			05/09/14 21:06	1
Xylenes, Total	ND		1.00	0.200	ug/L			05/09/14 21:06	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			05/09/14 21:06	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			05/09/14 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*05/09/14 21:06*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*05/09/14 21:06*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**77.8**	**B**	5.00	0.790	mg/L			05/07/14 16:03	1
Hardness as calcium carbonate	**60.0**		4.00	1.05	mg/L			05/13/14 08:45	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**9.05**	**HF**	0.100	0.100	SU			05/06/14 23:40	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-52278-6

Date Collected: 05/02/14 00:01
Date Received: 05/03/14 08:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			05/09/14 21:30	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			05/09/14 21:30	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			05/09/14 21:30	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			05/09/14 21:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			05/09/14 21:30	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			05/09/14 21:30	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			05/09/14 21:30	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			05/09/14 21:30	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			05/09/14 21:30	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			05/09/14 21:30	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			05/09/14 21:30	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			05/09/14 21:30	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			05/09/14 21:30	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			05/09/14 21:30	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			05/09/14 21:30	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			05/09/14 21:30	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			05/09/14 21:30	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			05/09/14 21:30	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			05/09/14 21:30	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			05/09/14 21:30	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			05/09/14 21:30	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			05/09/14 21:30	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			05/09/14 21:30	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			05/09/14 21:30	1
2-Hexanone	ND		2.50	0.231	ug/L			05/09/14 21:30	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			05/09/14 21:30	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			05/09/14 21:30	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			05/09/14 21:30	1
Acetone	ND		2.50	0.537	ug/L			05/09/14 21:30	1
Acrylonitrile	ND		10.0	0.476	ug/L			05/09/14 21:30	1
Allyl chloride	ND		0.500	0.0910	ug/L			05/09/14 21:30	1
Benzene	ND		0.500	0.130	ug/L			05/09/14 21:30	1
Bromobenzene	ND		0.500	0.130	ug/L			05/09/14 21:30	1
Bromochloromethane	ND		0.500	0.110	ug/L			05/09/14 21:30	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			05/09/14 21:30	1
Bromoform	ND		0.500	0.130	ug/L			05/09/14 21:30	1
Bromomethane	ND		0.500	0.0510	ug/L			05/09/14 21:30	1
Carbon disulfide	ND		0.500	0.150	ug/L			05/09/14 21:30	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			05/09/14 21:30	1
Chlorobenzene	ND		0.500	0.120	ug/L			05/09/14 21:30	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			05/09/14 21:30	1
Chloroethane	ND		0.500	0.0700	ug/L			05/09/14 21:30	1
Chloroform	ND		0.500	0.140	ug/L			05/09/14 21:30	1
Chloromethane	ND		0.500	0.0629	ug/L			05/09/14 21:30	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			05/09/14 21:30	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			05/09/14 21:30	1
Dibromomethane	ND		0.500	0.170	ug/L			05/09/14 21:30	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			05/09/14 21:30	1
Ethyl ether	ND		0.500	0.115	ug/L			05/09/14 21:30	1

Client Sample ID: Trip Blank

Lab Sample ID: 490-52278-6

Date Collected: 05/02/14 00:01

Matrix: Water

Date Received: 05/03/14 08:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			05/09/14 21:30	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			05/09/14 21:30	1
Iodomethane	ND		0.500	0.150	ug/L			05/09/14 21:30	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			05/09/14 21:30	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			05/09/14 21:30	1
Methylene Chloride	**0.905**		0.500	0.250	ug/L			05/09/14 21:30	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			05/09/14 21:30	1
Naphthalene	ND		0.500	0.0600	ug/L			05/09/14 21:30	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			05/09/14 21:30	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			05/09/14 21:30	1
o-Xylene	ND		0.500	0.0440	ug/L			05/09/14 21:30	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			05/09/14 21:30	1
Styrene	ND		0.500	0.0440	ug/L			05/09/14 21:30	1
t-Butanol	ND		10.0	2.46	ug/L			05/09/14 21:30	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			05/09/14 21:30	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			05/09/14 21:30	1
Toluene	ND		0.500	0.100	ug/L			05/09/14 21:30	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			05/09/14 21:30	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			05/09/14 21:30	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			05/09/14 21:30	1
Trichloroethene	ND		0.500	0.0600	ug/L			05/09/14 21:30	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			05/09/14 21:30	1
Vinyl acetate	ND		2.50	0.172	ug/L			05/09/14 21:30	1
Vinyl chloride	ND		0.500	0.0590	ug/L			05/09/14 21:30	1
Xylenes, Total	ND		1.00	0.200	ug/L			05/09/14 21:30	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			05/09/14 21:30	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			05/09/14 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*05/09/14 21:30*	*1*
1,2-Dichlorobenzene-d4	*105*		*80 - 120*		*05/09/14 21:30*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-181128/5
Matrix: Water
Analysis Batch: 181128

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			05/09/14 13:01	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			05/09/14 13:01	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			05/09/14 13:01	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			05/09/14 13:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			05/09/14 13:01	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			05/09/14 13:01	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			05/09/14 13:01	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			05/09/14 13:01	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			05/09/14 13:01	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			05/09/14 13:01	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			05/09/14 13:01	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			05/09/14 13:01	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			05/09/14 13:01	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			05/09/14 13:01	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			05/09/14 13:01	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			05/09/14 13:01	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			05/09/14 13:01	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			05/09/14 13:01	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			05/09/14 13:01	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			05/09/14 13:01	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			05/09/14 13:01	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			05/09/14 13:01	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			05/09/14 13:01	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			05/09/14 13:01	1
2-Hexanone	ND		2.50	0.231	ug/L			05/09/14 13:01	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			05/09/14 13:01	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			05/09/14 13:01	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			05/09/14 13:01	1
Acetone	ND		2.50	0.537	ug/L			05/09/14 13:01	1
Acrylonitrile	ND		10.0	0.476	ug/L			05/09/14 13:01	1
Allyl chloride	ND		0.500	0.0910	ug/L			05/09/14 13:01	1
Benzene	ND		0.500	0.130	ug/L			05/09/14 13:01	1
Bromobenzene	ND		0.500	0.130	ug/L			05/09/14 13:01	1
Bromochloromethane	ND		0.500	0.110	ug/L			05/09/14 13:01	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			05/09/14 13:01	1
Bromoform	ND		0.500	0.130	ug/L			05/09/14 13:01	1
Bromomethane	ND		0.500	0.0510	ug/L			05/09/14 13:01	1
Carbon disulfide	ND		0.500	0.150	ug/L			05/09/14 13:01	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			05/09/14 13:01	1
Chlorobenzene	ND		0.500	0.120	ug/L			05/09/14 13:01	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			05/09/14 13:01	1
Chloroethane	ND		0.500	0.0700	ug/L			05/09/14 13:01	1
Chloroform	ND		0.500	0.140	ug/L			05/09/14 13:01	1
Chloromethane	ND		0.500	0.0629	ug/L			05/09/14 13:01	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			05/09/14 13:01	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			05/09/14 13:01	1
Dibromomethane	ND		0.500	0.170	ug/L			05/09/14 13:01	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			05/09/14 13:01	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-181128/5
Matrix: Water
Analysis Batch: 181128

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			05/09/14 13:01	1
Ethylbenzene	ND		0.500	0.110	ug/L			05/09/14 13:01	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			05/09/14 13:01	1
Iodomethane	ND		0.500	0.150	ug/L			05/09/14 13:01	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			05/09/14 13:01	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			05/09/14 13:01	1
Methylene Chloride	ND		0.500	0.250	ug/L			05/09/14 13:01	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			05/09/14 13:01	1
Naphthalene	ND		0.500	0.0600	ug/L			05/09/14 13:01	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			05/09/14 13:01	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			05/09/14 13:01	1
o-Xylene	ND		0.500	0.0440	ug/L			05/09/14 13:01	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			05/09/14 13:01	1
Styrene	ND		0.500	0.0440	ug/L			05/09/14 13:01	1
t-Butanol	ND		10.0	2.46	ug/L			05/09/14 13:01	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			05/09/14 13:01	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			05/09/14 13:01	1
Toluene	ND		0.500	0.100	ug/L			05/09/14 13:01	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			05/09/14 13:01	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			05/09/14 13:01	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			05/09/14 13:01	1
Trichloroethene	ND		0.500	0.0600	ug/L			05/09/14 13:01	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			05/09/14 13:01	1
Vinyl acetate	ND		2.50	0.172	ug/L			05/09/14 13:01	1
Vinyl chloride	ND		0.500	0.0590	ug/L			05/09/14 13:01	1
Xylenes, Total	ND		1.00	0.200	ug/L			05/09/14 13:01	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			05/09/14 13:01	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			05/09/14 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*05/09/14 13:01*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*05/09/14 13:01*	*1*

Lab Sample ID: LCS 480-181128/3
Matrix: Water
Analysis Batch: 181128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.911		ug/L		98	70 - 130
1,1,1-Trichloroethane	4.00	4.060		ug/L		102	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.949		ug/L		99	70 - 130
1,1,2-Trichloroethane	4.00	3.870		ug/L		97	70 - 130
1,1-Dichloroethane	4.00	3.950		ug/L		99	70 - 130
1,1-Dichloroethene	4.00	4.032		ug/L		101	70 - 130
1,1-Dichloropropene	4.00	4.339		ug/L		108	70 - 130
1,2,3-Trichlorobenzene	4.00	3.818		ug/L		95	70 - 130
1,2,3-Trichloropropane	4.00	3.810		ug/L		95	70 - 130
1,2,4-Trichlorobenzene	4.00	3.854		ug/L		96	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-181128/3
Matrix: Water
Analysis Batch: 181128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.856		ug/L		96	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.244		ug/L		106	70 - 130
1,2-Dibromoethane	4.00	3.831		ug/L		96	70 - 130
1,2-Dichlorobenzene	4.00	3.867		ug/L		97	70 - 130
1,2-Dichloroethane	4.00	3.714		ug/L		93	70 - 130
1,2-Dichloropropane	4.00	3.923		ug/L		98	70 - 130
1,3,5-Trimethylbenzene	4.00	3.853		ug/L		96	70 - 130
1,3-Dichlorobenzene	4.00	3.826		ug/L		96	70 - 130
1,3-Dichloropropane	4.00	3.741		ug/L		94	70 - 130
1,4-Dichlorobenzene	4.00	3.868		ug/L		97	70 - 130
2,2-Dichloropropane	4.00	3.545		ug/L		89	70 - 130
2-Butanone (MEK)	20.0	19.46		ug/L		97	70 - 130
2-Chlorotoluene	4.00	3.834		ug/L		96	70 - 130
2-Hexanone	20.0	19.85		ug/L		99	70 - 130
4-Chlorotoluene	4.00	3.819		ug/L		95	70 - 130
4-Isopropyltoluene	4.00	3.901		ug/L		98	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	19.85		ug/L		99	70 - 130
Acetone	20.0	17.81		ug/L		89	70 - 130
Benzene	4.00	3.935		ug/L		98	70 - 130
Bromobenzene	4.00	3.868		ug/L		97	70 - 130
Bromochloromethane	4.00	3.850		ug/L		96	70 - 130
Dichlorobromomethane	4.00	3.868		ug/L		97	70 - 130
Bromoform	4.00	3.833		ug/L		96	70 - 130
Bromomethane	4.00	4.101		ug/L		103	70 - 130
Carbon disulfide	4.00	3.922		ug/L		98	70 - 130
Carbon tetrachloride	4.00	4.181		ug/L		105	70 - 130
Chlorobenzene	4.00	3.854		ug/L		96	70 - 130
Chlorodibromomethane	4.00	3.810		ug/L		95	70 - 130
Chloroethane	4.00	4.023		ug/L		101	70 - 130
Chloroform	4.00	3.874		ug/L		97	70 - 130
Chloromethane	4.00	4.287		ug/L		107	70 - 130
cis-1,2-Dichloroethene	4.00	3.844		ug/L		96	70 - 130
cis-1,3-Dichloropropene	4.00	3.975		ug/L		99	70 - 130
Dibromomethane	4.00	3.813		ug/L		95	70 - 130
Dichlorodifluoromethane	4.00	4.710		ug/L		118	70 - 130
Ethylbenzene	4.00	3.901		ug/L		98	70 - 130
Hexachlorobutadiene	4.00	4.083		ug/L		102	70 - 130
Isopropylbenzene	4.00	3.943		ug/L		99	70 - 130
Methyl tert-butyl ether	4.00	3.965		ug/L		99	70 - 130
Methylene Chloride	4.00	3.883		ug/L		97	70 - 130
Naphthalene	4.00	4.144		ug/L		104	70 - 130
n-Butylbenzene	4.00	3.907		ug/L		98	70 - 130
N-Propylbenzene	4.00	3.924		ug/L		98	70 - 130
sec-Butylbenzene	4.00	3.996		ug/L		100	70 - 130
Styrene	4.00	3.832		ug/L		96	70 - 130
tert-Butylbenzene	4.00	3.975		ug/L		99	70 - 130
Tetrachloroethene	4.00	3.851		ug/L		96	70 - 130
Toluene	4.00	3.947		ug/L		99	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-181128/3
Matrix: Water
Analysis Batch: 181128

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	4.067		ug/L		102	70 - 130
trans-1,3-Dichloropropene	4.00	4.331		ug/L		108	70 - 130
Trichloroethene	4.00	3.935		ug/L		98	70 - 130
Trichlorofluoromethane	4.00	4.367		ug/L		109	70 - 130
Vinyl chloride	4.00	4.256		ug/L		106	70 - 130
Xylenes, Total	8.00	7.803		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

Lab Sample ID: LCSD 480-181128/4
Matrix: Water
Analysis Batch: 181128

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.693		ug/L		92	70 - 130	6	20
1,1,1-Trichloroethane	4.00	3.834		ug/L		96	70 - 130	6	20
1,1,2,2-Tetrachloroethane	4.00	3.912		ug/L		98	70 - 130	1	20
1,1,2-Trichloroethane	4.00	3.778		ug/L		94	70 - 130	2	20
1,1-Dichloroethane	4.00	3.828		ug/L		96	70 - 130	3	20
1,1-Dichloroethene	4.00	3.803		ug/L		95	70 - 130	6	20
1,1-Dichloropropene	4.00	4.108		ug/L		103	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	3.847		ug/L		96	70 - 130	1	20
1,2,3-Trichloropropane	4.00	3.964		ug/L		99	70 - 130	4	20
1,2,4-Trichlorobenzene	4.00	3.705		ug/L		93	70 - 130	4	20
1,2,4-Trimethylbenzene	4.00	3.681		ug/L		92	70 - 130	5	20
1,2-Dibromo-3-Chloropropane	4.00	4.504		ug/L		113	70 - 130	6	20
1,2-Dibromoethane	4.00	3.720		ug/L		93	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.717		ug/L		93	70 - 130	4	20
1,2-Dichloroethane	4.00	3.690		ug/L		92	70 - 130	1	20
1,2-Dichloropropane	4.00	3.802		ug/L		95	70 - 130	3	20
1,3,5-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130	4	20
1,3-Dichlorobenzene	4.00	3.676		ug/L		92	70 - 130	4	20
1,3-Dichloropropane	4.00	3.697		ug/L		92	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.771		ug/L		94	70 - 130	3	20
2,2-Dichloropropane	4.00	3.458		ug/L		86	70 - 130	2	20
2-Butanone (MEK)	20.0	19.61		ug/L		98	70 - 130	1	20
2-Chlorotoluene	4.00	3.688		ug/L		92	70 - 130	4	20
2-Hexanone	20.0	19.89		ug/L		99	70 - 130	0	20
4-Chlorotoluene	4.00	3.664		ug/L		92	70 - 130	4	20
4-Isopropyltoluene	4.00	3.718		ug/L		93	70 - 130	5	20
4-Methyl-2-pentanone (MIBK)	20.0	19.91		ug/L		100	70 - 130	0	20
Acetone	20.0	18.36		ug/L		92	70 - 130	3	20
Benzene	4.00	3.745		ug/L		94	70 - 130	5	20
Bromobenzene	4.00	3.755		ug/L		94	70 - 130	3	20
Bromochloromethane	4.00	3.851		ug/L		96	70 - 130	0	20
Dichlorobromomethane	4.00	3.679		ug/L		92	70 - 130	5	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-181128/4
Matrix: Water
Analysis Batch: 181128

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
Bromoform	4.00	3.851		ug/L		96	70 - 130	0	20
Bromomethane	4.00	3.620		ug/L		91	70 - 130	12	20
Carbon disulfide	4.00	3.768		ug/L		94	70 - 130	4	20
Carbon tetrachloride	4.00	3.914		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.690		ug/L		92	70 - 130	4	20
Chlorodibromomethane	4.00	3.719		ug/L		93	70 - 130	2	20
Chloroethane	4.00	4.024		ug/L		101	70 - 130	0	20
Chloroform	4.00	3.748		ug/L		94	70 - 130	3	20
Chloromethane	4.00	4.000		ug/L		100	70 - 130	7	20
cis-1,2-Dichloroethene	4.00	3.764		ug/L		94	70 - 130	2	20
cis-1,3-Dichloropropene	4.00	3.881		ug/L		97	70 - 130	2	20
Dibromomethane	4.00	3.899		ug/L		97	70 - 130	2	20
Dichlorodifluoromethane	4.00	4.417		ug/L		110	70 - 130	6	20
Ethylbenzene	4.00	3.637		ug/L		91	70 - 130	7	20
Hexachlorobutadiene	4.00	3.862		ug/L		97	70 - 130	6	20
Isopropylbenzene	4.00	3.676		ug/L		92	70 - 130	7	20
Methyl tert-butyl ether	4.00	3.951		ug/L		99	70 - 130	0	20
Methylene Chloride	4.00	3.776		ug/L		94	70 - 130	3	20
Naphthalene	4.00	4.106		ug/L		103	70 - 130	1	20
n-Butylbenzene	4.00	3.682		ug/L		92	70 - 130	6	20
N-Propylbenzene	4.00	3.721		ug/L		93	70 - 130	5	20
sec-Butylbenzene	4.00	3.831		ug/L		96	70 - 130	4	20
Styrene	4.00	3.661		ug/L		92	70 - 130	5	20
tert-Butylbenzene	4.00	3.817		ug/L		95	70 - 130	4	20
Tetrachloroethene	4.00	3.670		ug/L		92	70 - 130	5	20
Toluene	4.00	3.816		ug/L		95	70 - 130	3	20
trans-1,2-Dichloroethene	4.00	3.883		ug/L		97	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	4.172		ug/L		104	70 - 130	4	20
Trichloroethene	4.00	3.788		ug/L		95	70 - 130	4	20
Trichlorofluoromethane	4.00	3.774		ug/L		94	70 - 130	15	20
Vinyl chloride	4.00	4.037		ug/L		101	70 - 130	5	20
Xylenes, Total	8.00	7.330		ug/L		92	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-180822/1-A
Matrix: Water
Analysis Batch: 181086

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 180822

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		05/08/14 10:00	05/09/14 01:28	1
Manganese	0.0004900	J	0.00300	0.000400	mg/L		05/08/14 10:00	05/09/14 01:28	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-180822/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 181086 — **Prep Batch: 180822**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.12		mg/L		101	85 - 115
Manganese	0.200	0.2039		mg/L		102	85 - 115

Lab Sample ID: 490-52278-1 MS — **Client Sample ID: CC-06 (raw)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 181086 — **Prep Batch: 180822**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.0476	J	10.0	10.06		mg/L		100	70 - 130
Manganese	0.0689	B	0.200	0.2676		mg/L		99	70 - 130

Lab Sample ID: 490-52278-1 MSD — **Client Sample ID: CC-06 (raw)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 181086 — **Prep Batch: 180822**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.0476	J	10.0	10.07		mg/L		100	70 - 130	0	20
Manganese	0.0689	B	0.200	0.2664		mg/L		99	70 - 130	0	20

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 480-180723/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 180723

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	1.210	J	5.00	0.790	mg/L			05/07/14 14:57	1

Lab Sample ID: LCS 480-180723/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 180723

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	100	92.99		mg/L		93	90 - 110

Lab Sample ID: 480-59314-A-3 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 180723

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	21.0	B	100	109.4		mg/L		88	42 - 116

Lab Sample ID: 480-59314-A-5 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 180723

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Alkalinity, Total	26.2	B	26.30		mg/L		0.3	20

Method: SM 2340C - Hardness, Total

Lab Sample ID: MB 480-181805/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 181805

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hardness as calcium carbonate	ND		2.00	0.525	mg/L			05/13/14 08:45	1

Lab Sample ID: LCS 480-181805/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 181805

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	298	308.0		mg/L		103	90 - 110

Lab Sample ID: 480-59123-E-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 181805

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hardness as calcium carbonate	324		200	544.0		mg/L		110	74 - 130

Lab Sample ID: 480-59123-E-1 MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 181805

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hardness as calcium carbonate	324		200	532.0		mg/L		104	74 - 130	2	15

Lab Sample ID: 480-58534-E-2 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 181805

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Hardness as calcium carbonate	1250		1210		mg/L		3	15

Method: SM 4500 H+ B - pH

Lab Sample ID: LCS 480-180505/1 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 180505

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	6.980		SU		100	99 - 101

Lab Sample ID: 480-59302-I-1 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 180505

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	7.80		7.790		SU		0.1	5

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

GC/MS VOA

Analysis Batch: 181128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-52278-1	CC-06 (raw)	Total/NA	Water	524.2	
490-52278-2	CC-06 (GAC in)	Total/NA	Water	524.2	
490-52278-4	CC-06 (GAC 1)	Total/NA	Water	524.2	
490-52278-5	CC-06 (GAC 2)	Total/NA	Water	524.2	
490-52278-6	Trip Blank	Total/NA	Water	524.2	
LCS 480-181128/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-181128/4	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-181128/5	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 180822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-52278-1	CC-06 (raw)	Total/NA	Water	200.7	
490-52278-1 MS	CC-06 (raw)	Total/NA	Water	200.7	
490-52278-1 MSD	CC-06 (raw)	Total/NA	Water	200.7	
490-52278-3	CC-06 (post filler)	Total/NA	Water	200.7	
LCS 480-180822/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-180822/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 181086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-52278-1	CC-06 (raw)	Total/NA	Water	200.7 Rev 4.4	180822
490-52278-1 MS	CC-06 (raw)	Total/NA	Water	200.7 Rev 4.4	180822
490-52278-1 MSD	CC-06 (raw)	Total/NA	Water	200.7 Rev 4.4	180822
490-52278-3	CC-06 (post filler)	Total/NA	Water	200.7 Rev 4.4	180822
LCS 480-180822/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	180822
MB 480-180822/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	180822

General Chemistry

Analysis Batch: 180505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-59302-I-1 DU	Duplicate	Total/NA	Water	SM 4500 H+ B	
490-52278-1	CC-06 (raw)	Total/NA	Water	SM 4500 H+ B	
490-52278-5	CC-06 (GAC 2)	Total/NA	Water	SM 4500 H+ B	
LCS 480-180505/1	Lab Control Sample	Total/NA	Water	SM 4500 H+ B	

Analysis Batch: 180723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-59314-A-3 MS	Matrix Spike	Total/NA	Water	SM 2320B	
480-59314-A-5 DU	Duplicate	Total/NA	Water	SM 2320B	
490-52278-1	CC-06 (raw)	Total/NA	Water	SM 2320B	
490-52278-5	CC-06 (GAC 2)	Total/NA	Water	SM 2320B	
LCS 480-180723/7	Lab Control Sample	Total/NA	Water	SM 2320B	
MB 480-180723/6	Method Blank	Total/NA	Water	SM 2320B	

Analysis Batch: 181805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-58534-E-2 DU	Duplicate	Total/NA	Water	SM 2340C	

General Chemistry (Continued)

Analysis Batch: 181805 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-59123-E-1 MS	Matrix Spike	Total/NA	Water	SM 2340C	
480-59123-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 2340C	
490-52278-1	CC-06 (raw)	Total/NA	Water	SM 2340C	
490-52278-5	CC-06 (GAC 2)	Total/NA	Water	SM 2340C	
LCS 480-181805/4	Lab Control Sample	Total/NA	Water	SM 2340C	
MB 480-181805/3	Method Blank	Total/NA	Water	SM 2340C	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Client Sample ID: CC-06 (raw)

Lab Sample ID: 490-52278-1
Date Collected: 05/02/14 09:16
Matrix: Water
Date Received: 05/03/14 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		4	25 mL	25 mL	181128	05/09/14 19:51	CDC	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	180822	05/08/14 10:00	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	181086	05/09/14 01:34		TAL BUF
Total/NA	Analysis	SM 2320B		1	25 mL	25 mL	180723	05/07/14 15:57	VAJ	TAL BUF
Total/NA	Analysis	SM 2340C		1	25 mL	50 mL	181805	05/13/14 08:45	MDL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1		25 mL	180505	05/06/14 23:37	KS	TAL BUF

Client Sample ID: CC-06 (GAC in)

Lab Sample ID: 490-52278-2
Date Collected: 05/02/14 09:25
Matrix: Water
Date Received: 05/03/14 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	181128	05/09/14 20:16	CDC	TAL BUF

Client Sample ID: CC-06 (post filler)

Lab Sample ID: 490-52278-3
Date Collected: 05/02/14 09:30
Matrix: Water
Date Received: 05/03/14 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	180822	05/08/14 10:00	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	181086	05/09/14 01:47		TAL BUF

Client Sample ID: CC-06 (GAC 1)

Lab Sample ID: 490-52278-4
Date Collected: 05/02/14 09:31
Matrix: Water
Date Received: 05/03/14 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	181128	05/09/14 20:41	CDC	TAL BUF

Client Sample ID: CC-06 (GAC 2)

Lab Sample ID: 490-52278-5
Date Collected: 05/02/14 09:36
Matrix: Water
Date Received: 05/03/14 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	181128	05/09/14 21:06	CDC	TAL BUF
Total/NA	Analysis	SM 2320B		1	25 mL	25 mL	180723	05/07/14 16:03	VAJ	TAL BUF
Total/NA	Analysis	SM 2340C		1	25 mL	50 mL	181805	05/13/14 08:45	MDL	TAL BUF
Total/NA	Analysis	SM 4500 H+ B		1		25 mL	180505	05/06/14 23:40	KS	TAL BUF

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-52278-6

Date Collected: 05/02/14 00:01

Matrix: Water

Date Received: 05/03/14 08:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	181128	05/09/14 21:30	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF
SM 2320B	Alkalinity	SM	TAL BUF
SM 2340C	Hardness, Total	SM	TAL BUF
SM 4500 H+ B	pH	SM	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

SM = "Standard Methods For The Examination Of Water And Wastewater",

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-52278-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Acrylonitrile
524.2		Water	Allyl chloride
524.2		Water	Carbon disulfide
524.2		Water	Dichlorofluoromethane
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	Naphthalene
524.2		Water	o-Xylene
524.2		Water	t-Butanol
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate
SM 4500 H+ B		Water	pH

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-52278 Chain of Custody

Cooler Received/Opened On: 5/3/2014 @0800

1. Tracking # 6467 (last 4 digits, FedEx)

Courier: Fed-Ex IR Gun ID: 14740456

2. Temperature of rep. sample or temp blank when opened: 2.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) _____

I certify that I attached a label with the unique LIMS number to each container (intial) _____

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

5/14/2014

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
52278

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5/14/2014

Client Information	Sampler: Ian Martz	Lab PM: Brown, Shali	Carrier	COC No:
Client Contact: Chuck Castelluccio	Phone: 978-322-4526	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested: (standard)			
City: Chelmsford	TAT Requested (days): standard			
State, Zip: MA, 01824				
Phone: 978 322 4526	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site: Tibbetts Road Site	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	2340 - Hardness as CaCO3	SM4500 - pH	2320B - alkalinity	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	D	N	N		
CC-06 (raw)	5/2/14	0916	G	W	N	N	✓	✓	✓	✓	✓		-1
CC-06 (GAC in)		0925	G				✓						2
CC-06 (post Filter)		0930	G					✓					3
CC-06 (GAC 1)		0931	G				✓						4
CC-06 (GAC 2)		0936	G				✓		✓	✓	✓		5
Trip Blank		—	—				✓						6

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 5/2/14 @ 1100	Company	Received by:	Date/Time: 5.3.14 @ 0800	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 2.5c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-52278-1

Login Number: 52278

List Source: TestAmerica Nashville

List Number: 1

Creator: McBride, Mike

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-52278-1

Login Number: 52278
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 05/06/14 03:26 PM

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	3.4 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-52278-1

Login Number: 52278
List Number: 3
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 05/06/14 03:28 PM

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	3.4 C
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	
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 Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-57721-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
7/29/2014 5:55:40 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-57721-1	CC-06 (raw)	Water	07/18/14 12:05	07/19/14 08:40
490-57721-2	CC-06 (post filter)	Water	07/18/14 12:10	07/19/14 08:40
490-57721-3	CC-06 (GAC-in)	Water	07/18/14 12:15	07/19/14 08:40
490-57721-4	CC-06 (GAC-1)	Water	07/18/14 12:20	07/19/14 08:40
490-57721-5	CC-06 (GAC-2)	Water	07/18/14 12:25	07/19/14 08:40

Job ID: 490-57721-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-57721-1

Comments
No additional comments.

Receipt
The samples were received on 7/19/2014 8:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 194469 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was ND or detected below RL limit in the associated samples; therefore, the data have been reported.

Method(s) 524.2: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 194469 recovered outside control limits for the following analytes: 2,2-Dichloropropane and Carbon disulfide.

Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: (490-57721-1 MS), (490-57721-1 MSD), CC-06 (raw) (490-57721-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
F1	MS and/or MSD Recovery exceeds the 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

Client Sample ID: CC-06 (raw)

Lab Sample ID: 490-57721-1

Date Collected: 07/18/14 12:05
Matrix: Water
Date Received: 07/19/14 08:40

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 05:42	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 05:42	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 05:42	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 05:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 05:42	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 05:42	1
1,1-Dichloroethene	**0.116**	**J**	0.500	0.0590	ug/L			07/24/14 05:42	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 05:42	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 05:42	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 05:42	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 05:42	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 05:42	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 05:42	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 05:42	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 05:42	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 05:42	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 05:42	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 05:42	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 05:42	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 05:42	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 05:42	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 05:42	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 05:42	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 05:42	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 05:42	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 05:42	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 05:42	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 05:42	1
Acetone	**1.76**	**J ***	2.50	0.537	ug/L			07/24/14 05:42	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 05:42	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 05:42	1
Benzene	**0.295**	**J**	0.500	0.130	ug/L			07/24/14 05:42	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 05:42	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 05:42	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 05:42	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 05:42	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 05:42	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 05:42	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 05:42	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 05:42	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 05:42	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 05:42	1
Chloroform	**0.187**	**J**	0.500	0.140	ug/L			07/24/14 05:42	1
Chloromethane	**0.497**	**J**	0.500	0.0629	ug/L			07/24/14 05:42	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 05:42	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 05:42	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 05:42	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 05:42	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 05:42	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

Client Sample ID: CC-06 (raw)

Date Collected: 07/18/14 12:05
Date Received: 07/19/14 08:40

Lab Sample ID: 490-57721-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 05:42	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 05:42	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 05:42	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 05:42	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 05:42	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 05:42	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 05:42	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 05:42	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 05:42	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 05:42	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 05:42	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 05:42	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 05:42	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 05:42	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 05:42	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 05:42	1
trans-1,2-Dichloroethene	**0.978**		0.500	0.130	ug/L			07/24/14 05:42	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 05:42	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 05:42	1
Trichloroethene	**4.21**		0.500	0.0600	ug/L			07/24/14 05:42	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 05:42	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 05:42	1
Vinyl chloride	**0.0894**	**J**	0.500	0.0590	ug/L			07/24/14 05:42	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 05:42	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 05:42	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 05:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*07/24/14 05:42*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*07/24/14 05:42*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**47.6**		4.00	0.960	ug/L			07/24/14 14:38	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*07/24/14 14:38*	*8*
1,2-Dichlorobenzene-d4	*99*		*80 - 120*		*07/24/14 14:38*	*8*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.0347**	**J**	0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 16:10	1
Manganese	**0.0526**		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 16:10	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

Client Sample ID: CC-06 (post filter)

Lab Sample ID: 490-57721-2

Date Collected: 07/18/14 12:10

Matrix: Water

Date Received: 07/19/14 08:40

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1.23		0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 16:24	1
Manganese	0.111		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 16:24	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

Client Sample ID: CC-06 (GAC-in)

Lab Sample ID: 490-57721-3

Date Collected: 07/18/14 12:15
Date Received: 07/19/14 08:40

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 13:22	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 13:22	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 13:22	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 13:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 13:22	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 13:22	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 13:22	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 13:22	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 13:22	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 13:22	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 13:22	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 13:22	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 13:22	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 13:22	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 13:22	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 13:22	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 13:22	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 13:22	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 13:22	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 13:22	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 13:22	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 13:22	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 13:22	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 13:22	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 13:22	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 13:22	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 13:22	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 13:22	1
Acetone	**6.63**		2.50	0.537	ug/L			07/24/14 13:22	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 13:22	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 13:22	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 13:22	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 13:22	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 13:22	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 13:22	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 13:22	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 13:22	1
Carbon disulfide	**0.257**	**J**	0.500	0.150	ug/L			07/24/14 13:22	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 13:22	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 13:22	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 13:22	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 13:22	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 13:22	1
Chloromethane	**0.171**	**J**	0.500	0.0629	ug/L			07/24/14 13:22	1
cis-1,2-Dichloroethene	**1.87**		0.500	0.120	ug/L			07/24/14 13:22	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 13:22	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 13:22	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 13:22	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 13:22	1

Client Sample ID: CC-06 (GAC-in)

Lab Sample ID: 490-57721-3

Date Collected: 07/18/14 12:15

Matrix: Water

Date Received: 07/19/14 08:40

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 13:22	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 13:22	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 13:22	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 13:22	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 13:22	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 13:22	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 13:22	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 13:22	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 13:22	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 13:22	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 13:22	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 13:22	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 13:22	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 13:22	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 13:22	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 13:22	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 13:22	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 13:22	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 13:22	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 13:22	1
Trichloroethene	**0.0797**	**J**	0.500	0.0600	ug/L			07/24/14 13:22	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 13:22	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 13:22	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 13:22	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 13:22	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 13:22	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/24/14 13:22*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*07/24/14 13:22*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

Client Sample ID: CC-06 (GAC-1)

Date Collected: 07/18/14 12:20
Date Received: 07/19/14 08:40

Lab Sample ID: 490-57721-4

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 06:33	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 06:33	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 06:33	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 06:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 06:33	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 06:33	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 06:33	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 06:33	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 06:33	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 06:33	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 06:33	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 06:33	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 06:33	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 06:33	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 06:33	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 06:33	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 06:33	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 06:33	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 06:33	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 06:33	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 06:33	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 06:33	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 06:33	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 06:33	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 06:33	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 06:33	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 06:33	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 06:33	1
Acetone	**1.78**	**J ***	2.50	0.537	ug/L			07/24/14 06:33	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 06:33	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 06:33	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 06:33	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 06:33	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 06:33	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 06:33	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 06:33	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 06:33	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 06:33	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 06:33	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 06:33	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 06:33	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 06:33	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 06:33	1
Chloromethane	**0.119**	**J**	0.500	0.0629	ug/L			07/24/14 06:33	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 06:33	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 06:33	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 06:33	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 06:33	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 06:33	1

Client Sample ID: CC-06 (GAC-1)

Lab Sample ID: 490-57721-4

Date Collected: 07/18/14 12:20

Matrix: Water

Date Received: 07/19/14 08:40

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 06:33	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 06:33	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 06:33	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 06:33	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 06:33	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 06:33	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 06:33	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 06:33	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 06:33	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 06:33	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 06:33	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 06:33	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 06:33	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 06:33	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 06:33	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 06:33	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 06:33	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 06:33	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 06:33	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 06:33	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 06:33	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 06:33	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 06:33	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 06:33	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 06:33	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 06:33	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 06:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/24/14 06:33*	*1*
1,2-Dichlorobenzene-d4	*104*		*80 - 120*		*07/24/14 06:33*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

Client Sample ID: CC-06 (GAC-2)

Date Collected: 07/18/14 12:25
Date Received: 07/19/14 08:40

Lab Sample ID: 490-57721-5

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 06:58	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 06:58	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 06:58	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 06:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 06:58	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 06:58	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 06:58	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 06:58	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 06:58	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 06:58	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 06:58	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 06:58	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 06:58	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 06:58	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 06:58	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 06:58	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 06:58	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 06:58	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 06:58	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 06:58	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 06:58	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 06:58	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 06:58	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 06:58	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 06:58	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 06:58	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 06:58	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 06:58	1
Acetone	**1.26**	**J ***	2.50	0.537	ug/L			07/24/14 06:58	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 06:58	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 06:58	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 06:58	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 06:58	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 06:58	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 06:58	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 06:58	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 06:58	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 06:58	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 06:58	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 06:58	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 06:58	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 06:58	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 06:58	1
Chloromethane	**0.127**	**J**	0.500	0.0629	ug/L			07/24/14 06:58	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 06:58	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 06:58	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 06:58	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 06:58	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 06:58	1

Client Sample ID: CC-06 (GAC-2)

Lab Sample ID: 490-57721-5

Date Collected: 07/18/14 12:25

Matrix: Water

Date Received: 07/19/14 08:40

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 06:58	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 06:58	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 06:58	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 06:58	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 06:58	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 06:58	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 06:58	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 06:58	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 06:58	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 06:58	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 06:58	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 06:58	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 06:58	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 06:58	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 06:58	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 06:58	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 06:58	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 06:58	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 06:58	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 06:58	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 06:58	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 06:58	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 06:58	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 06:58	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 06:58	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 06:58	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 06:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/24/14 06:58*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*07/24/14 06:58*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-194469/7
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 01:43	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 01:43	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 01:43	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 01:43	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 01:43	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 01:43	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 01:43	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 01:43	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 01:43	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 01:43	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 01:43	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 01:43	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 01:43	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 01:43	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 01:43	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 01:43	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 01:43	1
Acetone	ND		2.50	0.537	ug/L			07/24/14 01:43	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 01:43	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 01:43	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 01:43	1
Carbon disulfide	ND		0.500	0.150	ug/L			07/24/14 01:43	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 01:43	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 01:43	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 01:43	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 01:43	1
Chloromethane	ND		0.500	0.0629	ug/L			07/24/14 01:43	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 01:43	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 01:43	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194469/7
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 01:43	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 01:43	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 01:43	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 01:43	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 01:43	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 01:43	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 01:43	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 01:43	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 01:43	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 01:43	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 01:43	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 01:43	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 01:43	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 01:43	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 01:43	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 01:43	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 01:43	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 01:43	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 01:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/24/14 01:43*	*1*
1,2-Dichlorobenzene-d4	*104*		*80 - 120*		*07/24/14 01:43*	*1*

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.018		ug/L		100	70 - 130
1,1,1-Trichloroethane	4.00	3.448		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.840		ug/L		96	70 - 130
1,1,2-Trichloroethane	4.00	4.357		ug/L		109	70 - 130
1,1-Dichloroethane	4.00	3.937		ug/L		98	70 - 130
1,1-Dichloroethene	4.00	3.816		ug/L		95	70 - 130
1,1-Dichloropropene	4.00	4.215		ug/L		105	70 - 130
1,2,3-Trichlorobenzene	4.00	3.293		ug/L		82	70 - 130
1,2,3-Trichloropropane	4.00	4.068		ug/L		102	70 - 130
1,2,4-Trichlorobenzene	4.00	3.474		ug/L		87	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.683		ug/L		92	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.147		ug/L		104	70 - 130
1,2-Dibromoethane	4.00	4.091		ug/L		102	70 - 130
1,2-Dichlorobenzene	4.00	3.653		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	4.163		ug/L		104	70 - 130
1,2-Dichloropropane	4.00	4.127		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	4.00	3.702		ug/L		93	70 - 130
1,3-Dichlorobenzene	4.00	3.807		ug/L		95	70 - 130
1,3-Dichloropropane	4.00	4.139		ug/L		103	70 - 130
1,4-Dichlorobenzene	4.00	3.798		ug/L		95	70 - 130
2,2-Dichloropropane	4.00	2.845		ug/L		71	70 - 130
2-Butanone (MEK)	20.0	23.55		ug/L		118	70 - 130
2-Chlorotoluene	4.00	3.661		ug/L		92	70 - 130
2-Hexanone	20.0	22.16		ug/L		111	70 - 130
4-Chlorotoluene	4.00	3.865		ug/L		97	70 - 130
4-Isopropyltoluene	4.00	3.724		ug/L		93	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	22.51		ug/L		113	70 - 130
Acetone	20.0	25.03		ug/L		125	70 - 130
Benzene	4.00	3.961		ug/L		99	70 - 130
Bromobenzene	4.00	3.766		ug/L		94	70 - 130
Bromochloromethane	4.00	3.841		ug/L		96	70 - 130
Dichlorobromomethane	4.00	4.258		ug/L		106	70 - 130
Bromoform	4.00	4.812		ug/L		120	70 - 130
Bromomethane	4.00	4.400		ug/L		110	70 - 130
Carbon disulfide	4.00	3.014		ug/L		75	70 - 130
Carbon tetrachloride	4.00	4.232		ug/L		106	70 - 130
Chlorobenzene	4.00	3.879		ug/L		97	70 - 130
Chlorodibromomethane	4.00	4.478		ug/L		112	70 - 130
Chloroethane	4.00	3.934		ug/L		98	70 - 130
Chloroform	4.00	3.797		ug/L		95	70 - 130
Chloromethane	4.00	4.875		ug/L		122	70 - 130
cis-1,2-Dichloroethene	4.00	3.783		ug/L		95	70 - 130
cis-1,3-Dichloropropene	4.00	4.656		ug/L		116	70 - 130
Dibromomethane	4.00	4.004		ug/L		100	70 - 130
Dichlorodifluoromethane	4.00	4.448		ug/L		111	70 - 130
Ethylbenzene	4.00	3.785		ug/L		95	70 - 130
Hexachlorobutadiene	4.00	3.543		ug/L		89	70 - 130
Isopropylbenzene	4.00	3.795		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.874		ug/L		97	70 - 130
Methylene Chloride	4.00	4.264		ug/L		107	70 - 130
Naphthalene	4.00	3.412		ug/L		85	70 - 130
n-Butylbenzene	4.00	3.680		ug/L		92	70 - 130
N-Propylbenzene	4.00	3.696		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.735		ug/L		93	70 - 130
Styrene	4.00	3.806		ug/L		95	70 - 130
tert-Butylbenzene	4.00	3.698		ug/L		92	70 - 130
Tetrachloroethene	4.00	3.712		ug/L		93	70 - 130
Toluene	4.00	4.073		ug/L		102	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.816		ug/L		95	70 - 130
trans-1,3-Dichloropropene	4.00	5.176		ug/L		129	70 - 130
Trichloroethene	4.00	3.894		ug/L		97	70 - 130
Trichlorofluoromethane	4.00	4.664		ug/L		117	70 - 130
Vinyl chloride	4.00	4.239		ug/L		106	70 - 130
Xylenes, Total	8.00	7.604		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*95*		*80 - 120*

Lab Sample ID: LCSD 480-194469/6
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	4.331		ug/L		108	70 - 130	8	20
1,1,1-Trichloroethane	4.00	4.130		ug/L		103	70 - 130	18	20
1,1,2,2-Tetrachloroethane	4.00	3.923		ug/L		98	70 - 130	2	20
1,1,2-Trichloroethane	4.00	3.970		ug/L		99	70 - 130	9	20
1,1-Dichloroethane	4.00	4.232		ug/L		106	70 - 130	7	20
1,1-Dichloroethene	4.00	3.851		ug/L		96	70 - 130	1	20
1,1-Dichloropropene	4.00	4.495		ug/L		112	70 - 130	6	20
1,2,3-Trichlorobenzene	4.00	3.834		ug/L		96	70 - 130	15	20
1,2,3-Trichloropropane	4.00	4.136		ug/L		103	70 - 130	2	20
1,2,4-Trichlorobenzene	4.00	3.830		ug/L		96	70 - 130	10	20
1,2,4-Trimethylbenzene	4.00	3.973		ug/L		99	70 - 130	8	20
1,2-Dibromo-3-Chloropropane	4.00	4.396		ug/L		110	70 - 130	6	20
1,2-Dibromoethane	4.00	3.958		ug/L		99	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.839		ug/L		96	70 - 130	5	20
1,2-Dichloroethane	4.00	4.023		ug/L		101	70 - 130	3	20
1,2-Dichloropropane	4.00	4.168		ug/L		104	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	4.047		ug/L		101	70 - 130	9	20
1,3-Dichlorobenzene	4.00	3.935		ug/L		98	70 - 130	3	20
1,3-Dichloropropane	4.00	4.004		ug/L		100	70 - 130	3	20
1,4-Dichlorobenzene	4.00	3.927		ug/L		98	70 - 130	3	20
2,2-Dichloropropane	4.00	3.686	*	ug/L		92	70 - 130	26	20
2-Butanone (MEK)	20.0	23.28		ug/L		116	70 - 130	1	20
2-Chlorotoluene	4.00	4.013		ug/L		100	70 - 130	9	20
2-Hexanone	20.0	21.58		ug/L		108	70 - 130	3	20
4-Chlorotoluene	4.00	3.886		ug/L		97	70 - 130	1	20
4-Isopropyltoluene	4.00	4.050		ug/L		101	70 - 130	8	20
4-Methyl-2-pentanone (MIBK)	20.0	21.47		ug/L		107	70 - 130	5	20
Acetone	20.0	26.92	*	ug/L		135	70 - 130	7	20
Benzene	4.00	4.084		ug/L		102	70 - 130	3	20
Bromobenzene	4.00	3.824		ug/L		96	70 - 130	2	20
Bromochloromethane	4.00	4.023		ug/L		101	70 - 130	5	20
Dichlorobromomethane	4.00	4.330		ug/L		108	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-194469/6
Matrix: Water
Analysis Batch: 194469

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
Bromoform	4.00	4.611		ug/L		115	70 - 130	4	20
Bromomethane	4.00	4.244		ug/L		106	70 - 130	4	20
Carbon disulfide	4.00	3.822	*	ug/L		96	70 - 130	24	20
Carbon tetrachloride	4.00	4.600		ug/L		115	70 - 130	8	20
Chlorobenzene	4.00	3.930		ug/L		98	70 - 130	1	20
Chlorodibromomethane	4.00	4.413		ug/L		110	70 - 130	1	20
Chloroethane	4.00	4.609		ug/L		115	70 - 130	16	20
Chloroform	4.00	4.026		ug/L		101	70 - 130	6	20
Chloromethane	4.00	4.715		ug/L		118	70 - 130	3	20
cis-1,2-Dichloroethene	4.00	4.111		ug/L		103	70 - 130	8	20
cis-1,3-Dichloropropene	4.00	4.376		ug/L		109	70 - 130	6	20
Dibromomethane	4.00	4.166		ug/L		104	70 - 130	4	20
Dichlorodifluoromethane	4.00	4.984		ug/L		125	70 - 130	11	20
Ethylbenzene	4.00	3.977		ug/L		99	70 - 130	5	20
Hexachlorobutadiene	4.00	3.949		ug/L		99	70 - 130	11	20
Isopropylbenzene	4.00	4.106		ug/L		103	70 - 130	8	20
Methyl tert-butyl ether	4.00	4.048		ug/L		101	70 - 130	4	20
Methylene Chloride	4.00	4.478		ug/L		112	70 - 130	5	20
Naphthalene	4.00	3.775		ug/L		94	70 - 130	10	20
n-Butylbenzene	4.00	3.982		ug/L		100	70 - 130	8	20
N-Propylbenzene	4.00	3.973		ug/L		99	70 - 130	7	20
sec-Butylbenzene	4.00	4.054		ug/L		101	70 - 130	8	20
Styrene	4.00	3.829		ug/L		96	70 - 130	1	20
tert-Butylbenzene	4.00	4.005		ug/L		100	70 - 130	8	20
Tetrachloroethene	4.00	3.941		ug/L		99	70 - 130	6	20
Toluene	4.00	4.050		ug/L		101	70 - 130	1	20
trans-1,2-Dichloroethene	4.00	4.083		ug/L		102	70 - 130	7	20
trans-1,3-Dichloropropene	4.00	4.705		ug/L		118	70 - 130	10	20
Trichloroethene	4.00	4.104		ug/L		103	70 - 130	5	20
Trichlorofluoromethane	4.00	4.793		ug/L		120	70 - 130	3	20
Vinyl chloride	4.00	4.522		ug/L		113	70 - 130	6	20
Xylenes, Total	8.00	8.037		ug/L		100	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 12:17	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

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		0.500	0.0590	ug/L			07/24/14 12:17	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 12:17	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 12:17	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 12:17	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 12:17	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 12:17	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 12:17	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 12:17	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 12:17	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 12:17	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 12:17	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 12:17	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 12:17	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 12:17	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 12:17	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 12:17	1
Acetone	ND		2.50	0.537	ug/L			07/24/14 12:17	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 12:17	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 12:17	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 12:17	1
Carbon disulfide	ND		0.500	0.150	ug/L			07/24/14 12:17	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 12:17	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 12:17	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 12:17	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 12:17	1
Chloromethane	ND		0.500	0.0629	ug/L			07/24/14 12:17	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 12:17	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 12:17	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 12:17	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 12:17	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 12:17	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 12:17	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 12:17	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 12:17	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 12:17	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 12:17	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 12:17	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 12:17	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 12:17	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 12:17	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 12:17	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 12:17	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 12:17	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 12:17	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 12:17	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 12:17	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/24/14 12:17*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*07/24/14 12:17*	*1*

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.556		ug/L		89	70 - 130
1,1,1-Trichloroethane	4.00	3.356		ug/L		84	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.308		ug/L		83	70 - 130
1,1,2-Trichloroethane	4.00	3.293		ug/L		82	70 - 130
1,1-Dichloroethane	4.00	3.458		ug/L		86	70 - 130
1,1-Dichloroethene	4.00	3.210		ug/L		80	70 - 130
1,1-Dichloropropene	4.00	3.645		ug/L		91	70 - 130
1,2,3-Trichlorobenzene	4.00	3.309		ug/L		83	70 - 130
1,2,3-Trichloropropane	4.00	3.484		ug/L		87	70 - 130
1,2,4-Trichlorobenzene	4.00	3.330		ug/L		83	70 - 130
1,2,4-Trimethylbenzene	4.00	3.307		ug/L		83	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	3.600		ug/L		90	70 - 130
1,2-Dibromoethane	4.00	3.379		ug/L		84	70 - 130
1,2-Dichlorobenzene	4.00	3.314		ug/L		83	70 - 130
1,2-Dichloroethane	4.00	3.504		ug/L		88	70 - 130
1,2-Dichloropropane	4.00	3.341		ug/L		84	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	4.00	3.375		ug/L		84	70 - 130
1,3-Dichlorobenzene	4.00	3.334		ug/L		83	70 - 130
1,3-Dichloropropane	4.00	3.410		ug/L		85	70 - 130
1,4-Dichlorobenzene	4.00	3.288		ug/L		82	70 - 130
2,2-Dichloropropane	4.00	2.962		ug/L		74	70 - 130
2-Butanone (MEK)	20.0	18.61		ug/L		93	70 - 130
2-Chlorotoluene	4.00	3.321		ug/L		83	70 - 130
2-Hexanone	20.0	17.32		ug/L		87	70 - 130
4-Chlorotoluene	4.00	3.337		ug/L		83	70 - 130
4-Isopropyltoluene	4.00	3.340		ug/L		83	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	17.39		ug/L		87	70 - 130
Acetone	20.0	23.83		ug/L		119	70 - 130
Benzene	4.00	3.394		ug/L		85	70 - 130
Bromobenzene	4.00	3.354		ug/L		84	70 - 130
Bromochloromethane	4.00	3.375		ug/L		84	70 - 130
Dichlorobromomethane	4.00	3.518		ug/L		88	70 - 130
Bromoform	4.00	3.625		ug/L		91	70 - 130
Bromomethane	4.00	4.077		ug/L		102	70 - 130
Carbon disulfide	4.00	2.959		ug/L		74	70 - 130
Carbon tetrachloride	4.00	3.714		ug/L		93	70 - 130
Chlorobenzene	4.00	3.349		ug/L		84	70 - 130
Chlorodibromomethane	4.00	3.616		ug/L		90	70 - 130
Chloroethane	4.00	4.261		ug/L		107	70 - 130
Chloroform	4.00	3.349		ug/L		84	70 - 130
Chloromethane	4.00	4.429		ug/L		111	70 - 130
cis-1,2-Dichloroethene	4.00	3.355		ug/L		84	70 - 130
cis-1,3-Dichloropropene	4.00	3.530		ug/L		88	70 - 130
Dibromomethane	4.00	3.330		ug/L		83	70 - 130
Dichlorodifluoromethane	4.00	5.138		ug/L		128	70 - 130
Ethylbenzene	4.00	3.361		ug/L		84	70 - 130
Hexachlorobutadiene	4.00	3.392		ug/L		85	70 - 130
Isopropylbenzene	4.00	3.404		ug/L		85	70 - 130
Methyl tert-butyl ether	4.00	3.357		ug/L		84	70 - 130
Methylene Chloride	4.00	3.748		ug/L		94	70 - 130
Naphthalene	4.00	3.262		ug/L		82	70 - 130
n-Butylbenzene	4.00	3.348		ug/L		84	70 - 130
N-Propylbenzene	4.00	3.306		ug/L		83	70 - 130
sec-Butylbenzene	4.00	3.311		ug/L		83	70 - 130
Styrene	4.00	3.206		ug/L		80	70 - 130
tert-Butylbenzene	4.00	3.322		ug/L		83	70 - 130
Tetrachloroethene	4.00	3.275		ug/L		82	70 - 130
Toluene	4.00	3.330		ug/L		83	70 - 130
trans-1,2-Dichloroethene	4.00	3.348		ug/L		84	70 - 130
trans-1,3-Dichloropropene	4.00	3.830		ug/L		96	70 - 130
Trichloroethene	4.00	3.393		ug/L		85	70 - 130
Trichlorofluoromethane	4.00	4.554		ug/L		114	70 - 130
Vinyl chloride	4.00	4.183		ug/L		105	70 - 130
Xylenes, Total	8.00	6.765		ug/L		85	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*

Lab Sample ID: LCSD 480-194535/5
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.448		ug/L		86	70 - 130	3	20
1,1,1-Trichloroethane	4.00	3.180		ug/L		80	70 - 130	5	20
1,1,2,2-Tetrachloroethane	4.00	3.210		ug/L		80	70 - 130	3	20
1,1,2-Trichloroethane	4.00	3.162		ug/L		79	70 - 130	4	20
1,1-Dichloroethane	4.00	3.349		ug/L		84	70 - 130	3	20
1,1-Dichloroethene	4.00	2.961		ug/L		74	70 - 130	8	20
1,1-Dichloropropene	4.00	3.403		ug/L		85	70 - 130	7	20
1,2,3-Trichlorobenzene	4.00	3.210		ug/L		80	70 - 130	3	20
1,2,3-Trichloropropane	4.00	3.385		ug/L		85	70 - 130	3	20
1,2,4-Trichlorobenzene	4.00	3.258		ug/L		81	70 - 130	2	20
1,2,4-Trimethylbenzene	4.00	3.204		ug/L		80	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	3.301		ug/L		83	70 - 130	9	20
1,2-Dibromoethane	4.00	3.249		ug/L		81	70 - 130	4	20
1,2-Dichlorobenzene	4.00	3.282		ug/L		82	70 - 130	1	20
1,2-Dichloroethane	4.00	3.329		ug/L		83	70 - 130	5	20
1,2-Dichloropropane	4.00	3.281		ug/L		82	70 - 130	2	20
1,3,5-Trimethylbenzene	4.00	3.251		ug/L		81	70 - 130	4	20
1,3-Dichlorobenzene	4.00	3.256		ug/L		81	70 - 130	2	20
1,3-Dichloropropane	4.00	3.261		ug/L		82	70 - 130	4	20
1,4-Dichlorobenzene	4.00	3.227		ug/L		81	70 - 130	2	20
2,2-Dichloropropane	4.00	2.998		ug/L		75	70 - 130	1	20
2-Butanone (MEK)	20.0	18.45		ug/L		92	70 - 130	1	20
2-Chlorotoluene	4.00	3.228		ug/L		81	70 - 130	3	20
2-Hexanone	20.0	17.21		ug/L		86	70 - 130	1	20
4-Chlorotoluene	4.00	3.186		ug/L		80	70 - 130	5	20
4-Isopropyltoluene	4.00	3.215		ug/L		80	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	17.20		ug/L		86	70 - 130	1	20
Acetone	20.0	22.10		ug/L		111	70 - 130	8	20
Benzene	4.00	3.198		ug/L		80	70 - 130	6	20
Bromobenzene	4.00	3.134		ug/L		78	70 - 130	7	20
Bromochloromethane	4.00	3.202		ug/L		80	70 - 130	5	20
Dichlorobromomethane	4.00	3.402		ug/L		85	70 - 130	3	20
Bromoform	4.00	3.419		ug/L		85	70 - 130	6	20
Bromomethane	4.00	3.829		ug/L		96	70 - 130	6	20
Carbon disulfide	4.00	2.845		ug/L		71	70 - 130	4	20
Carbon tetrachloride	4.00	3.427		ug/L		86	70 - 130	8	20
Chlorobenzene	4.00	3.136		ug/L		78	70 - 130	7	20
Chlorodibromomethane	4.00	3.415		ug/L		85	70 - 130	6	20
Chloroethane	4.00	3.896		ug/L		97	70 - 130	9	20
Chloroform	4.00	3.207		ug/L		80	70 - 130	4	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-194535/5
Matrix: Water
Analysis Batch: 194535

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
Chloromethane	4.00	4.244		ug/L		106	70 - 130	4	20
cis-1,2-Dichloroethene	4.00	3.237		ug/L		81	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.428		ug/L		86	70 - 130	3	20
Dibromomethane	4.00	3.328		ug/L		83	70 - 130	0	20
Dichlorodifluoromethane	4.00	4.789		ug/L		120	70 - 130	7	20
Ethylbenzene	4.00	3.169		ug/L		79	70 - 130	6	20
Hexachlorobutadiene	4.00	3.129		ug/L		78	70 - 130	8	20
Isopropylbenzene	4.00	3.191		ug/L		80	70 - 130	6	20
Methyl tert-butyl ether	4.00	3.295		ug/L		82	70 - 130	2	20
Methylene Chloride	4.00	3.858		ug/L		96	70 - 130	3	20
Naphthalene	4.00	3.218		ug/L		80	70 - 130	1	20
n-Butylbenzene	4.00	3.172		ug/L		79	70 - 130	5	20
N-Propylbenzene	4.00	3.199		ug/L		80	70 - 130	3	20
sec-Butylbenzene	4.00	3.143		ug/L		79	70 - 130	5	20
Styrene	4.00	3.074		ug/L		77	70 - 130	4	20
tert-Butylbenzene	4.00	3.179		ug/L		79	70 - 130	4	20
Tetrachloroethene	4.00	3.197		ug/L		80	70 - 130	2	20
Toluene	4.00	3.196		ug/L		80	70 - 130	4	20
trans-1,2-Dichloroethene	4.00	3.201		ug/L		80	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.724		ug/L		93	70 - 130	3	20
Trichloroethene	4.00	3.272		ug/L		82	70 - 130	4	20
Trichlorofluoromethane	4.00	4.263		ug/L		107	70 - 130	7	20
Vinyl chloride	4.00	3.945		ug/L		99	70 - 130	6	20
Xylenes, Total	8.00	6.404		ug/L		80	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: 490-57721-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: CC-06 (raw)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		32.0	29.12		ug/L		91	70 - 130
1,1,1-Trichloroethane	ND		32.0	27.50		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	ND		32.0	27.91		ug/L		87	70 - 130
1,1,2-Trichloroethane	ND		32.0	27.89		ug/L		87	70 - 130
1,1-Dichloroethane	ND		32.0	28.84		ug/L		90	70 - 130
1,1-Dichloroethene	ND		32.0	27.45		ug/L		86	70 - 130
1,1-Dichloropropene	ND		32.0	30.40		ug/L		95	70 - 130
1,2,3-Trichlorobenzene	ND		32.0	26.50		ug/L		83	70 - 130
1,2,3-Trichloropropane	ND		32.0	28.05		ug/L		88	70 - 130
1,2,4-Trichlorobenzene	ND		32.0	26.88		ug/L		84	70 - 130
1,2,4-Trimethylbenzene	ND		32.0	27.01		ug/L		84	70 - 130
1,2-Dibromo-3-Chloropropane	ND		32.0	27.00		ug/L		84	70 - 130
1,2-Dibromoethane	ND		32.0	28.22		ug/L		88	70 - 130
1,2-Dichlorobenzene	ND		32.0	27.25		ug/L		85	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: CC-06 (raw)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	ND		32.0	28.15		ug/L		88	70 - 130
1,2-Dichloropropane	ND		32.0	28.65		ug/L		90	70 - 130
1,3,5-Trimethylbenzene	ND		32.0	27.44		ug/L		86	70 - 130
1,3-Dichlorobenzene	ND		32.0	27.07		ug/L		85	70 - 130
1,3-Dichloropropane	ND		32.0	27.49		ug/L		86	70 - 130
1,4-Dichlorobenzene	ND		32.0	27.38		ug/L		86	70 - 130
2,2-Dichloropropane	ND		32.0	21.54	F1	ug/L		67	70 - 130
2-Butanone (MEK)	ND		160	146.3		ug/L		91	70 - 130
2-Chlorotoluene	ND		32.0	27.31		ug/L		85	70 - 130
2-Hexanone	ND		160	142.3		ug/L		89	70 - 130
4-Chlorotoluene	ND		32.0	26.88		ug/L		84	70 - 130
4-Isopropyltoluene	ND		32.0	27.08		ug/L		85	70 - 130
4-Methyl-2-pentanone (MIBK)	ND		160	144.5		ug/L		90	70 - 130
Acetone	ND		160	153.9		ug/L		96	70 - 130
Benzene	ND		32.0	28.17		ug/L		88	70 - 130
Bromobenzene	ND		32.0	27.20		ug/L		85	70 - 130
Bromochloromethane	ND		32.0	27.48		ug/L		86	70 - 130
Dichlorobromomethane	ND		32.0	28.34		ug/L		89	70 - 130
Bromoform	ND		32.0	26.32		ug/L		82	70 - 130
Bromomethane	ND		32.0	31.82		ug/L		99	70 - 130
Carbon disulfide	ND		32.0	22.73		ug/L		71	70 - 130
Carbon tetrachloride	ND		32.0	28.24		ug/L		88	70 - 130
Chlorobenzene	ND		32.0	27.87		ug/L		87	70 - 130
Chlorodibromomethane	ND		32.0	27.15		ug/L		85	70 - 130
Chloroethane	ND		32.0	32.31		ug/L		101	70 - 130
Chloroform	ND		32.0	27.51		ug/L		86	70 - 130
Chloromethane	ND		32.0	32.11		ug/L		100	70 - 130
cis-1,2-Dichloroethene	47.6		32.0	67.27	F1	ug/L		62	70 - 130
cis-1,3-Dichloropropene	ND		32.0	27.21		ug/L		85	70 - 130
Dibromomethane	ND		32.0	28.86		ug/L		90	70 - 130
Dichlorodifluoromethane	ND		32.0	37.25		ug/L		116	70 - 130
Ethylbenzene	ND		32.0	27.71		ug/L		87	70 - 130
Hexachlorobutadiene	ND		32.0	25.89		ug/L		81	70 - 130
Isopropylbenzene	ND		32.0	28.14		ug/L		88	70 - 130
Methyl tert-butyl ether	ND		32.0	28.84		ug/L		90	70 - 130
Methylene Chloride	ND		32.0	31.74		ug/L		99	70 - 130
Naphthalene	ND		32.0	26.50		ug/L		83	70 - 130
n-Butylbenzene	ND		32.0	26.80		ug/L		84	70 - 130
N-Propylbenzene	ND		32.0	27.27		ug/L		85	70 - 130
sec-Butylbenzene	ND		32.0	27.28		ug/L		85	70 - 130
Styrene	ND		32.0	26.26		ug/L		82	70 - 130
tert-Butylbenzene	ND		32.0	27.98		ug/L		87	70 - 130
Tetrachloroethene	ND		32.0	27.67		ug/L		86	70 - 130
Toluene	ND		32.0	28.04		ug/L		88	70 - 130
trans-1,2-Dichloroethene	ND		32.0	28.56		ug/L		89	70 - 130
trans-1,3-Dichloropropene	ND		32.0	29.21		ug/L		91	70 - 130
Trichloroethene	3.75		32.0	31.81		ug/L		88	70 - 130
Trichlorofluoromethane	ND		32.0	29.34		ug/L		92	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: CC-06 (raw)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	ND		32.0	31.28		ug/L		98	70 - 130
Xylenes, Total	ND		64.0	56.54		ug/L		88	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*99*		*80 - 120*

Lab Sample ID: 490-57721-1 MSD
Matrix: Water
Analysis Batch: 194535

Client Sample ID: CC-06 (raw)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		32.0	27.98		ug/L		87	70 - 130	4	20
1,1,1-Trichloroethane	ND		32.0	27.02		ug/L		84	70 - 130	2	20
1,1,2,2-Tetrachloroethane	ND		32.0	27.83		ug/L		87	70 - 130	0	20
1,1,2-Trichloroethane	ND		32.0	26.92		ug/L		84	70 - 130	4	20
1,1-Dichloroethane	ND		32.0	27.78		ug/L		87	70 - 130	4	20
1,1-Dichloroethene	ND		32.0	26.17		ug/L		82	70 - 130	5	20
1,1-Dichloropropene	ND		32.0	29.45		ug/L		92	70 - 130	3	20
1,2,3-Trichlorobenzene	ND		32.0	26.23		ug/L		82	70 - 130	1	20
1,2,3-Trichloropropane	ND		32.0	27.58		ug/L		86	70 - 130	2	20
1,2,4-Trichlorobenzene	ND		32.0	26.94		ug/L		84	70 - 130	0	20
1,2,4-Trimethylbenzene	ND		32.0	27.13		ug/L		85	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	ND		32.0	28.34		ug/L		89	70 - 130	5	20
1,2-Dibromoethane	ND		32.0	27.18		ug/L		85	70 - 130	4	20
1,2-Dichlorobenzene	ND		32.0	27.28		ug/L		85	70 - 130	0	20
1,2-Dichloroethane	ND		32.0	27.94		ug/L		87	70 - 130	1	20
1,2-Dichloropropane	ND		32.0	27.64		ug/L		86	70 - 130	4	20
1,3,5-Trimethylbenzene	ND		32.0	26.91		ug/L		84	70 - 130	2	20
1,3-Dichlorobenzene	ND		32.0	27.36		ug/L		86	70 - 130	1	20
1,3-Dichloropropane	ND		32.0	26.94		ug/L		84	70 - 130	2	20
1,4-Dichlorobenzene	ND		32.0	26.68		ug/L		83	70 - 130	3	20
2,2-Dichloropropane	ND		32.0	21.71	F1	ug/L		68	70 - 130	1	20
2-Butanone (MEK)	ND		160	142.4		ug/L		89	70 - 130	3	20
2-Chlorotoluene	ND		32.0	27.47		ug/L		86	70 - 130	1	20
2-Hexanone	ND		160	142.3		ug/L		89	70 - 130	0	20
4-Chlorotoluene	ND		32.0	26.83		ug/L		84	70 - 130	0	20
4-Isopropyltoluene	ND		32.0	27.08		ug/L		85	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	ND		160	142.3		ug/L		89	70 - 130	2	20
Acetone	ND		160	135.3		ug/L		85	70 - 130	13	20
Benzene	ND		32.0	27.63		ug/L		86	70 - 130	2	20
Bromobenzene	ND		32.0	27.22		ug/L		85	70 - 130	0	20
Bromochloromethane	ND		32.0	27.65		ug/L		86	70 - 130	1	20
Dichlorobromomethane	ND		32.0	27.08		ug/L		85	70 - 130	5	20
Bromoform	ND		32.0	26.05		ug/L		81	70 - 130	1	20
Bromomethane	ND		32.0	30.27		ug/L		95	70 - 130	5	20
Carbon disulfide	ND		32.0	22.09	F1	ug/L		69	70 - 130	3	20
Carbon tetrachloride	ND		32.0	27.57		ug/L		86	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-1 MSD
Matrix: Water
Analysis Batch: 194535

Client Sample ID: CC-06 (raw)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	ND		32.0	26.83		ug/L		84	70 - 130	4	20
Chlorodibromomethane	ND		32.0	26.53		ug/L		83	70 - 130	2	20
Chloroethane	ND		32.0	31.28		ug/L		98	70 - 130	3	20
Chloroform	ND		32.0	26.76		ug/L		84	70 - 130	3	20
Chloromethane	ND		32.0	31.35		ug/L		98	70 - 130	2	20
cis-1,2-Dichloroethene	47.6		32.0	66.52	F1	ug/L		59	70 - 130	1	20
cis-1,3-Dichloropropene	ND		32.0	27.35		ug/L		85	70 - 130	1	20
Dibromomethane	ND		32.0	27.45		ug/L		86	70 - 130	5	20
Dichlorodifluoromethane	ND		32.0	34.85		ug/L		109	70 - 130	7	20
Ethylbenzene	ND		32.0	26.64		ug/L		83	70 - 130	4	20
Hexachlorobutadiene	ND		32.0	25.32		ug/L		79	70 - 130	2	20
Isopropylbenzene	ND		32.0	27.03		ug/L		84	70 - 130	4	20
Methyl tert-butyl ether	ND		32.0	28.49		ug/L		89	70 - 130	1	20
Methylene Chloride	ND		32.0	32.42		ug/L		101	70 - 130	2	20
Naphthalene	ND		32.0	26.90		ug/L		84	70 - 130	1	20
n-Butylbenzene	ND		32.0	26.65		ug/L		83	70 - 130	1	20
N-Propylbenzene	ND		32.0	27.04		ug/L		84	70 - 130	1	20
sec-Butylbenzene	ND		32.0	27.11		ug/L		85	70 - 130	1	20
Styrene	ND		32.0	25.48		ug/L		80	70 - 130	3	20
tert-Butylbenzene	ND		32.0	27.18		ug/L		85	70 - 130	3	20
Tetrachloroethene	ND		32.0	25.93		ug/L		81	70 - 130	7	20
Toluene	ND		32.0	27.22		ug/L		85	70 - 130	3	20
trans-1,2-Dichloroethene	ND		32.0	28.38		ug/L		89	70 - 130	1	20
trans-1,3-Dichloropropene	ND		32.0	29.58		ug/L		92	70 - 130	1	20
Trichloroethene	3.75		32.0	30.73		ug/L		84	70 - 130	3	20
Trichlorofluoromethane	ND		32.0	30.53		ug/L		95	70 - 130	4	20
Vinyl chloride	ND		32.0	30.68		ug/L		96	70 - 130	2	20
Xylenes, Total	ND		64.0	54.84		ug/L		86	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-194974/1-A
Matrix: Water
Analysis Batch: 195162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 15:47	1
Manganese	ND		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 15:47	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-194974/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.18		mg/L		102	85 - 115
Manganese	0.200	0.2029		mg/L		101	85 - 115

Lab Sample ID: 490-57721-1 MS — **Client Sample ID: CC-06 (raw)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.0347	J	10.0	10.17		mg/L		101	70 - 130
Manganese	0.0526		0.200	0.2566		mg/L		102	70 - 130

Lab Sample ID: 490-57721-1 MSD — **Client Sample ID: CC-06 (raw)**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.0347	J	10.0	10.05		mg/L		100	70 - 130	1	20
Manganese	0.0526		0.200	0.2528		mg/L		100	70 - 130	2	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

GC/MS VOA

Analysis Batch: 194469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57721-1	CC-06 (raw)	Total/NA	Water	524.2	
490-57721-4	CC-06 (GAC-1)	Total/NA	Water	524.2	
490-57721-5	CC-06 (GAC-2)	Total/NA	Water	524.2	
LCS 480-194469/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-194469/6	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-194469/7	Method Blank	Total/NA	Water	524.2	

Analysis Batch: 194535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57721-1 - DL	CC-06 (raw)	Total/NA	Water	524.2	
490-57721-1 MS	CC-06 (raw)	Total/NA	Water	524.2	
490-57721-1 MSD	CC-06 (raw)	Total/NA	Water	524.2	
490-57721-3	CC-06 (GAC-in)	Total/NA	Water	524.2	
LCS 480-194535/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-194535/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-194535/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 194974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57721-1	CC-06 (raw)	Total/NA	Water	200.7	
490-57721-1 MS	CC-06 (raw)	Total/NA	Water	200.7	
490-57721-1 MSD	CC-06 (raw)	Total/NA	Water	200.7	
490-57721-2	CC-06 (post filter)	Total/NA	Water	200.7	
LCS 480-194974/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-194974/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 195162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57721-1	CC-06 (raw)	Total/NA	Water	200.7 Rev 4.4	194974
490-57721-1 MS	CC-06 (raw)	Total/NA	Water	200.7 Rev 4.4	194974
490-57721-1 MSD	CC-06 (raw)	Total/NA	Water	200.7 Rev 4.4	194974
490-57721-2	CC-06 (post filter)	Total/NA	Water	200.7 Rev 4.4	194974
LCS 480-194974/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	194974
MB 480-194974/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	194974

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

Client Sample ID: CC-06 (raw)

Lab Sample ID: 490-57721-1
Date Collected: 07/18/14 12:05
Matrix: Water
Date Received: 07/19/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 05:42	RAS	TAL BUF
Total/NA	Analysis	524.2	DL	8	25 mL	25 mL	194535	07/24/14 14:38	CDC	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	194974	07/28/14 07:40	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	195162	07/28/14 16:10	JRK	TAL BUF

Client Sample ID: CC-06 (post filter)

Lab Sample ID: 490-57721-2
Date Collected: 07/18/14 12:10
Matrix: Water
Date Received: 07/19/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	194974	07/28/14 07:40	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	195162	07/28/14 16:24	JRK	TAL BUF

Client Sample ID: CC-06 (GAC-in)

Lab Sample ID: 490-57721-3
Date Collected: 07/18/14 12:15
Matrix: Water
Date Received: 07/19/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194535	07/24/14 13:22	CDC	TAL BUF

Client Sample ID: CC-06 (GAC-1)

Lab Sample ID: 490-57721-4
Date Collected: 07/18/14 12:20
Matrix: Water
Date Received: 07/19/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 06:33	RAS	TAL BUF

Client Sample ID: CC-06 (GAC-2)

Lab Sample ID: 490-57721-5
Date Collected: 07/18/14 12:25
Matrix: Water
Date Received: 07/19/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 06:58	RAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57721-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Acrylonitrile
524.2		Water	Allyl chloride
524.2		Water	Carbon disulfide
524.2		Water	Dichlorofluoromethane
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	Naphthalene
524.2		Water	o-Xylene
524.2		Water	t-Butanol
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-57721 Chain of Custody

Cooler Received/Opened On 7/19/2014 @ 0840

1. Tracking # 7031 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 1.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO...NA

If yes, how many and where: (1) Front

5. Were the seals intact, signed, and dated correctly? YES..NO...NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) MDM

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica THE LEADER IN ENVI

Loc: 490
57721

7/29/2014

Client Information	Sampler: Ian Martz	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-24404-8963.1
Client Contact: Chuck Castelluccio	Phone: 978 322 4526	E-Mail: shali.brown@testamericainc.com		Page:
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): standard			
State, Zip: MA, 01824				
Phone: 781 213 4967	PO #: MA000725.2014.00107			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: FORD Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624.2_Preserved - Standard Analyte list (Buffalo)	200.7 - Iron/Manganese (Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-06 (raw)	7/18/14	1205	G	W	N	N	✓	✓		-1
CC-06 (post filter)	↓	1210	↓	↓	↓	↓		✓		2
CC-06 (GAC-in)	↓	1215	↓	↓	↓	↓	✓			3
CC-06 (GAC-1)	↓	1220	↓	↓	↓	↓	✓			4
CC-06 (GAC-2)	↓	1225	↓	↓	↓	↓	✓			5

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify) II

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 7/18/14 @ 1400	Company: ARCADIS	Received by:	Date/Time: 7-19-14 @ 0840	Company: TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.2c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57721-1

Login Number: 57721

List Number: 1

Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57721-1

Login Number: 57721
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 07/22/14 04:23 PM

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	4.8 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57721-1

Login Number: 57721
List Number: 3
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 07/22/14 04:25 PM

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	4.8 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-57724-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
7/29/2014 6:01:31 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57724-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-57724-1	CC-03 (raw)	Water	07/18/14 09:05	07/19/14 08:40
490-57724-2	CC-03 (post-filter)	Water	07/18/14 09:10	07/19/14 08:40
490-57724-3	CC-03 (GAC-1)	Water	07/18/14 09:15	07/19/14 08:40
490-57724-4	CC-03 (GAC-2)	Water	07/18/14 09:20	07/19/14 08:40
490-57724-5	Trip Blank	Water	07/18/14 00:01	07/19/14 08:40

Job ID: 490-57724-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-57724-1

Comments
No additional comments.

Receipt
The samples were received on 7/19/2014 8:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 194469 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was ND or detected below RL limit in the associated samples; therefore, the data have been reported.

Method(s) 524.2: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 194469 recovered outside control limits for the following analytes: 2,2-Dichloropropane and Carbon disulfide.

Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-03 (raw) (490-57724-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery 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.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57724-1

Client Sample ID: CC-03 (raw)

Lab Sample ID: 490-57724-1

Date Collected: 07/18/14 09:05
Date Received: 07/19/14 08:40

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 07:23	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 07:23	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 07:23	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 07:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 07:23	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 07:23	1
1,1-Dichloroethene	**0.106**	**J**	0.500	0.0590	ug/L			07/24/14 07:23	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 07:23	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 07:23	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 07:23	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 07:23	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 07:23	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 07:23	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 07:23	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 07:23	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 07:23	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 07:23	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 07:23	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 07:23	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 07:23	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 07:23	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 07:23	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 07:23	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 07:23	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 07:23	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 07:23	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 07:23	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 07:23	1
Acetone	ND	*	2.50	0.537	ug/L			07/24/14 07:23	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 07:23	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 07:23	1
Benzene	**0.478**	**J**	0.500	0.130	ug/L			07/24/14 07:23	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 07:23	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 07:23	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 07:23	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 07:23	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 07:23	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 07:23	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 07:23	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 07:23	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 07:23	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 07:23	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 07:23	1
Chloromethane	**0.0941**	**J**	0.500	0.0629	ug/L			07/24/14 07:23	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 07:23	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 07:23	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 07:23	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 07:23	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 07:23	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57724-1

Client Sample ID: CC-03 (raw)

Date Collected: 07/18/14 09:05
Date Received: 07/19/14 08:40

Lab Sample ID: 490-57724-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 07:23	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 07:23	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 07:23	1
Methyl tert-butyl ether	**0.272**	**J**	0.500	0.120	ug/L			07/24/14 07:23	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 07:23	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 07:23	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 07:23	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 07:23	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 07:23	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 07:23	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 07:23	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 07:23	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 07:23	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 07:23	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 07:23	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 07:23	1
trans-1,2-Dichloroethene	**0.852**		0.500	0.130	ug/L			07/24/14 07:23	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 07:23	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 07:23	1
Trichloroethene	**2.72**		0.500	0.0600	ug/L			07/24/14 07:23	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 07:23	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 07:23	1
Vinyl chloride	**0.139**	**J**	0.500	0.0590	ug/L			07/24/14 07:23	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 07:23	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 07:23	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 07:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*07/24/14 07:23*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*07/24/14 07:23*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**31.6**		2.00	0.480	ug/L			07/24/14 15:03	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/24/14 15:03*	*4*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*07/24/14 15:03*	*4*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.161**		0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 16:26	1
Manganese	**0.0484**		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 16:26	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57724-1

Client Sample ID: CC-03 (post-filter)

Lab Sample ID: 490-57724-2

Date Collected: 07/18/14 09:10

Matrix: Water

Date Received: 07/19/14 08:40

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.807		0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 16:35	1
Manganese	0.0604		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 16:35	1

Client Sample ID: CC-03 (GAC-1)

Lab Sample ID: 490-57724-3

Date Collected: 07/18/14 09:15

Matrix: Water

Date Received: 07/19/14 08:40

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 07:49	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 07:49	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 07:49	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 07:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 07:49	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 07:49	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 07:49	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 07:49	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 07:49	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 07:49	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 07:49	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 07:49	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 07:49	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 07:49	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 07:49	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 07:49	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 07:49	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 07:49	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 07:49	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 07:49	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 07:49	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 07:49	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 07:49	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 07:49	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 07:49	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 07:49	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 07:49	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 07:49	1
Acetone	**1.07**	**J ***	2.50	0.537	ug/L			07/24/14 07:49	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 07:49	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 07:49	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 07:49	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 07:49	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 07:49	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 07:49	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 07:49	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 07:49	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 07:49	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 07:49	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 07:49	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 07:49	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 07:49	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 07:49	1
Chloromethane	**0.179**	**J**	0.500	0.0629	ug/L			07/24/14 07:49	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 07:49	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 07:49	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 07:49	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 07:49	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 07:49	1

Client Sample ID: CC-03 (GAC-1)

Lab Sample ID: 490-57724-3

Date Collected: 07/18/14 09:15

Matrix: Water

Date Received: 07/19/14 08:40

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 07:49	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 07:49	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 07:49	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 07:49	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 07:49	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 07:49	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 07:49	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 07:49	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 07:49	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 07:49	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 07:49	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 07:49	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 07:49	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 07:49	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 07:49	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 07:49	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 07:49	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 07:49	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 07:49	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 07:49	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 07:49	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 07:49	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 07:49	1
Vinyl chloride	**0.0594**	**J**	0.500	0.0590	ug/L			07/24/14 07:49	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 07:49	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 07:49	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 07:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/24/14 07:49*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*07/24/14 07:49*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57724-1

Client Sample ID: CC-03 (GAC-2)

Date Collected: 07/18/14 09:20
Date Received: 07/19/14 08:40

Lab Sample ID: 490-57724-4

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 08:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 08:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 08:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 08:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 08:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 08:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 08:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 08:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 08:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 08:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 08:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 08:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 08:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 08:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 08:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 08:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 08:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 08:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 08:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 08:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 08:14	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 08:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 08:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 08:14	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 08:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 08:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 08:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 08:14	1
Acetone	**0.855**	**J ***	2.50	0.537	ug/L			07/24/14 08:14	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 08:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 08:14	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 08:14	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 08:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 08:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 08:14	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 08:14	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 08:14	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 08:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 08:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 08:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 08:14	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 08:14	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 08:14	1
Chloromethane	**0.291**	**J**	0.500	0.0629	ug/L			07/24/14 08:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 08:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 08:14	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 08:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 08:14	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 08:14	1

Client Sample ID: CC-03 (GAC-2)

Lab Sample ID: 490-57724-4

Date Collected: 07/18/14 09:20

Matrix: Water

Date Received: 07/19/14 08:40

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 08:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 08:14	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 08:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 08:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 08:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 08:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 08:14	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 08:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 08:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 08:14	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 08:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 08:14	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 08:14	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 08:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 08:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 08:14	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 08:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 08:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 08:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 08:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 08:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 08:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 08:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 08:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 08:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 08:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 08:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/24/14 08:14*	*1*
1,2-Dichlorobenzene-d4	*104*		*80 - 120*		*07/24/14 08:14*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57724-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-57724-5

Date Collected: 07/18/14 00:01
Date Received: 07/19/14 08:40

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 08:38	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 08:38	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 08:38	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 08:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 08:38	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 08:38	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 08:38	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 08:38	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 08:38	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 08:38	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 08:38	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 08:38	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 08:38	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 08:38	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 08:38	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 08:38	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 08:38	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 08:38	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 08:38	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 08:38	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 08:38	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 08:38	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 08:38	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 08:38	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 08:38	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 08:38	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 08:38	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 08:38	1
Acetone	**1.58**	**J ***	2.50	0.537	ug/L			07/24/14 08:38	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 08:38	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 08:38	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 08:38	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 08:38	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 08:38	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 08:38	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 08:38	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 08:38	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 08:38	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 08:38	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 08:38	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 08:38	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 08:38	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 08:38	1
Chloromethane	**0.0850**	**J**	0.500	0.0629	ug/L			07/24/14 08:38	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 08:38	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 08:38	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 08:38	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 08:38	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 08:38	1

Client Sample ID: Trip Blank

Lab Sample ID: 490-57724-5

Date Collected: 07/18/14 00:01

Matrix: Water

Date Received: 07/19/14 08:40

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 08:38	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 08:38	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 08:38	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 08:38	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 08:38	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 08:38	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 08:38	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 08:38	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 08:38	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 08:38	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 08:38	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 08:38	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 08:38	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 08:38	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 08:38	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 08:38	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 08:38	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 08:38	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 08:38	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 08:38	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 08:38	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 08:38	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 08:38	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 08:38	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 08:38	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 08:38	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 08:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*07/24/14 08:38*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*07/24/14 08:38*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-194469/7
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 01:43	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 01:43	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 01:43	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 01:43	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 01:43	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 01:43	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 01:43	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 01:43	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 01:43	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 01:43	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 01:43	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 01:43	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 01:43	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 01:43	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 01:43	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 01:43	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 01:43	1
Acetone	ND		2.50	0.537	ug/L			07/24/14 01:43	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 01:43	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 01:43	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 01:43	1
Carbon disulfide	ND		0.500	0.150	ug/L			07/24/14 01:43	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 01:43	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 01:43	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 01:43	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 01:43	1
Chloromethane	ND		0.500	0.0629	ug/L			07/24/14 01:43	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 01:43	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 01:43	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194469/7
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 01:43	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 01:43	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 01:43	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 01:43	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 01:43	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 01:43	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 01:43	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 01:43	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 01:43	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 01:43	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 01:43	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 01:43	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 01:43	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 01:43	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 01:43	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 01:43	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 01:43	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 01:43	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 01:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/24/14 01:43*	*1*
1,2-Dichlorobenzene-d4	*104*		*80 - 120*		*07/24/14 01:43*	*1*

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.018		ug/L		100	70 - 130
1,1,1-Trichloroethane	4.00	3.448		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.840		ug/L		96	70 - 130
1,1,2-Trichloroethane	4.00	4.357		ug/L		109	70 - 130
1,1-Dichloroethane	4.00	3.937		ug/L		98	70 - 130
1,1-Dichloroethene	4.00	3.816		ug/L		95	70 - 130
1,1-Dichloropropene	4.00	4.215		ug/L		105	70 - 130
1,2,3-Trichlorobenzene	4.00	3.293		ug/L		82	70 - 130
1,2,3-Trichloropropane	4.00	4.068		ug/L		102	70 - 130
1,2,4-Trichlorobenzene	4.00	3.474		ug/L		87	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.683		ug/L		92	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.147		ug/L		104	70 - 130
1,2-Dibromoethane	4.00	4.091		ug/L		102	70 - 130
1,2-Dichlorobenzene	4.00	3.653		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	4.163		ug/L		104	70 - 130
1,2-Dichloropropane	4.00	4.127		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	4.00	3.702		ug/L		93	70 - 130
1,3-Dichlorobenzene	4.00	3.807		ug/L		95	70 - 130
1,3-Dichloropropane	4.00	4.139		ug/L		103	70 - 130
1,4-Dichlorobenzene	4.00	3.798		ug/L		95	70 - 130
2,2-Dichloropropane	4.00	2.845		ug/L		71	70 - 130
2-Butanone (MEK)	20.0	23.55		ug/L		118	70 - 130
2-Chlorotoluene	4.00	3.661		ug/L		92	70 - 130
2-Hexanone	20.0	22.16		ug/L		111	70 - 130
4-Chlorotoluene	4.00	3.865		ug/L		97	70 - 130
4-Isopropyltoluene	4.00	3.724		ug/L		93	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	22.51		ug/L		113	70 - 130
Acetone	20.0	25.03		ug/L		125	70 - 130
Benzene	4.00	3.961		ug/L		99	70 - 130
Bromobenzene	4.00	3.766		ug/L		94	70 - 130
Bromochloromethane	4.00	3.841		ug/L		96	70 - 130
Dichlorobromomethane	4.00	4.258		ug/L		106	70 - 130
Bromoform	4.00	4.812		ug/L		120	70 - 130
Bromomethane	4.00	4.400		ug/L		110	70 - 130
Carbon disulfide	4.00	3.014		ug/L		75	70 - 130
Carbon tetrachloride	4.00	4.232		ug/L		106	70 - 130
Chlorobenzene	4.00	3.879		ug/L		97	70 - 130
Chlorodibromomethane	4.00	4.478		ug/L		112	70 - 130
Chloroethane	4.00	3.934		ug/L		98	70 - 130
Chloroform	4.00	3.797		ug/L		95	70 - 130
Chloromethane	4.00	4.875		ug/L		122	70 - 130
cis-1,2-Dichloroethene	4.00	3.783		ug/L		95	70 - 130
cis-1,3-Dichloropropene	4.00	4.656		ug/L		116	70 - 130
Dibromomethane	4.00	4.004		ug/L		100	70 - 130
Dichlorodifluoromethane	4.00	4.448		ug/L		111	70 - 130
Ethylbenzene	4.00	3.785		ug/L		95	70 - 130
Hexachlorobutadiene	4.00	3.543		ug/L		89	70 - 130
Isopropylbenzene	4.00	3.795		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.874		ug/L		97	70 - 130
Methylene Chloride	4.00	4.264		ug/L		107	70 - 130
Naphthalene	4.00	3.412		ug/L		85	70 - 130
n-Butylbenzene	4.00	3.680		ug/L		92	70 - 130
N-Propylbenzene	4.00	3.696		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.735		ug/L		93	70 - 130
Styrene	4.00	3.806		ug/L		95	70 - 130
tert-Butylbenzene	4.00	3.698		ug/L		92	70 - 130
Tetrachloroethene	4.00	3.712		ug/L		93	70 - 130
Toluene	4.00	4.073		ug/L		102	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.816		ug/L		95	70 - 130
trans-1,3-Dichloropropene	4.00	5.176		ug/L		129	70 - 130
Trichloroethene	4.00	3.894		ug/L		97	70 - 130
Trichlorofluoromethane	4.00	4.664		ug/L		117	70 - 130
Vinyl chloride	4.00	4.239		ug/L		106	70 - 130
Xylenes, Total	8.00	7.604		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*95*		*80 - 120*

Lab Sample ID: LCSD 480-194469/6
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	4.331		ug/L		108	70 - 130	8	20
1,1,1-Trichloroethane	4.00	4.130		ug/L		103	70 - 130	18	20
1,1,2,2-Tetrachloroethane	4.00	3.923		ug/L		98	70 - 130	2	20
1,1,2-Trichloroethane	4.00	3.970		ug/L		99	70 - 130	9	20
1,1-Dichloroethane	4.00	4.232		ug/L		106	70 - 130	7	20
1,1-Dichloroethene	4.00	3.851		ug/L		96	70 - 130	1	20
1,1-Dichloropropene	4.00	4.495		ug/L		112	70 - 130	6	20
1,2,3-Trichlorobenzene	4.00	3.834		ug/L		96	70 - 130	15	20
1,2,3-Trichloropropane	4.00	4.136		ug/L		103	70 - 130	2	20
1,2,4-Trichlorobenzene	4.00	3.830		ug/L		96	70 - 130	10	20
1,2,4-Trimethylbenzene	4.00	3.973		ug/L		99	70 - 130	8	20
1,2-Dibromo-3-Chloropropane	4.00	4.396		ug/L		110	70 - 130	6	20
1,2-Dibromoethane	4.00	3.958		ug/L		99	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.839		ug/L		96	70 - 130	5	20
1,2-Dichloroethane	4.00	4.023		ug/L		101	70 - 130	3	20
1,2-Dichloropropane	4.00	4.168		ug/L		104	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	4.047		ug/L		101	70 - 130	9	20
1,3-Dichlorobenzene	4.00	3.935		ug/L		98	70 - 130	3	20
1,3-Dichloropropane	4.00	4.004		ug/L		100	70 - 130	3	20
1,4-Dichlorobenzene	4.00	3.927		ug/L		98	70 - 130	3	20
2,2-Dichloropropane	4.00	3.686	*	ug/L		92	70 - 130	26	20
2-Butanone (MEK)	20.0	23.28		ug/L		116	70 - 130	1	20
2-Chlorotoluene	4.00	4.013		ug/L		100	70 - 130	9	20
2-Hexanone	20.0	21.58		ug/L		108	70 - 130	3	20
4-Chlorotoluene	4.00	3.886		ug/L		97	70 - 130	1	20
4-Isopropyltoluene	4.00	4.050		ug/L		101	70 - 130	8	20
4-Methyl-2-pentanone (MIBK)	20.0	21.47		ug/L		107	70 - 130	5	20
Acetone	20.0	26.92	*	ug/L		135	70 - 130	7	20
Benzene	4.00	4.084		ug/L		102	70 - 130	3	20
Bromobenzene	4.00	3.824		ug/L		96	70 - 130	2	20
Bromochloromethane	4.00	4.023		ug/L		101	70 - 130	5	20
Dichlorobromomethane	4.00	4.330		ug/L		108	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-194469/6
Matrix: Water
Analysis Batch: 194469

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
Bromoform	4.00	4.611		ug/L		115	70 - 130	4	20
Bromomethane	4.00	4.244		ug/L		106	70 - 130	4	20
Carbon disulfide	4.00	3.822	*	ug/L		96	70 - 130	24	20
Carbon tetrachloride	4.00	4.600		ug/L		115	70 - 130	8	20
Chlorobenzene	4.00	3.930		ug/L		98	70 - 130	1	20
Chlorodibromomethane	4.00	4.413		ug/L		110	70 - 130	1	20
Chloroethane	4.00	4.609		ug/L		115	70 - 130	16	20
Chloroform	4.00	4.026		ug/L		101	70 - 130	6	20
Chloromethane	4.00	4.715		ug/L		118	70 - 130	3	20
cis-1,2-Dichloroethene	4.00	4.111		ug/L		103	70 - 130	8	20
cis-1,3-Dichloropropene	4.00	4.376		ug/L		109	70 - 130	6	20
Dibromomethane	4.00	4.166		ug/L		104	70 - 130	4	20
Dichlorodifluoromethane	4.00	4.984		ug/L		125	70 - 130	11	20
Ethylbenzene	4.00	3.977		ug/L		99	70 - 130	5	20
Hexachlorobutadiene	4.00	3.949		ug/L		99	70 - 130	11	20
Isopropylbenzene	4.00	4.106		ug/L		103	70 - 130	8	20
Methyl tert-butyl ether	4.00	4.048		ug/L		101	70 - 130	4	20
Methylene Chloride	4.00	4.478		ug/L		112	70 - 130	5	20
Naphthalene	4.00	3.775		ug/L		94	70 - 130	10	20
n-Butylbenzene	4.00	3.982		ug/L		100	70 - 130	8	20
N-Propylbenzene	4.00	3.973		ug/L		99	70 - 130	7	20
sec-Butylbenzene	4.00	4.054		ug/L		101	70 - 130	8	20
Styrene	4.00	3.829		ug/L		96	70 - 130	1	20
tert-Butylbenzene	4.00	4.005		ug/L		100	70 - 130	8	20
Tetrachloroethene	4.00	3.941		ug/L		99	70 - 130	6	20
Toluene	4.00	4.050		ug/L		101	70 - 130	1	20
trans-1,2-Dichloroethene	4.00	4.083		ug/L		102	70 - 130	7	20
trans-1,3-Dichloropropene	4.00	4.705		ug/L		118	70 - 130	10	20
Trichloroethene	4.00	4.104		ug/L		103	70 - 130	5	20
Trichlorofluoromethane	4.00	4.793		ug/L		120	70 - 130	3	20
Vinyl chloride	4.00	4.522		ug/L		113	70 - 130	6	20
Xylenes, Total	8.00	8.037		ug/L		100	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 12:17	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

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		0.500	0.0590	ug/L			07/24/14 12:17	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 12:17	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 12:17	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 12:17	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 12:17	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 12:17	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 12:17	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 12:17	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 12:17	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 12:17	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 12:17	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 12:17	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 12:17	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 12:17	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 12:17	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 12:17	1
Acetone	ND		2.50	0.537	ug/L			07/24/14 12:17	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 12:17	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 12:17	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 12:17	1
Carbon disulfide	ND		0.500	0.150	ug/L			07/24/14 12:17	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 12:17	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 12:17	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 12:17	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 12:17	1
Chloromethane	ND		0.500	0.0629	ug/L			07/24/14 12:17	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 12:17	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 12:17	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 12:17	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 12:17	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 12:17	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 12:17	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 12:17	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 12:17	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 12:17	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 12:17	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 12:17	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 12:17	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 12:17	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 12:17	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 12:17	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 12:17	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 12:17	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 12:17	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 12:17	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 12:17	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/24/14 12:17*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*07/24/14 12:17*	*1*

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.556		ug/L		89	70 - 130
1,1,1-Trichloroethane	4.00	3.356		ug/L		84	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.308		ug/L		83	70 - 130
1,1,2-Trichloroethane	4.00	3.293		ug/L		82	70 - 130
1,1-Dichloroethane	4.00	3.458		ug/L		86	70 - 130
1,1-Dichloroethene	4.00	3.210		ug/L		80	70 - 130
1,1-Dichloropropene	4.00	3.645		ug/L		91	70 - 130
1,2,3-Trichlorobenzene	4.00	3.309		ug/L		83	70 - 130
1,2,3-Trichloropropane	4.00	3.484		ug/L		87	70 - 130
1,2,4-Trichlorobenzene	4.00	3.330		ug/L		83	70 - 130
1,2,4-Trimethylbenzene	4.00	3.307		ug/L		83	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	3.600		ug/L		90	70 - 130
1,2-Dibromoethane	4.00	3.379		ug/L		84	70 - 130
1,2-Dichlorobenzene	4.00	3.314		ug/L		83	70 - 130
1,2-Dichloroethane	4.00	3.504		ug/L		88	70 - 130
1,2-Dichloropropane	4.00	3.341		ug/L		84	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	4.00	3.375		ug/L		84	70 - 130
1,3-Dichlorobenzene	4.00	3.334		ug/L		83	70 - 130
1,3-Dichloropropane	4.00	3.410		ug/L		85	70 - 130
1,4-Dichlorobenzene	4.00	3.288		ug/L		82	70 - 130
2,2-Dichloropropane	4.00	2.962		ug/L		74	70 - 130
2-Butanone (MEK)	20.0	18.61		ug/L		93	70 - 130
2-Chlorotoluene	4.00	3.321		ug/L		83	70 - 130
2-Hexanone	20.0	17.32		ug/L		87	70 - 130
4-Chlorotoluene	4.00	3.337		ug/L		83	70 - 130
4-Isopropyltoluene	4.00	3.340		ug/L		83	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	17.39		ug/L		87	70 - 130
Acetone	20.0	23.83		ug/L		119	70 - 130
Benzene	4.00	3.394		ug/L		85	70 - 130
Bromobenzene	4.00	3.354		ug/L		84	70 - 130
Bromochloromethane	4.00	3.375		ug/L		84	70 - 130
Dichlorobromomethane	4.00	3.518		ug/L		88	70 - 130
Bromoform	4.00	3.625		ug/L		91	70 - 130
Bromomethane	4.00	4.077		ug/L		102	70 - 130
Carbon disulfide	4.00	2.959		ug/L		74	70 - 130
Carbon tetrachloride	4.00	3.714		ug/L		93	70 - 130
Chlorobenzene	4.00	3.349		ug/L		84	70 - 130
Chlorodibromomethane	4.00	3.616		ug/L		90	70 - 130
Chloroethane	4.00	4.261		ug/L		107	70 - 130
Chloroform	4.00	3.349		ug/L		84	70 - 130
Chloromethane	4.00	4.429		ug/L		111	70 - 130
cis-1,2-Dichloroethene	4.00	3.355		ug/L		84	70 - 130
cis-1,3-Dichloropropene	4.00	3.530		ug/L		88	70 - 130
Dibromomethane	4.00	3.330		ug/L		83	70 - 130
Dichlorodifluoromethane	4.00	5.138		ug/L		128	70 - 130
Ethylbenzene	4.00	3.361		ug/L		84	70 - 130
Hexachlorobutadiene	4.00	3.392		ug/L		85	70 - 130
Isopropylbenzene	4.00	3.404		ug/L		85	70 - 130
Methyl tert-butyl ether	4.00	3.357		ug/L		84	70 - 130
Methylene Chloride	4.00	3.748		ug/L		94	70 - 130
Naphthalene	4.00	3.262		ug/L		82	70 - 130
n-Butylbenzene	4.00	3.348		ug/L		84	70 - 130
N-Propylbenzene	4.00	3.306		ug/L		83	70 - 130
sec-Butylbenzene	4.00	3.311		ug/L		83	70 - 130
Styrene	4.00	3.206		ug/L		80	70 - 130
tert-Butylbenzene	4.00	3.322		ug/L		83	70 - 130
Tetrachloroethene	4.00	3.275		ug/L		82	70 - 130
Toluene	4.00	3.330		ug/L		83	70 - 130
trans-1,2-Dichloroethene	4.00	3.348		ug/L		84	70 - 130
trans-1,3-Dichloropropene	4.00	3.830		ug/L		96	70 - 130
Trichloroethene	4.00	3.393		ug/L		85	70 - 130
Trichlorofluoromethane	4.00	4.554		ug/L		114	70 - 130
Vinyl chloride	4.00	4.183		ug/L		105	70 - 130
Xylenes, Total	8.00	6.765		ug/L		85	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*

Lab Sample ID: LCSD 480-194535/5
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.448		ug/L		86	70 - 130	3	20
1,1,1-Trichloroethane	4.00	3.180		ug/L		80	70 - 130	5	20
1,1,2,2-Tetrachloroethane	4.00	3.210		ug/L		80	70 - 130	3	20
1,1,2-Trichloroethane	4.00	3.162		ug/L		79	70 - 130	4	20
1,1-Dichloroethane	4.00	3.349		ug/L		84	70 - 130	3	20
1,1-Dichloroethene	4.00	2.961		ug/L		74	70 - 130	8	20
1,1-Dichloropropene	4.00	3.403		ug/L		85	70 - 130	7	20
1,2,3-Trichlorobenzene	4.00	3.210		ug/L		80	70 - 130	3	20
1,2,3-Trichloropropane	4.00	3.385		ug/L		85	70 - 130	3	20
1,2,4-Trichlorobenzene	4.00	3.258		ug/L		81	70 - 130	2	20
1,2,4-Trimethylbenzene	4.00	3.204		ug/L		80	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	3.301		ug/L		83	70 - 130	9	20
1,2-Dibromoethane	4.00	3.249		ug/L		81	70 - 130	4	20
1,2-Dichlorobenzene	4.00	3.282		ug/L		82	70 - 130	1	20
1,2-Dichloroethane	4.00	3.329		ug/L		83	70 - 130	5	20
1,2-Dichloropropane	4.00	3.281		ug/L		82	70 - 130	2	20
1,3,5-Trimethylbenzene	4.00	3.251		ug/L		81	70 - 130	4	20
1,3-Dichlorobenzene	4.00	3.256		ug/L		81	70 - 130	2	20
1,3-Dichloropropane	4.00	3.261		ug/L		82	70 - 130	4	20
1,4-Dichlorobenzene	4.00	3.227		ug/L		81	70 - 130	2	20
2,2-Dichloropropane	4.00	2.998		ug/L		75	70 - 130	1	20
2-Butanone (MEK)	20.0	18.45		ug/L		92	70 - 130	1	20
2-Chlorotoluene	4.00	3.228		ug/L		81	70 - 130	3	20
2-Hexanone	20.0	17.21		ug/L		86	70 - 130	1	20
4-Chlorotoluene	4.00	3.186		ug/L		80	70 - 130	5	20
4-Isopropyltoluene	4.00	3.215		ug/L		80	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	17.20		ug/L		86	70 - 130	1	20
Acetone	20.0	22.10		ug/L		111	70 - 130	8	20
Benzene	4.00	3.198		ug/L		80	70 - 130	6	20
Bromobenzene	4.00	3.134		ug/L		78	70 - 130	7	20
Bromochloromethane	4.00	3.202		ug/L		80	70 - 130	5	20
Dichlorobromomethane	4.00	3.402		ug/L		85	70 - 130	3	20
Bromoform	4.00	3.419		ug/L		85	70 - 130	6	20
Bromomethane	4.00	3.829		ug/L		96	70 - 130	6	20
Carbon disulfide	4.00	2.845		ug/L		71	70 - 130	4	20
Carbon tetrachloride	4.00	3.427		ug/L		86	70 - 130	8	20
Chlorobenzene	4.00	3.136		ug/L		78	70 - 130	7	20
Chlorodibromomethane	4.00	3.415		ug/L		85	70 - 130	6	20
Chloroethane	4.00	3.896		ug/L		97	70 - 130	9	20
Chloroform	4.00	3.207		ug/L		80	70 - 130	4	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-194535/5
Matrix: Water
Analysis Batch: 194535

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
Chloromethane	4.00	4.244		ug/L		106	70 - 130	4	20
cis-1,2-Dichloroethene	4.00	3.237		ug/L		81	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.428		ug/L		86	70 - 130	3	20
Dibromomethane	4.00	3.328		ug/L		83	70 - 130	0	20
Dichlorodifluoromethane	4.00	4.789		ug/L		120	70 - 130	7	20
Ethylbenzene	4.00	3.169		ug/L		79	70 - 130	6	20
Hexachlorobutadiene	4.00	3.129		ug/L		78	70 - 130	8	20
Isopropylbenzene	4.00	3.191		ug/L		80	70 - 130	6	20
Methyl tert-butyl ether	4.00	3.295		ug/L		82	70 - 130	2	20
Methylene Chloride	4.00	3.858		ug/L		96	70 - 130	3	20
Naphthalene	4.00	3.218		ug/L		80	70 - 130	1	20
n-Butylbenzene	4.00	3.172		ug/L		79	70 - 130	5	20
N-Propylbenzene	4.00	3.199		ug/L		80	70 - 130	3	20
sec-Butylbenzene	4.00	3.143		ug/L		79	70 - 130	5	20
Styrene	4.00	3.074		ug/L		77	70 - 130	4	20
tert-Butylbenzene	4.00	3.179		ug/L		79	70 - 130	4	20
Tetrachloroethene	4.00	3.197		ug/L		80	70 - 130	2	20
Toluene	4.00	3.196		ug/L		80	70 - 130	4	20
trans-1,2-Dichloroethene	4.00	3.201		ug/L		80	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.724		ug/L		93	70 - 130	3	20
Trichloroethene	4.00	3.272		ug/L		82	70 - 130	4	20
Trichlorofluoromethane	4.00	4.263		ug/L		107	70 - 130	7	20
Vinyl chloride	4.00	3.945		ug/L		99	70 - 130	6	20
Xylenes, Total	8.00	6.404		ug/L		80	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: 490-57721-B-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		32.0	29.12		ug/L		91	70 - 130
1,1,1-Trichloroethane	ND		32.0	27.50		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	ND		32.0	27.91		ug/L		87	70 - 130
1,1,2-Trichloroethane	ND		32.0	27.89		ug/L		87	70 - 130
1,1-Dichloroethane	ND		32.0	28.84		ug/L		90	70 - 130
1,1-Dichloroethene	ND		32.0	27.45		ug/L		86	70 - 130
1,1-Dichloropropene	ND		32.0	30.40		ug/L		95	70 - 130
1,2,3-Trichlorobenzene	ND		32.0	26.50		ug/L		83	70 - 130
1,2,3-Trichloropropane	ND		32.0	28.05		ug/L		88	70 - 130
1,2,4-Trichlorobenzene	ND		32.0	26.88		ug/L		84	70 - 130
1,2,4-Trimethylbenzene	ND		32.0	27.01		ug/L		84	70 - 130
1,2-Dibromo-3-Chloropropane	ND		32.0	27.00		ug/L		84	70 - 130
1,2-Dibromoethane	ND		32.0	28.22		ug/L		88	70 - 130
1,2-Dichlorobenzene	ND		32.0	27.25		ug/L		85	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-B-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	ND		32.0	28.15		ug/L		88	70 - 130
1,2-Dichloropropane	ND		32.0	28.65		ug/L		90	70 - 130
1,3,5-Trimethylbenzene	ND		32.0	27.44		ug/L		86	70 - 130
1,3-Dichlorobenzene	ND		32.0	27.07		ug/L		85	70 - 130
1,3-Dichloropropane	ND		32.0	27.49		ug/L		86	70 - 130
1,4-Dichlorobenzene	ND		32.0	27.38		ug/L		86	70 - 130
2,2-Dichloropropane	ND		32.0	21.54	F1	ug/L		67	70 - 130
2-Butanone (MEK)	ND		160	146.3		ug/L		91	70 - 130
2-Chlorotoluene	ND		32.0	27.31		ug/L		85	70 - 130
2-Hexanone	ND		160	142.3		ug/L		89	70 - 130
4-Chlorotoluene	ND		32.0	26.88		ug/L		84	70 - 130
4-Isopropyltoluene	ND		32.0	27.08		ug/L		85	70 - 130
4-Methyl-2-pentanone (MIBK)	ND		160	144.5		ug/L		90	70 - 130
Acetone	ND		160	153.9		ug/L		96	70 - 130
Benzene	ND		32.0	28.17		ug/L		88	70 - 130
Bromobenzene	ND		32.0	27.20		ug/L		85	70 - 130
Bromochloromethane	ND		32.0	27.48		ug/L		86	70 - 130
Dichlorobromomethane	ND		32.0	28.34		ug/L		89	70 - 130
Bromoform	ND		32.0	26.32		ug/L		82	70 - 130
Bromomethane	ND		32.0	31.82		ug/L		99	70 - 130
Carbon disulfide	ND		32.0	22.73		ug/L		71	70 - 130
Carbon tetrachloride	ND		32.0	28.24		ug/L		88	70 - 130
Chlorobenzene	ND		32.0	27.87		ug/L		87	70 - 130
Chlorodibromomethane	ND		32.0	27.15		ug/L		85	70 - 130
Chloroethane	ND		32.0	32.31		ug/L		101	70 - 130
Chloroform	ND		32.0	27.51		ug/L		86	70 - 130
Chloromethane	ND		32.0	32.11		ug/L		100	70 - 130
cis-1,2-Dichloroethene	47.6		32.0	67.27	F1	ug/L		62	70 - 130
cis-1,3-Dichloropropene	ND		32.0	27.21		ug/L		85	70 - 130
Dibromomethane	ND		32.0	28.86		ug/L		90	70 - 130
Dichlorodifluoromethane	ND		32.0	37.25		ug/L		116	70 - 130
Ethylbenzene	ND		32.0	27.71		ug/L		87	70 - 130
Hexachlorobutadiene	ND		32.0	25.89		ug/L		81	70 - 130
Isopropylbenzene	ND		32.0	28.14		ug/L		88	70 - 130
Methyl tert-butyl ether	ND		32.0	28.84		ug/L		90	70 - 130
Methylene Chloride	ND		32.0	31.74		ug/L		99	70 - 130
Naphthalene	ND		32.0	26.50		ug/L		83	70 - 130
n-Butylbenzene	ND		32.0	26.80		ug/L		84	70 - 130
N-Propylbenzene	ND		32.0	27.27		ug/L		85	70 - 130
sec-Butylbenzene	ND		32.0	27.28		ug/L		85	70 - 130
Styrene	ND		32.0	26.26		ug/L		82	70 - 130
tert-Butylbenzene	ND		32.0	27.98		ug/L		87	70 - 130
Tetrachloroethene	ND		32.0	27.67		ug/L		86	70 - 130
Toluene	ND		32.0	28.04		ug/L		88	70 - 130
trans-1,2-Dichloroethene	ND		32.0	28.56		ug/L		89	70 - 130
trans-1,3-Dichloropropene	ND		32.0	29.21		ug/L		91	70 - 130
Trichloroethene	3.75	J	32.0	31.81		ug/L		88	70 - 130
Trichlorofluoromethane	ND		32.0	29.34		ug/L		92	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-B-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	ND		32.0	31.28		ug/L		98	70 - 130
Xylenes, Total	ND		64.0	56.54		ug/L		88	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*99*		*80 - 120*

Lab Sample ID: 490-57721-B-1 MSD
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		32.0	27.98		ug/L		87	70 - 130	4	20
1,1,1-Trichloroethane	ND		32.0	27.02		ug/L		84	70 - 130	2	20
1,1,2,2-Tetrachloroethane	ND		32.0	27.83		ug/L		87	70 - 130	0	20
1,1,2-Trichloroethane	ND		32.0	26.92		ug/L		84	70 - 130	4	20
1,1-Dichloroethane	ND		32.0	27.78		ug/L		87	70 - 130	4	20
1,1-Dichloroethene	ND		32.0	26.17		ug/L		82	70 - 130	5	20
1,1-Dichloropropene	ND		32.0	29.45		ug/L		92	70 - 130	3	20
1,2,3-Trichlorobenzene	ND		32.0	26.23		ug/L		82	70 - 130	1	20
1,2,3-Trichloropropane	ND		32.0	27.58		ug/L		86	70 - 130	2	20
1,2,4-Trichlorobenzene	ND		32.0	26.94		ug/L		84	70 - 130	0	20
1,2,4-Trimethylbenzene	ND		32.0	27.13		ug/L		85	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	ND		32.0	28.34		ug/L		89	70 - 130	5	20
1,2-Dibromoethane	ND		32.0	27.18		ug/L		85	70 - 130	4	20
1,2-Dichlorobenzene	ND		32.0	27.28		ug/L		85	70 - 130	0	20
1,2-Dichloroethane	ND		32.0	27.94		ug/L		87	70 - 130	1	20
1,2-Dichloropropane	ND		32.0	27.64		ug/L		86	70 - 130	4	20
1,3,5-Trimethylbenzene	ND		32.0	26.91		ug/L		84	70 - 130	2	20
1,3-Dichlorobenzene	ND		32.0	27.36		ug/L		86	70 - 130	1	20
1,3-Dichloropropane	ND		32.0	26.94		ug/L		84	70 - 130	2	20
1,4-Dichlorobenzene	ND		32.0	26.68		ug/L		83	70 - 130	3	20
2,2-Dichloropropane	ND		32.0	21.71	F1	ug/L		68	70 - 130	1	20
2-Butanone (MEK)	ND		160	142.4		ug/L		89	70 - 130	3	20
2-Chlorotoluene	ND		32.0	27.47		ug/L		86	70 - 130	1	20
2-Hexanone	ND		160	142.3		ug/L		89	70 - 130	0	20
4-Chlorotoluene	ND		32.0	26.83		ug/L		84	70 - 130	0	20
4-Isopropyltoluene	ND		32.0	27.08		ug/L		85	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	ND		160	142.3		ug/L		89	70 - 130	2	20
Acetone	ND		160	135.3		ug/L		85	70 - 130	13	20
Benzene	ND		32.0	27.63		ug/L		86	70 - 130	2	20
Bromobenzene	ND		32.0	27.22		ug/L		85	70 - 130	0	20
Bromochloromethane	ND		32.0	27.65		ug/L		86	70 - 130	1	20
Dichlorobromomethane	ND		32.0	27.08		ug/L		85	70 - 130	5	20
Bromoform	ND		32.0	26.05		ug/L		81	70 - 130	1	20
Bromomethane	ND		32.0	30.27		ug/L		95	70 - 130	5	20
Carbon disulfide	ND		32.0	22.09	F1	ug/L		69	70 - 130	3	20
Carbon tetrachloride	ND		32.0	27.57		ug/L		86	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-B-1 MSD
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	ND		32.0	26.83		ug/L		84	70 - 130	4	20
Chlorodibromomethane	ND		32.0	26.53		ug/L		83	70 - 130	2	20
Chloroethane	ND		32.0	31.28		ug/L		98	70 - 130	3	20
Chloroform	ND		32.0	26.76		ug/L		84	70 - 130	3	20
Chloromethane	ND		32.0	31.35		ug/L		98	70 - 130	2	20
cis-1,2-Dichloroethene	47.6		32.0	66.52	F1	ug/L		59	70 - 130	1	20
cis-1,3-Dichloropropene	ND		32.0	27.35		ug/L		85	70 - 130	1	20
Dibromomethane	ND		32.0	27.45		ug/L		86	70 - 130	5	20
Dichlorodifluoromethane	ND		32.0	34.85		ug/L		109	70 - 130	7	20
Ethylbenzene	ND		32.0	26.64		ug/L		83	70 - 130	4	20
Hexachlorobutadiene	ND		32.0	25.32		ug/L		79	70 - 130	2	20
Isopropylbenzene	ND		32.0	27.03		ug/L		84	70 - 130	4	20
Methyl tert-butyl ether	ND		32.0	28.49		ug/L		89	70 - 130	1	20
Methylene Chloride	ND		32.0	32.42		ug/L		101	70 - 130	2	20
Naphthalene	ND		32.0	26.90		ug/L		84	70 - 130	1	20
n-Butylbenzene	ND		32.0	26.65		ug/L		83	70 - 130	1	20
N-Propylbenzene	ND		32.0	27.04		ug/L		84	70 - 130	1	20
sec-Butylbenzene	ND		32.0	27.11		ug/L		85	70 - 130	1	20
Styrene	ND		32.0	25.48		ug/L		80	70 - 130	3	20
tert-Butylbenzene	ND		32.0	27.18		ug/L		85	70 - 130	3	20
Tetrachloroethene	ND		32.0	25.93		ug/L		81	70 - 130	7	20
Toluene	ND		32.0	27.22		ug/L		85	70 - 130	3	20
trans-1,2-Dichloroethene	ND		32.0	28.38		ug/L		89	70 - 130	1	20
trans-1,3-Dichloropropene	ND		32.0	29.58		ug/L		92	70 - 130	1	20
Trichloroethene	3.75	J	32.0	30.73		ug/L		84	70 - 130	3	20
Trichlorofluoromethane	ND		32.0	30.53		ug/L		95	70 - 130	4	20
Vinyl chloride	ND		32.0	30.68		ug/L		96	70 - 130	2	20
Xylenes, Total	ND		64.0	54.84		ug/L		86	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-194974/1-A
Matrix: Water
Analysis Batch: 195162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 15:47	1
Manganese	ND		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 15:47	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-194974/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.18		mg/L		102	85 - 115
Manganese	0.200	0.2029		mg/L		101	85 - 115

Lab Sample ID: 490-57721-D-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.0347	J	10.0	10.17		mg/L		101	70 - 130
Manganese	0.0526		0.200	0.2566		mg/L		102	70 - 130

Lab Sample ID: 490-57721-D-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.0347	J	10.0	10.05		mg/L		100	70 - 130	1	20
Manganese	0.0526		0.200	0.2528		mg/L		100	70 - 130	2	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57724-1

GC/MS VOA

Analysis Batch: 194469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57724-1	CC-03 (raw)	Total/NA	Water	524.2	
490-57724-3	CC-03 (GAC-1)	Total/NA	Water	524.2	
490-57724-4	CC-03 (GAC-2)	Total/NA	Water	524.2	
490-57724-5	Trip Blank	Total/NA	Water	524.2	
LCS 480-194469/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-194469/6	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-194469/7	Method Blank	Total/NA	Water	524.2	

Analysis Batch: 194535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57721-B-1 MS	Matrix Spike	Total/NA	Water	524.2	
490-57721-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	524.2	
490-57724-1 - DL	CC-03 (raw)	Total/NA	Water	524.2	
LCS 480-194535/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-194535/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-194535/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 194974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57721-D-1-B MS	Matrix Spike	Total/NA	Water	200.7	
490-57721-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
490-57724-1	CC-03 (raw)	Total/NA	Water	200.7	
490-57724-2	CC-03 (post-filter)	Total/NA	Water	200.7	
LCS 480-194974/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-194974/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 195162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57721-D-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	194974
490-57721-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	194974
490-57724-1	CC-03 (raw)	Total/NA	Water	200.7 Rev 4.4	194974
490-57724-2	CC-03 (post-filter)	Total/NA	Water	200.7 Rev 4.4	194974
LCS 480-194974/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	194974
MB 480-194974/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	194974

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57724-1

Client Sample ID: CC-03 (raw)

Lab Sample ID: 490-57724-1
Date Collected: 07/18/14 09:05
Matrix: Water
Date Received: 07/19/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 07:23	RAS	TAL BUF
Total/NA	Analysis	524.2	DL	4	25 mL	25 mL	194535	07/24/14 15:03	CDC	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	194974	07/28/14 07:40	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	195162	07/28/14 16:26	JRK	TAL BUF

Client Sample ID: CC-03 (post-filter)

Lab Sample ID: 490-57724-2
Date Collected: 07/18/14 09:10
Matrix: Water
Date Received: 07/19/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	194974	07/28/14 07:40	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	195162	07/28/14 16:35	JRK	TAL BUF

Client Sample ID: CC-03 (GAC-1)

Lab Sample ID: 490-57724-3
Date Collected: 07/18/14 09:15
Matrix: Water
Date Received: 07/19/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 07:49	RAS	TAL BUF

Client Sample ID: CC-03 (GAC-2)

Lab Sample ID: 490-57724-4
Date Collected: 07/18/14 09:20
Matrix: Water
Date Received: 07/19/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 08:14	RAS	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 490-57724-5
Date Collected: 07/18/14 00:01
Matrix: Water
Date Received: 07/19/14 08:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 08:38	RAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57724-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57724-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Acrylonitrile
524.2		Water	Allyl chloride
524.2		Water	Carbon disulfide
524.2		Water	Dichlorofluoromethane
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	Naphthalene
524.2		Water	o-Xylene
524.2		Water	t-Butanol
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-57724 Chain of Custody

Cooler Received/Opened On 7/19/2014 @ 0840

1. Tracking # 7031 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 1.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA

4. Were custody seals on outside of cooler? YES..NO...NA

If yes, how many and where: (1) Front

5. Were the seals intact, signed, and dated correctly? YES..NO...NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) mbm

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) mbm

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mbm

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mbm

I certify that I attached a label with the unique LIMS number to each container (intial) mbm

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica THE LEADER IN ENVIRO

Loc: 490
57724

7/29/2014

Sampler: Ian Martz	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-24404-8963.1
Phone: 978 322 4526	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
			Job #:

Client Information

Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone: 781 213 4962
Email: chuck.castelluccio@arcadis-us.com
Project Name: FORD Tibbetts Road Site E101274
Site:

Due Date Requested:
TAT Requested (days): standard
PO #: MA000725.2014.00107
WO #:
Project #: 49002494
SSOW#:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list (Buffalo)	200.7 - Iron/Manganese (Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Codes:				A	D		
CC-03 (raw)	7/18/14	0905	G	W	N	N	✓	✓	-1	
CC-03 (post-filter)	↓	0910	↓	↓	↓	↓		✓	2	
CC-03 (GAC-1)	↓	0915	↓	↓	↓	↓	✓		3	
CC-03 (GAC-2)	↓	0920	↓	↓	↓	↓	✓		4	
Trip Blank	—	—	—	↓	↓	↓			5	

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)
Other:

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Deliverable Requested: I, II, III, IV, Other (specify) II

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:

Method of Shipment:

Empty Kit Relinquished by:	Date:	Time:			
Relinquished by:	Date/Time: 7/18/14 @ 1400	Company: ARCADIS	Received by:	Date/Time: 7-19-14 @ 0840	Company: TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.2c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57724-1

Login Number: 57724

List Number: 1

Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57724-1

Login Number: 57724
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 07/22/14 04:26 PM

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	4.8 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57724-1

Login Number: 57724
List Number: 3
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 07/22/14 04:28 PM

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	4.8 C
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	
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 Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-57592-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
7/29/2014 5:05:15 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-57592-1	CC-04 (raw)	Water	07/16/14 16:05	07/17/14 08:30
490-57592-2	CC-04 (post softener)	Water	07/16/14 16:10	07/17/14 08:30
490-57592-3	CC-04 (GAC-in)	Water	07/16/14 16:15	07/17/14 08:30
490-57592-4	CC-04 (GAC-1)	Water	07/16/14 16:20	07/17/14 08:30
490-57592-5	CC-04 (GAC-2)	Water	07/16/14 16:25	07/17/14 08:30

Job ID: 490-57592-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-57592-1

Comments
No additional comments.

Receipt
The samples were received on 7/17/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 194469 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was ND or detected below RL limit in the associated samples; therefore, the data have been reported.

Method(s) 524.2: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 194469 recovered outside control limits for the following analytes: 2,2-Dichloropropane and Carbon disulfide.

Method(s) 524.2: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: CC-04 (raw) (490-57592-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
F1	MS and/or MSD Recovery exceeds the 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

Client Sample ID: CC-04 (raw)

Lab Sample ID: 490-57592-1

Date Collected: 07/16/14 16:05
Matrix: Water
Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 02:21	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 02:21	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 02:21	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 02:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 02:21	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 02:21	1
1,1-Dichloroethene	**0.113**	**J**	0.500	0.0590	ug/L			07/24/14 02:21	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 02:21	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 02:21	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 02:21	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 02:21	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 02:21	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 02:21	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 02:21	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 02:21	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 02:21	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 02:21	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 02:21	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 02:21	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 02:21	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 02:21	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 02:21	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 02:21	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 02:21	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 02:21	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 02:21	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 02:21	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 02:21	1
Acetone	**1.45**	**J ***	2.50	0.537	ug/L			07/24/14 02:21	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 02:21	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 02:21	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 02:21	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 02:21	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 02:21	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 02:21	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 02:21	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 02:21	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 02:21	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 02:21	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 02:21	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 02:21	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 02:21	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 02:21	1
Chloromethane	**0.584**		0.500	0.0629	ug/L			07/24/14 02:21	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 02:21	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 02:21	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 02:21	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 02:21	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 02:21	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

Client Sample ID: CC-04 (raw)

Lab Sample ID: 490-57592-1

Date Collected: 07/16/14 16:05
Matrix: Water
Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 02:21	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 02:21	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 02:21	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 02:21	1
Methylene Chloride	**0.548**		0.500	0.250	ug/L			07/24/14 02:21	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 02:21	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 02:21	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 02:21	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 02:21	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 02:21	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 02:21	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 02:21	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 02:21	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 02:21	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 02:21	1
Toluene	**0.180**	**J**	0.500	0.100	ug/L			07/24/14 02:21	1
trans-1,2-Dichloroethene	**0.869**		0.500	0.130	ug/L			07/24/14 02:21	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 02:21	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 02:21	1
Trichloroethene	**4.74**		0.500	0.0600	ug/L			07/24/14 02:21	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 02:21	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 02:21	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 02:21	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 02:21	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 02:21	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 02:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/24/14 02:21*	*1*
1,2-Dichlorobenzene-d4	*104*		*80 - 120*		*07/24/14 02:21*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**42.3**		2.00	0.480	ug/L			07/24/14 13:47	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/24/14 13:47*	*4*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*07/24/14 13:47*	*4*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.205**		0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 15:53	1
Manganese	**0.132**		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 15:53	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

Client Sample ID: CC-04 (post softener)

Lab Sample ID: 490-57592-2

Date Collected: 07/16/14 16:10

Matrix: Water

Date Received: 07/17/14 08:30

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.0209**	**J**	0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 16:01	1
Manganese	ND		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 16:01	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

Client Sample ID: CC-04 (GAC-in)

Lab Sample ID: 490-57592-3

Date Collected: 07/16/14 16:15
Matrix: Water
Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 12:57	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 12:57	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 12:57	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 12:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 12:57	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 12:57	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 12:57	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 12:57	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 12:57	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 12:57	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 12:57	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 12:57	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 12:57	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 12:57	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 12:57	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 12:57	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 12:57	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 12:57	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 12:57	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 12:57	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 12:57	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 12:57	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 12:57	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 12:57	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 12:57	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 12:57	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 12:57	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 12:57	1
Acetone	**10.8**		2.50	0.537	ug/L			07/24/14 12:57	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 12:57	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 12:57	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 12:57	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 12:57	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 12:57	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 12:57	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 12:57	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 12:57	1
Carbon disulfide	ND		0.500	0.150	ug/L			07/24/14 12:57	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 12:57	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 12:57	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 12:57	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 12:57	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 12:57	1
Chloromethane	**0.214**	**J**	0.500	0.0629	ug/L			07/24/14 12:57	1
cis-1,2-Dichloroethene	**1.59**		0.500	0.120	ug/L			07/24/14 12:57	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 12:57	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 12:57	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 12:57	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 12:57	1

Client Sample ID: CC-04 (GAC-in)

Lab Sample ID: 490-57592-3

Date Collected: 07/16/14 16:15

Matrix: Water

Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 12:57	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 12:57	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 12:57	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 12:57	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 12:57	1
Methylene Chloride	**0.474**	**J**	0.500	0.250	ug/L			07/24/14 12:57	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 12:57	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 12:57	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 12:57	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 12:57	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 12:57	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 12:57	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 12:57	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 12:57	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 12:57	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 12:57	1
Toluene	**1.29**		0.500	0.100	ug/L			07/24/14 12:57	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 12:57	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 12:57	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 12:57	1
Trichloroethene	**0.0761**	**J**	0.500	0.0600	ug/L			07/24/14 12:57	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 12:57	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 12:57	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 12:57	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 12:57	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 12:57	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*07/24/14 12:57*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*07/24/14 12:57*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

Client Sample ID: CC-04 (GAC-1)

Date Collected: 07/16/14 16:20
Date Received: 07/17/14 08:30

Lab Sample ID: 490-57592-4

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 03:11	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 03:11	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 03:11	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 03:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 03:11	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 03:11	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 03:11	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 03:11	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 03:11	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 03:11	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 03:11	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 03:11	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 03:11	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 03:11	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 03:11	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 03:11	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 03:11	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 03:11	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 03:11	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 03:11	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 03:11	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 03:11	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 03:11	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 03:11	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 03:11	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 03:11	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 03:11	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 03:11	1
Acetone	**1.70**	**J ***	2.50	0.537	ug/L			07/24/14 03:11	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 03:11	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 03:11	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 03:11	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 03:11	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 03:11	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 03:11	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 03:11	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 03:11	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 03:11	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 03:11	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 03:11	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 03:11	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 03:11	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 03:11	1
Chloromethane	**0.151**	**J**	0.500	0.0629	ug/L			07/24/14 03:11	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 03:11	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 03:11	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 03:11	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 03:11	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 03:11	1

Client Sample ID: CC-04 (GAC-1)

Lab Sample ID: 490-57592-4

Date Collected: 07/16/14 16:20

Matrix: Water

Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 03:11	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 03:11	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 03:11	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 03:11	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 03:11	1
Methylene Chloride	**0.457**	**J**	0.500	0.250	ug/L			07/24/14 03:11	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 03:11	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 03:11	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 03:11	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 03:11	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 03:11	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 03:11	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 03:11	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 03:11	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 03:11	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 03:11	1
Toluene	**0.114**	**J**	0.500	0.100	ug/L			07/24/14 03:11	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 03:11	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 03:11	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 03:11	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 03:11	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 03:11	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 03:11	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 03:11	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 03:11	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 03:11	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*07/24/14 03:11*	*1*
1,2-Dichlorobenzene-d4	*105*		*80 - 120*		*07/24/14 03:11*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

Client Sample ID: CC-04 (GAC-2)

Date Collected: 07/16/14 16:25
Date Received: 07/17/14 08:30

Lab Sample ID: 490-57592-5

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 03:36	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 03:36	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 03:36	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 03:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 03:36	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 03:36	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 03:36	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 03:36	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 03:36	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 03:36	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 03:36	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 03:36	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 03:36	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 03:36	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 03:36	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 03:36	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 03:36	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 03:36	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 03:36	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 03:36	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 03:36	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 03:36	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 03:36	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 03:36	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 03:36	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 03:36	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 03:36	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 03:36	1
Acetone	**1.83**	**J ***	2.50	0.537	ug/L			07/24/14 03:36	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 03:36	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 03:36	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 03:36	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 03:36	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 03:36	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 03:36	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 03:36	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 03:36	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 03:36	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 03:36	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 03:36	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 03:36	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 03:36	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 03:36	1
Chloromethane	**0.401**	**J**	0.500	0.0629	ug/L			07/24/14 03:36	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 03:36	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 03:36	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 03:36	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 03:36	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 03:36	1

Client Sample ID: CC-04 (GAC-2)

Lab Sample ID: 490-57592-5

Date Collected: 07/16/14 16:25

Matrix: Water

Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 03:36	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 03:36	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 03:36	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 03:36	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 03:36	1
Methylene Chloride	**0.555**		0.500	0.250	ug/L			07/24/14 03:36	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 03:36	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 03:36	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 03:36	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 03:36	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 03:36	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 03:36	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 03:36	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 03:36	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 03:36	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 03:36	1
Toluene	**0.267**	**J**	0.500	0.100	ug/L			07/24/14 03:36	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 03:36	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 03:36	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 03:36	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 03:36	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 03:36	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 03:36	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 03:36	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 03:36	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 03:36	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 03:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*07/24/14 03:36*	*1*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*		*07/24/14 03:36*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-194469/7
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 01:43	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 01:43	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 01:43	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 01:43	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 01:43	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 01:43	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 01:43	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 01:43	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 01:43	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 01:43	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 01:43	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 01:43	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 01:43	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 01:43	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 01:43	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 01:43	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 01:43	1
Acetone	ND		2.50	0.537	ug/L			07/24/14 01:43	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 01:43	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 01:43	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 01:43	1
Carbon disulfide	ND		0.500	0.150	ug/L			07/24/14 01:43	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 01:43	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 01:43	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 01:43	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 01:43	1
Chloromethane	ND		0.500	0.0629	ug/L			07/24/14 01:43	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 01:43	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 01:43	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194469/7
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 01:43	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 01:43	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 01:43	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 01:43	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 01:43	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 01:43	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 01:43	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 01:43	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 01:43	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 01:43	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 01:43	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 01:43	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 01:43	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 01:43	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 01:43	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 01:43	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 01:43	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 01:43	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 01:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/24/14 01:43*	*1*
1,2-Dichlorobenzene-d4	*104*		*80 - 120*		*07/24/14 01:43*	*1*

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.018		ug/L		100	70 - 130
1,1,1-Trichloroethane	4.00	3.448		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.840		ug/L		96	70 - 130
1,1,2-Trichloroethane	4.00	4.357		ug/L		109	70 - 130
1,1-Dichloroethane	4.00	3.937		ug/L		98	70 - 130
1,1-Dichloroethene	4.00	3.816		ug/L		95	70 - 130
1,1-Dichloropropene	4.00	4.215		ug/L		105	70 - 130
1,2,3-Trichlorobenzene	4.00	3.293		ug/L		82	70 - 130
1,2,3-Trichloropropane	4.00	4.068		ug/L		102	70 - 130
1,2,4-Trichlorobenzene	4.00	3.474		ug/L		87	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.683		ug/L		92	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.147		ug/L		104	70 - 130
1,2-Dibromoethane	4.00	4.091		ug/L		102	70 - 130
1,2-Dichlorobenzene	4.00	3.653		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	4.163		ug/L		104	70 - 130
1,2-Dichloropropane	4.00	4.127		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	4.00	3.702		ug/L		93	70 - 130
1,3-Dichlorobenzene	4.00	3.807		ug/L		95	70 - 130
1,3-Dichloropropane	4.00	4.139		ug/L		103	70 - 130
1,4-Dichlorobenzene	4.00	3.798		ug/L		95	70 - 130
2,2-Dichloropropane	4.00	2.845		ug/L		71	70 - 130
2-Butanone (MEK)	20.0	23.55		ug/L		118	70 - 130
2-Chlorotoluene	4.00	3.661		ug/L		92	70 - 130
2-Hexanone	20.0	22.16		ug/L		111	70 - 130
4-Chlorotoluene	4.00	3.865		ug/L		97	70 - 130
4-Isopropyltoluene	4.00	3.724		ug/L		93	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	22.51		ug/L		113	70 - 130
Acetone	20.0	25.03		ug/L		125	70 - 130
Benzene	4.00	3.961		ug/L		99	70 - 130
Bromobenzene	4.00	3.766		ug/L		94	70 - 130
Bromochloromethane	4.00	3.841		ug/L		96	70 - 130
Dichlorobromomethane	4.00	4.258		ug/L		106	70 - 130
Bromoform	4.00	4.812		ug/L		120	70 - 130
Bromomethane	4.00	4.400		ug/L		110	70 - 130
Carbon disulfide	4.00	3.014		ug/L		75	70 - 130
Carbon tetrachloride	4.00	4.232		ug/L		106	70 - 130
Chlorobenzene	4.00	3.879		ug/L		97	70 - 130
Chlorodibromomethane	4.00	4.478		ug/L		112	70 - 130
Chloroethane	4.00	3.934		ug/L		98	70 - 130
Chloroform	4.00	3.797		ug/L		95	70 - 130
Chloromethane	4.00	4.875		ug/L		122	70 - 130
cis-1,2-Dichloroethene	4.00	3.783		ug/L		95	70 - 130
cis-1,3-Dichloropropene	4.00	4.656		ug/L		116	70 - 130
Dibromomethane	4.00	4.004		ug/L		100	70 - 130
Dichlorodifluoromethane	4.00	4.448		ug/L		111	70 - 130
Ethylbenzene	4.00	3.785		ug/L		95	70 - 130
Hexachlorobutadiene	4.00	3.543		ug/L		89	70 - 130
Isopropylbenzene	4.00	3.795		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.874		ug/L		97	70 - 130
Methylene Chloride	4.00	4.264		ug/L		107	70 - 130
Naphthalene	4.00	3.412		ug/L		85	70 - 130
n-Butylbenzene	4.00	3.680		ug/L		92	70 - 130
N-Propylbenzene	4.00	3.696		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.735		ug/L		93	70 - 130
Styrene	4.00	3.806		ug/L		95	70 - 130
tert-Butylbenzene	4.00	3.698		ug/L		92	70 - 130
Tetrachloroethene	4.00	3.712		ug/L		93	70 - 130
Toluene	4.00	4.073		ug/L		102	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.816		ug/L		95	70 - 130
trans-1,3-Dichloropropene	4.00	5.176		ug/L		129	70 - 130
Trichloroethene	4.00	3.894		ug/L		97	70 - 130
Trichlorofluoromethane	4.00	4.664		ug/L		117	70 - 130
Vinyl chloride	4.00	4.239		ug/L		106	70 - 130
Xylenes, Total	8.00	7.604		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*95*		*80 - 120*

Lab Sample ID: LCSD 480-194469/6
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	4.331		ug/L		108	70 - 130	8	20
1,1,1-Trichloroethane	4.00	4.130		ug/L		103	70 - 130	18	20
1,1,2,2-Tetrachloroethane	4.00	3.923		ug/L		98	70 - 130	2	20
1,1,2-Trichloroethane	4.00	3.970		ug/L		99	70 - 130	9	20
1,1-Dichloroethane	4.00	4.232		ug/L		106	70 - 130	7	20
1,1-Dichloroethene	4.00	3.851		ug/L		96	70 - 130	1	20
1,1-Dichloropropene	4.00	4.495		ug/L		112	70 - 130	6	20
1,2,3-Trichlorobenzene	4.00	3.834		ug/L		96	70 - 130	15	20
1,2,3-Trichloropropane	4.00	4.136		ug/L		103	70 - 130	2	20
1,2,4-Trichlorobenzene	4.00	3.830		ug/L		96	70 - 130	10	20
1,2,4-Trimethylbenzene	4.00	3.973		ug/L		99	70 - 130	8	20
1,2-Dibromo-3-Chloropropane	4.00	4.396		ug/L		110	70 - 130	6	20
1,2-Dibromoethane	4.00	3.958		ug/L		99	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.839		ug/L		96	70 - 130	5	20
1,2-Dichloroethane	4.00	4.023		ug/L		101	70 - 130	3	20
1,2-Dichloropropane	4.00	4.168		ug/L		104	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	4.047		ug/L		101	70 - 130	9	20
1,3-Dichlorobenzene	4.00	3.935		ug/L		98	70 - 130	3	20
1,3-Dichloropropane	4.00	4.004		ug/L		100	70 - 130	3	20
1,4-Dichlorobenzene	4.00	3.927		ug/L		98	70 - 130	3	20
2,2-Dichloropropane	4.00	3.686	*	ug/L		92	70 - 130	26	20
2-Butanone (MEK)	20.0	23.28		ug/L		116	70 - 130	1	20
2-Chlorotoluene	4.00	4.013		ug/L		100	70 - 130	9	20
2-Hexanone	20.0	21.58		ug/L		108	70 - 130	3	20
4-Chlorotoluene	4.00	3.886		ug/L		97	70 - 130	1	20
4-Isopropyltoluene	4.00	4.050		ug/L		101	70 - 130	8	20
4-Methyl-2-pentanone (MIBK)	20.0	21.47		ug/L		107	70 - 130	5	20
Acetone	20.0	26.92	*	ug/L		135	70 - 130	7	20
Benzene	4.00	4.084		ug/L		102	70 - 130	3	20
Bromobenzene	4.00	3.824		ug/L		96	70 - 130	2	20
Bromochloromethane	4.00	4.023		ug/L		101	70 - 130	5	20
Dichlorobromomethane	4.00	4.330		ug/L		108	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-194469/6
Matrix: Water
Analysis Batch: 194469

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
Bromoform	4.00	4.611		ug/L		115	70 - 130	4	20
Bromomethane	4.00	4.244		ug/L		106	70 - 130	4	20
Carbon disulfide	4.00	3.822	*	ug/L		96	70 - 130	24	20
Carbon tetrachloride	4.00	4.600		ug/L		115	70 - 130	8	20
Chlorobenzene	4.00	3.930		ug/L		98	70 - 130	1	20
Chlorodibromomethane	4.00	4.413		ug/L		110	70 - 130	1	20
Chloroethane	4.00	4.609		ug/L		115	70 - 130	16	20
Chloroform	4.00	4.026		ug/L		101	70 - 130	6	20
Chloromethane	4.00	4.715		ug/L		118	70 - 130	3	20
cis-1,2-Dichloroethene	4.00	4.111		ug/L		103	70 - 130	8	20
cis-1,3-Dichloropropene	4.00	4.376		ug/L		109	70 - 130	6	20
Dibromomethane	4.00	4.166		ug/L		104	70 - 130	4	20
Dichlorodifluoromethane	4.00	4.984		ug/L		125	70 - 130	11	20
Ethylbenzene	4.00	3.977		ug/L		99	70 - 130	5	20
Hexachlorobutadiene	4.00	3.949		ug/L		99	70 - 130	11	20
Isopropylbenzene	4.00	4.106		ug/L		103	70 - 130	8	20
Methyl tert-butyl ether	4.00	4.048		ug/L		101	70 - 130	4	20
Methylene Chloride	4.00	4.478		ug/L		112	70 - 130	5	20
Naphthalene	4.00	3.775		ug/L		94	70 - 130	10	20
n-Butylbenzene	4.00	3.982		ug/L		100	70 - 130	8	20
N-Propylbenzene	4.00	3.973		ug/L		99	70 - 130	7	20
sec-Butylbenzene	4.00	4.054		ug/L		101	70 - 130	8	20
Styrene	4.00	3.829		ug/L		96	70 - 130	1	20
tert-Butylbenzene	4.00	4.005		ug/L		100	70 - 130	8	20
Tetrachloroethene	4.00	3.941		ug/L		99	70 - 130	6	20
Toluene	4.00	4.050		ug/L		101	70 - 130	1	20
trans-1,2-Dichloroethene	4.00	4.083		ug/L		102	70 - 130	7	20
trans-1,3-Dichloropropene	4.00	4.705		ug/L		118	70 - 130	10	20
Trichloroethene	4.00	4.104		ug/L		103	70 - 130	5	20
Trichlorofluoromethane	4.00	4.793		ug/L		120	70 - 130	3	20
Vinyl chloride	4.00	4.522		ug/L		113	70 - 130	6	20
Xylenes, Total	8.00	8.037		ug/L		100	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 12:17	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

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		0.500	0.0590	ug/L			07/24/14 12:17	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 12:17	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 12:17	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 12:17	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 12:17	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 12:17	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 12:17	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 12:17	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 12:17	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 12:17	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 12:17	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 12:17	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 12:17	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 12:17	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 12:17	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 12:17	1
Acetone	ND		2.50	0.537	ug/L			07/24/14 12:17	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 12:17	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 12:17	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 12:17	1
Carbon disulfide	ND		0.500	0.150	ug/L			07/24/14 12:17	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 12:17	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 12:17	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 12:17	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 12:17	1
Chloromethane	ND		0.500	0.0629	ug/L			07/24/14 12:17	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 12:17	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 12:17	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 12:17	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 12:17	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 12:17	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 12:17	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 12:17	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 12:17	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 12:17	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 12:17	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 12:17	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 12:17	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 12:17	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 12:17	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 12:17	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 12:17	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 12:17	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 12:17	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 12:17	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 12:17	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/24/14 12:17*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*07/24/14 12:17*	*1*

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.556		ug/L		89	70 - 130
1,1,1-Trichloroethane	4.00	3.356		ug/L		84	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.308		ug/L		83	70 - 130
1,1,2-Trichloroethane	4.00	3.293		ug/L		82	70 - 130
1,1-Dichloroethane	4.00	3.458		ug/L		86	70 - 130
1,1-Dichloroethene	4.00	3.210		ug/L		80	70 - 130
1,1-Dichloropropene	4.00	3.645		ug/L		91	70 - 130
1,2,3-Trichlorobenzene	4.00	3.309		ug/L		83	70 - 130
1,2,3-Trichloropropane	4.00	3.484		ug/L		87	70 - 130
1,2,4-Trichlorobenzene	4.00	3.330		ug/L		83	70 - 130
1,2,4-Trimethylbenzene	4.00	3.307		ug/L		83	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	3.600		ug/L		90	70 - 130
1,2-Dibromoethane	4.00	3.379		ug/L		84	70 - 130
1,2-Dichlorobenzene	4.00	3.314		ug/L		83	70 - 130
1,2-Dichloroethane	4.00	3.504		ug/L		88	70 - 130
1,2-Dichloropropane	4.00	3.341		ug/L		84	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	4.00	3.375		ug/L		84	70 - 130
1,3-Dichlorobenzene	4.00	3.334		ug/L		83	70 - 130
1,3-Dichloropropane	4.00	3.410		ug/L		85	70 - 130
1,4-Dichlorobenzene	4.00	3.288		ug/L		82	70 - 130
2,2-Dichloropropane	4.00	2.962		ug/L		74	70 - 130
2-Butanone (MEK)	20.0	18.61		ug/L		93	70 - 130
2-Chlorotoluene	4.00	3.321		ug/L		83	70 - 130
2-Hexanone	20.0	17.32		ug/L		87	70 - 130
4-Chlorotoluene	4.00	3.337		ug/L		83	70 - 130
4-Isopropyltoluene	4.00	3.340		ug/L		83	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	17.39		ug/L		87	70 - 130
Acetone	20.0	23.83		ug/L		119	70 - 130
Benzene	4.00	3.394		ug/L		85	70 - 130
Bromobenzene	4.00	3.354		ug/L		84	70 - 130
Bromochloromethane	4.00	3.375		ug/L		84	70 - 130
Dichlorobromomethane	4.00	3.518		ug/L		88	70 - 130
Bromoform	4.00	3.625		ug/L		91	70 - 130
Bromomethane	4.00	4.077		ug/L		102	70 - 130
Carbon disulfide	4.00	2.959		ug/L		74	70 - 130
Carbon tetrachloride	4.00	3.714		ug/L		93	70 - 130
Chlorobenzene	4.00	3.349		ug/L		84	70 - 130
Chlorodibromomethane	4.00	3.616		ug/L		90	70 - 130
Chloroethane	4.00	4.261		ug/L		107	70 - 130
Chloroform	4.00	3.349		ug/L		84	70 - 130
Chloromethane	4.00	4.429		ug/L		111	70 - 130
cis-1,2-Dichloroethene	4.00	3.355		ug/L		84	70 - 130
cis-1,3-Dichloropropene	4.00	3.530		ug/L		88	70 - 130
Dibromomethane	4.00	3.330		ug/L		83	70 - 130
Dichlorodifluoromethane	4.00	5.138		ug/L		128	70 - 130
Ethylbenzene	4.00	3.361		ug/L		84	70 - 130
Hexachlorobutadiene	4.00	3.392		ug/L		85	70 - 130
Isopropylbenzene	4.00	3.404		ug/L		85	70 - 130
Methyl tert-butyl ether	4.00	3.357		ug/L		84	70 - 130
Methylene Chloride	4.00	3.748		ug/L		94	70 - 130
Naphthalene	4.00	3.262		ug/L		82	70 - 130
n-Butylbenzene	4.00	3.348		ug/L		84	70 - 130
N-Propylbenzene	4.00	3.306		ug/L		83	70 - 130
sec-Butylbenzene	4.00	3.311		ug/L		83	70 - 130
Styrene	4.00	3.206		ug/L		80	70 - 130
tert-Butylbenzene	4.00	3.322		ug/L		83	70 - 130
Tetrachloroethene	4.00	3.275		ug/L		82	70 - 130
Toluene	4.00	3.330		ug/L		83	70 - 130
trans-1,2-Dichloroethene	4.00	3.348		ug/L		84	70 - 130
trans-1,3-Dichloropropene	4.00	3.830		ug/L		96	70 - 130
Trichloroethene	4.00	3.393		ug/L		85	70 - 130
Trichlorofluoromethane	4.00	4.554		ug/L		114	70 - 130
Vinyl chloride	4.00	4.183		ug/L		105	70 - 130
Xylenes, Total	8.00	6.765		ug/L		85	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*

Lab Sample ID: LCSD 480-194535/5
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.448		ug/L		86	70 - 130	3	20
1,1,1-Trichloroethane	4.00	3.180		ug/L		80	70 - 130	5	20
1,1,2,2-Tetrachloroethane	4.00	3.210		ug/L		80	70 - 130	3	20
1,1,2-Trichloroethane	4.00	3.162		ug/L		79	70 - 130	4	20
1,1-Dichloroethane	4.00	3.349		ug/L		84	70 - 130	3	20
1,1-Dichloroethene	4.00	2.961		ug/L		74	70 - 130	8	20
1,1-Dichloropropene	4.00	3.403		ug/L		85	70 - 130	7	20
1,2,3-Trichlorobenzene	4.00	3.210		ug/L		80	70 - 130	3	20
1,2,3-Trichloropropane	4.00	3.385		ug/L		85	70 - 130	3	20
1,2,4-Trichlorobenzene	4.00	3.258		ug/L		81	70 - 130	2	20
1,2,4-Trimethylbenzene	4.00	3.204		ug/L		80	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	3.301		ug/L		83	70 - 130	9	20
1,2-Dibromoethane	4.00	3.249		ug/L		81	70 - 130	4	20
1,2-Dichlorobenzene	4.00	3.282		ug/L		82	70 - 130	1	20
1,2-Dichloroethane	4.00	3.329		ug/L		83	70 - 130	5	20
1,2-Dichloropropane	4.00	3.281		ug/L		82	70 - 130	2	20
1,3,5-Trimethylbenzene	4.00	3.251		ug/L		81	70 - 130	4	20
1,3-Dichlorobenzene	4.00	3.256		ug/L		81	70 - 130	2	20
1,3-Dichloropropane	4.00	3.261		ug/L		82	70 - 130	4	20
1,4-Dichlorobenzene	4.00	3.227		ug/L		81	70 - 130	2	20
2,2-Dichloropropane	4.00	2.998		ug/L		75	70 - 130	1	20
2-Butanone (MEK)	20.0	18.45		ug/L		92	70 - 130	1	20
2-Chlorotoluene	4.00	3.228		ug/L		81	70 - 130	3	20
2-Hexanone	20.0	17.21		ug/L		86	70 - 130	1	20
4-Chlorotoluene	4.00	3.186		ug/L		80	70 - 130	5	20
4-Isopropyltoluene	4.00	3.215		ug/L		80	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	17.20		ug/L		86	70 - 130	1	20
Acetone	20.0	22.10		ug/L		111	70 - 130	8	20
Benzene	4.00	3.198		ug/L		80	70 - 130	6	20
Bromobenzene	4.00	3.134		ug/L		78	70 - 130	7	20
Bromochloromethane	4.00	3.202		ug/L		80	70 - 130	5	20
Dichlorobromomethane	4.00	3.402		ug/L		85	70 - 130	3	20
Bromoform	4.00	3.419		ug/L		85	70 - 130	6	20
Bromomethane	4.00	3.829		ug/L		96	70 - 130	6	20
Carbon disulfide	4.00	2.845		ug/L		71	70 - 130	4	20
Carbon tetrachloride	4.00	3.427		ug/L		86	70 - 130	8	20
Chlorobenzene	4.00	3.136		ug/L		78	70 - 130	7	20
Chlorodibromomethane	4.00	3.415		ug/L		85	70 - 130	6	20
Chloroethane	4.00	3.896		ug/L		97	70 - 130	9	20
Chloroform	4.00	3.207		ug/L		80	70 - 130	4	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-194535/5
Matrix: Water
Analysis Batch: 194535

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
Chloromethane	4.00	4.244		ug/L		106	70 - 130	4	20
cis-1,2-Dichloroethene	4.00	3.237		ug/L		81	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.428		ug/L		86	70 - 130	3	20
Dibromomethane	4.00	3.328		ug/L		83	70 - 130	0	20
Dichlorodifluoromethane	4.00	4.789		ug/L		120	70 - 130	7	20
Ethylbenzene	4.00	3.169		ug/L		79	70 - 130	6	20
Hexachlorobutadiene	4.00	3.129		ug/L		78	70 - 130	8	20
Isopropylbenzene	4.00	3.191		ug/L		80	70 - 130	6	20
Methyl tert-butyl ether	4.00	3.295		ug/L		82	70 - 130	2	20
Methylene Chloride	4.00	3.858		ug/L		96	70 - 130	3	20
Naphthalene	4.00	3.218		ug/L		80	70 - 130	1	20
n-Butylbenzene	4.00	3.172		ug/L		79	70 - 130	5	20
N-Propylbenzene	4.00	3.199		ug/L		80	70 - 130	3	20
sec-Butylbenzene	4.00	3.143		ug/L		79	70 - 130	5	20
Styrene	4.00	3.074		ug/L		77	70 - 130	4	20
tert-Butylbenzene	4.00	3.179		ug/L		79	70 - 130	4	20
Tetrachloroethene	4.00	3.197		ug/L		80	70 - 130	2	20
Toluene	4.00	3.196		ug/L		80	70 - 130	4	20
trans-1,2-Dichloroethene	4.00	3.201		ug/L		80	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.724		ug/L		93	70 - 130	3	20
Trichloroethene	4.00	3.272		ug/L		82	70 - 130	4	20
Trichlorofluoromethane	4.00	4.263		ug/L		107	70 - 130	7	20
Vinyl chloride	4.00	3.945		ug/L		99	70 - 130	6	20
Xylenes, Total	8.00	6.404		ug/L		80	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: 490-57721-B-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		32.0	29.12		ug/L		91	70 - 130
1,1,1-Trichloroethane	ND		32.0	27.50		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	ND		32.0	27.91		ug/L		87	70 - 130
1,1,2-Trichloroethane	ND		32.0	27.89		ug/L		87	70 - 130
1,1-Dichloroethane	ND		32.0	28.84		ug/L		90	70 - 130
1,1-Dichloroethene	ND		32.0	27.45		ug/L		86	70 - 130
1,1-Dichloropropene	ND		32.0	30.40		ug/L		95	70 - 130
1,2,3-Trichlorobenzene	ND		32.0	26.50		ug/L		83	70 - 130
1,2,3-Trichloropropane	ND		32.0	28.05		ug/L		88	70 - 130
1,2,4-Trichlorobenzene	ND		32.0	26.88		ug/L		84	70 - 130
1,2,4-Trimethylbenzene	ND		32.0	27.01		ug/L		84	70 - 130
1,2-Dibromo-3-Chloropropane	ND		32.0	27.00		ug/L		84	70 - 130
1,2-Dibromoethane	ND		32.0	28.22		ug/L		88	70 - 130
1,2-Dichlorobenzene	ND		32.0	27.25		ug/L		85	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-B-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	ND		32.0	28.15		ug/L		88	70 - 130
1,2-Dichloropropane	ND		32.0	28.65		ug/L		90	70 - 130
1,3,5-Trimethylbenzene	ND		32.0	27.44		ug/L		86	70 - 130
1,3-Dichlorobenzene	ND		32.0	27.07		ug/L		85	70 - 130
1,3-Dichloropropane	ND		32.0	27.49		ug/L		86	70 - 130
1,4-Dichlorobenzene	ND		32.0	27.38		ug/L		86	70 - 130
2,2-Dichloropropane	ND		32.0	21.54	F1	ug/L		67	70 - 130
2-Butanone (MEK)	ND		160	146.3		ug/L		91	70 - 130
2-Chlorotoluene	ND		32.0	27.31		ug/L		85	70 - 130
2-Hexanone	ND		160	142.3		ug/L		89	70 - 130
4-Chlorotoluene	ND		32.0	26.88		ug/L		84	70 - 130
4-Isopropyltoluene	ND		32.0	27.08		ug/L		85	70 - 130
4-Methyl-2-pentanone (MIBK)	ND		160	144.5		ug/L		90	70 - 130
Acetone	ND		160	153.9		ug/L		96	70 - 130
Benzene	ND		32.0	28.17		ug/L		88	70 - 130
Bromobenzene	ND		32.0	27.20		ug/L		85	70 - 130
Bromochloromethane	ND		32.0	27.48		ug/L		86	70 - 130
Dichlorobromomethane	ND		32.0	28.34		ug/L		89	70 - 130
Bromoform	ND		32.0	26.32		ug/L		82	70 - 130
Bromomethane	ND		32.0	31.82		ug/L		99	70 - 130
Carbon disulfide	ND		32.0	22.73		ug/L		71	70 - 130
Carbon tetrachloride	ND		32.0	28.24		ug/L		88	70 - 130
Chlorobenzene	ND		32.0	27.87		ug/L		87	70 - 130
Chlorodibromomethane	ND		32.0	27.15		ug/L		85	70 - 130
Chloroethane	ND		32.0	32.31		ug/L		101	70 - 130
Chloroform	ND		32.0	27.51		ug/L		86	70 - 130
Chloromethane	ND		32.0	32.11		ug/L		100	70 - 130
cis-1,2-Dichloroethene	47.6		32.0	67.27	F1	ug/L		62	70 - 130
cis-1,3-Dichloropropene	ND		32.0	27.21		ug/L		85	70 - 130
Dibromomethane	ND		32.0	28.86		ug/L		90	70 - 130
Dichlorodifluoromethane	ND		32.0	37.25		ug/L		116	70 - 130
Ethylbenzene	ND		32.0	27.71		ug/L		87	70 - 130
Hexachlorobutadiene	ND		32.0	25.89		ug/L		81	70 - 130
Isopropylbenzene	ND		32.0	28.14		ug/L		88	70 - 130
Methyl tert-butyl ether	ND		32.0	28.84		ug/L		90	70 - 130
Methylene Chloride	ND		32.0	31.74		ug/L		99	70 - 130
Naphthalene	ND		32.0	26.50		ug/L		83	70 - 130
n-Butylbenzene	ND		32.0	26.80		ug/L		84	70 - 130
N-Propylbenzene	ND		32.0	27.27		ug/L		85	70 - 130
sec-Butylbenzene	ND		32.0	27.28		ug/L		85	70 - 130
Styrene	ND		32.0	26.26		ug/L		82	70 - 130
tert-Butylbenzene	ND		32.0	27.98		ug/L		87	70 - 130
Tetrachloroethene	ND		32.0	27.67		ug/L		86	70 - 130
Toluene	ND		32.0	28.04		ug/L		88	70 - 130
trans-1,2-Dichloroethene	ND		32.0	28.56		ug/L		89	70 - 130
trans-1,3-Dichloropropene	ND		32.0	29.21		ug/L		91	70 - 130
Trichloroethene	3.75	J	32.0	31.81		ug/L		88	70 - 130
Trichlorofluoromethane	ND		32.0	29.34		ug/L		92	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-B-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	ND		32.0	31.28		ug/L		98	70 - 130
Xylenes, Total	ND		64.0	56.54		ug/L		88	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*99*		*80 - 120*

Lab Sample ID: 490-57721-B-1 MSD
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		32.0	27.98		ug/L		87	70 - 130	4	20
1,1,1-Trichloroethane	ND		32.0	27.02		ug/L		84	70 - 130	2	20
1,1,2,2-Tetrachloroethane	ND		32.0	27.83		ug/L		87	70 - 130	0	20
1,1,2-Trichloroethane	ND		32.0	26.92		ug/L		84	70 - 130	4	20
1,1-Dichloroethane	ND		32.0	27.78		ug/L		87	70 - 130	4	20
1,1-Dichloroethene	ND		32.0	26.17		ug/L		82	70 - 130	5	20
1,1-Dichloropropene	ND		32.0	29.45		ug/L		92	70 - 130	3	20
1,2,3-Trichlorobenzene	ND		32.0	26.23		ug/L		82	70 - 130	1	20
1,2,3-Trichloropropane	ND		32.0	27.58		ug/L		86	70 - 130	2	20
1,2,4-Trichlorobenzene	ND		32.0	26.94		ug/L		84	70 - 130	0	20
1,2,4-Trimethylbenzene	ND		32.0	27.13		ug/L		85	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	ND		32.0	28.34		ug/L		89	70 - 130	5	20
1,2-Dibromoethane	ND		32.0	27.18		ug/L		85	70 - 130	4	20
1,2-Dichlorobenzene	ND		32.0	27.28		ug/L		85	70 - 130	0	20
1,2-Dichloroethane	ND		32.0	27.94		ug/L		87	70 - 130	1	20
1,2-Dichloropropane	ND		32.0	27.64		ug/L		86	70 - 130	4	20
1,3,5-Trimethylbenzene	ND		32.0	26.91		ug/L		84	70 - 130	2	20
1,3-Dichlorobenzene	ND		32.0	27.36		ug/L		86	70 - 130	1	20
1,3-Dichloropropane	ND		32.0	26.94		ug/L		84	70 - 130	2	20
1,4-Dichlorobenzene	ND		32.0	26.68		ug/L		83	70 - 130	3	20
2,2-Dichloropropane	ND		32.0	21.71	F1	ug/L		68	70 - 130	1	20
2-Butanone (MEK)	ND		160	142.4		ug/L		89	70 - 130	3	20
2-Chlorotoluene	ND		32.0	27.47		ug/L		86	70 - 130	1	20
2-Hexanone	ND		160	142.3		ug/L		89	70 - 130	0	20
4-Chlorotoluene	ND		32.0	26.83		ug/L		84	70 - 130	0	20
4-Isopropyltoluene	ND		32.0	27.08		ug/L		85	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	ND		160	142.3		ug/L		89	70 - 130	2	20
Acetone	ND		160	135.3		ug/L		85	70 - 130	13	20
Benzene	ND		32.0	27.63		ug/L		86	70 - 130	2	20
Bromobenzene	ND		32.0	27.22		ug/L		85	70 - 130	0	20
Bromochloromethane	ND		32.0	27.65		ug/L		86	70 - 130	1	20
Dichlorobromomethane	ND		32.0	27.08		ug/L		85	70 - 130	5	20
Bromoform	ND		32.0	26.05		ug/L		81	70 - 130	1	20
Bromomethane	ND		32.0	30.27		ug/L		95	70 - 130	5	20
Carbon disulfide	ND		32.0	22.09	F1	ug/L		69	70 - 130	3	20
Carbon tetrachloride	ND		32.0	27.57		ug/L		86	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-B-1 MSD
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	ND		32.0	26.83		ug/L		84	70 - 130	4	20
Chlorodibromomethane	ND		32.0	26.53		ug/L		83	70 - 130	2	20
Chloroethane	ND		32.0	31.28		ug/L		98	70 - 130	3	20
Chloroform	ND		32.0	26.76		ug/L		84	70 - 130	3	20
Chloromethane	ND		32.0	31.35		ug/L		98	70 - 130	2	20
cis-1,2-Dichloroethene	47.6		32.0	66.52	F1	ug/L		59	70 - 130	1	20
cis-1,3-Dichloropropene	ND		32.0	27.35		ug/L		85	70 - 130	1	20
Dibromomethane	ND		32.0	27.45		ug/L		86	70 - 130	5	20
Dichlorodifluoromethane	ND		32.0	34.85		ug/L		109	70 - 130	7	20
Ethylbenzene	ND		32.0	26.64		ug/L		83	70 - 130	4	20
Hexachlorobutadiene	ND		32.0	25.32		ug/L		79	70 - 130	2	20
Isopropylbenzene	ND		32.0	27.03		ug/L		84	70 - 130	4	20
Methyl tert-butyl ether	ND		32.0	28.49		ug/L		89	70 - 130	1	20
Methylene Chloride	ND		32.0	32.42		ug/L		101	70 - 130	2	20
Naphthalene	ND		32.0	26.90		ug/L		84	70 - 130	1	20
n-Butylbenzene	ND		32.0	26.65		ug/L		83	70 - 130	1	20
N-Propylbenzene	ND		32.0	27.04		ug/L		84	70 - 130	1	20
sec-Butylbenzene	ND		32.0	27.11		ug/L		85	70 - 130	1	20
Styrene	ND		32.0	25.48		ug/L		80	70 - 130	3	20
tert-Butylbenzene	ND		32.0	27.18		ug/L		85	70 - 130	3	20
Tetrachloroethene	ND		32.0	25.93		ug/L		81	70 - 130	7	20
Toluene	ND		32.0	27.22		ug/L		85	70 - 130	3	20
trans-1,2-Dichloroethene	ND		32.0	28.38		ug/L		89	70 - 130	1	20
trans-1,3-Dichloropropene	ND		32.0	29.58		ug/L		92	70 - 130	1	20
Trichloroethene	3.75	J	32.0	30.73		ug/L		84	70 - 130	3	20
Trichlorofluoromethane	ND		32.0	30.53		ug/L		95	70 - 130	4	20
Vinyl chloride	ND		32.0	30.68		ug/L		96	70 - 130	2	20
Xylenes, Total	ND		64.0	54.84		ug/L		86	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-194974/1-A
Matrix: Water
Analysis Batch: 195162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 15:47	1
Manganese	ND		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 15:47	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-194974/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.18		mg/L		102	85 - 115
Manganese	0.200	0.2029		mg/L		101	85 - 115

Lab Sample ID: 490-57721-D-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.0347	J	10.0	10.17		mg/L		101	70 - 130
Manganese	0.0526		0.200	0.2566		mg/L		102	70 - 130

Lab Sample ID: 490-57721-D-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.0347	J	10.0	10.05		mg/L		100	70 - 130	1	20
Manganese	0.0526		0.200	0.2528		mg/L		100	70 - 130	2	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

GC/MS VOA

Analysis Batch: 194469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57592-1	CC-04 (raw)	Total/NA	Water	524.2	
490-57592-4	CC-04 (GAC-1)	Total/NA	Water	524.2	
490-57592-5	CC-04 (GAC-2)	Total/NA	Water	524.2	
LCS 480-194469/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-194469/6	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-194469/7	Method Blank	Total/NA	Water	524.2	

Analysis Batch: 194535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57592-1 - DL	CC-04 (raw)	Total/NA	Water	524.2	
490-57592-3	CC-04 (GAC-in)	Total/NA	Water	524.2	
490-57721-B-1 MS	Matrix Spike	Total/NA	Water	524.2	
490-57721-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	524.2	
LCS 480-194535/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-194535/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-194535/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 194974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57592-1	CC-04 (raw)	Total/NA	Water	200.7	
490-57592-2	CC-04 (post softener)	Total/NA	Water	200.7	
490-57721-D-1-B MS	Matrix Spike	Total/NA	Water	200.7	
490-57721-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
LCS 480-194974/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-194974/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 195162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57592-1	CC-04 (raw)	Total/NA	Water	200.7 Rev 4.4	194974
490-57592-2	CC-04 (post softener)	Total/NA	Water	200.7 Rev 4.4	194974
490-57721-D-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	194974
490-57721-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	194974
LCS 480-194974/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	194974
MB 480-194974/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	194974

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

Client Sample ID: CC-04 (raw)

Lab Sample ID: 490-57592-1
Date Collected: 07/16/14 16:05
Matrix: Water
Date Received: 07/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 02:21	RAS	TAL BUF
Total/NA	Analysis	524.2	DL	4	25 mL	25 mL	194535	07/24/14 13:47	CDC	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	194974	07/28/14 07:40	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	195162	07/28/14 15:53	JRK	TAL BUF

Client Sample ID: CC-04 (post softener)

Lab Sample ID: 490-57592-2
Date Collected: 07/16/14 16:10
Matrix: Water
Date Received: 07/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	194974	07/28/14 07:40	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	195162	07/28/14 16:01	JRK	TAL BUF

Client Sample ID: CC-04 (GAC-in)

Lab Sample ID: 490-57592-3
Date Collected: 07/16/14 16:15
Matrix: Water
Date Received: 07/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194535	07/24/14 12:57	CDC	TAL BUF

Client Sample ID: CC-04 (GAC-1)

Lab Sample ID: 490-57592-4
Date Collected: 07/16/14 16:20
Matrix: Water
Date Received: 07/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 03:11	RAS	TAL BUF

Client Sample ID: CC-04 (GAC-2)

Lab Sample ID: 490-57592-5
Date Collected: 07/16/14 16:25
Matrix: Water
Date Received: 07/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 03:36	RAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57592-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Acrylonitrile
524.2		Water	Allyl chloride
524.2		Water	Carbon disulfide
524.2		Water	Dichlorofluoromethane
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	Naphthalene
524.2		Water	o-Xylene
524.2		Water	t-Butanol
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Nashville, TN

COOLER RECEIPT FORM

490-57592 Chain of Custody

Cooler Received/Opened On : 07/17/2014 @ 0830

1. Tracking # D012 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 96210146

2. Temperature of rep. sample or temp blank when opened: 2.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) CH

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

Cooler Receipt Form.doc

LF-1

End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica THE LEADER IN ENVIRON

Loc: 490
57592

7/29/2014

Client Information	Sampler: Ian Martz	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-24404-8963.1
Client Contact: Chuck Castelluccio	Phone: 978 322 4526	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): standard			
State, Zip: MA, 01824				
Phone: 978-322-4526	PO #: MA000725.2014.00107			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: FORD Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624.2_Preserved - Standard Analyte list (Buffalo)	200.7 - Iron/Manganese (Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-04 (raw)	7/16/14	1605	G	W	N	N	✓	✓		-1
CC-04 (post softener)	↓	1610	↓	↓	↓	↓		✓		2
CC-04 (GAC-in)	↓	1615	↓	↓	↓	↓	✓			3
CC-04 (GAC-1)	↓	1620	↓	↓	↓	↓	✓			4
CC-04 (GAC-2)	↓	1625	↓	↓	↓	↓	✓			5

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 7/16/14 @ 1700	Company: ARCADIS	Received by:	Date/Time: 7-17-14 @ 0830	Company: TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.1c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57592-1

Login Number: 57592

List Source: TestAmerica Nashville

List Number: 1

Creator: McBride, Mike

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57592-1

Login Number: 57592
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 07/22/14 04:11 PM

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	4.8 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57592-1

Login Number: 57592
List Number: 3
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 07/22/14 04:14 PM

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	4.8 C
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	
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 Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-57595-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
7/29/2014 5:19:41 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-57595-1	CC-15 (raw)	Water	07/16/14 12:05	07/17/14 08:30
490-57595-2	CC-15 (post filter)	Water	07/16/14 12:10	07/17/14 08:30
490-57595-3	CC-15 (GAC-1)	Water	07/16/14 12:15	07/17/14 08:30
490-57595-4	CC-15 (GAC-2)	Water	07/16/14 12:20	07/17/14 08:30
490-57595-5	Trip Blank	Water	07/16/14 00:01	07/17/14 08:30

Job ID: 490-57595-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-57595-1

Comments
No additional comments.

Receipt
The samples were received on 7/17/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 194469 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was ND or detected below RL limit in the associated samples; therefore, the data have been reported.

Method(s) 524.2: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 194469 recovered outside control limits for the following analytes: 2,2-Dichloropropane and Carbon disulfide.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
F1	MS and/or MSD Recovery exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

Client Sample ID: CC-15 (raw)

Lab Sample ID: 490-57595-1

Date Collected: 07/16/14 12:05
Matrix: Water
Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 04:01	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 04:01	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 04:01	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 04:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 04:01	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 04:01	1
1,1-Dichloroethene	**0.129**	**J**	0.500	0.0590	ug/L			07/24/14 04:01	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 04:01	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 04:01	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 04:01	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 04:01	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 04:01	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 04:01	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 04:01	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 04:01	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 04:01	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 04:01	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 04:01	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 04:01	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 04:01	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 04:01	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 04:01	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 04:01	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 04:01	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 04:01	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 04:01	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 04:01	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 04:01	1
Acetone	**1.24**	**J ***	2.50	0.537	ug/L			07/24/14 04:01	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 04:01	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 04:01	1
Benzene	**0.359**	**J**	0.500	0.130	ug/L			07/24/14 04:01	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 04:01	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 04:01	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 04:01	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 04:01	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 04:01	1
Carbon disulfide	ND	*	0.500	0.150	ug/L			07/24/14 04:01	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 04:01	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 04:01	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 04:01	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 04:01	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 04:01	1
Chloromethane	**0.112**	**J**	0.500	0.0629	ug/L			07/24/14 04:01	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 04:01	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 04:01	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 04:01	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 04:01	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 04:01	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

Client Sample ID: CC-15 (raw)

Date Collected: 07/16/14 12:05
Date Received: 07/17/14 08:30

Lab Sample ID: 490-57595-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 04:01	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 04:01	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 04:01	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 04:01	1
Methylene Chloride	**0.377**	**J**	0.500	0.250	ug/L			07/24/14 04:01	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 04:01	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 04:01	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 04:01	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 04:01	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 04:01	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 04:01	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 04:01	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 04:01	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 04:01	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 04:01	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 04:01	1
trans-1,2-Dichloroethene	**1.03**		0.500	0.130	ug/L			07/24/14 04:01	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 04:01	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 04:01	1
Trichloroethene	**4.71**		0.500	0.0600	ug/L			07/24/14 04:01	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 04:01	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 04:01	1
Vinyl chloride	**0.137**	**J**	0.500	0.0590	ug/L			07/24/14 04:01	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 04:01	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 04:01	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 04:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*07/24/14 04:01*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*07/24/14 04:01*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**46.1**		2.00	0.480	ug/L			07/24/14 14:12	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*07/24/14 14:12*	*4*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*07/24/14 14:12*	*4*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 16:04	1
Manganese	**0.100**		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 16:04	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

Client Sample ID: CC-15 (post filter)

Lab Sample ID: 490-57595-2

Date Collected: 07/16/14 12:10

Matrix: Water

Date Received: 07/17/14 08:30

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 16:07	1
Manganese	**0.0944**		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 16:07	1

Client Sample ID: CC-15 (GAC-1)

Lab Sample ID: 490-57595-3

Date Collected: 07/16/14 12:15

Matrix: Water

Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 04:26	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 04:26	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 04:26	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 04:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 04:26	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 04:26	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 04:26	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 04:26	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 04:26	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 04:26	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 04:26	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 04:26	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 04:26	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 04:26	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 04:26	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 04:26	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 04:26	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 04:26	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 04:26	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 04:26	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 04:26	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 04:26	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 04:26	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 04:26	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 04:26	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 04:26	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 04:26	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 04:26	1
Acetone	**1.42**	**J ***	2.50	0.537	ug/L			07/24/14 04:26	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 04:26	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 04:26	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 04:26	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 04:26	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 04:26	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 04:26	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 04:26	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 04:26	1
Carbon disulfide	**0.565**	*****	0.500	0.150	ug/L			07/24/14 04:26	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 04:26	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 04:26	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 04:26	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 04:26	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 04:26	1
Chloromethane	**0.194**	**J**	0.500	0.0629	ug/L			07/24/14 04:26	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 04:26	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 04:26	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 04:26	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 04:26	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 04:26	1

Client Sample ID: CC-15 (GAC-1)

Lab Sample ID: 490-57595-3

Date Collected: 07/16/14 12:15

Matrix: Water

Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 04:26	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 04:26	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 04:26	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 04:26	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 04:26	1
Methylene Chloride	**0.465**	**J**	0.500	0.250	ug/L			07/24/14 04:26	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 04:26	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 04:26	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 04:26	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 04:26	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 04:26	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 04:26	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 04:26	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 04:26	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 04:26	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 04:26	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 04:26	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 04:26	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 04:26	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 04:26	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 04:26	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 04:26	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 04:26	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 04:26	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 04:26	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 04:26	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 04:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/24/14 04:26*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*07/24/14 04:26*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

Client Sample ID: CC-15 (GAC-2)

Date Collected: 07/16/14 12:20
Date Received: 07/17/14 08:30

Lab Sample ID: 490-57595-4

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 04:52	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 04:52	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 04:52	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 04:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 04:52	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 04:52	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 04:52	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 04:52	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 04:52	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 04:52	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 04:52	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 04:52	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 04:52	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 04:52	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 04:52	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 04:52	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 04:52	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 04:52	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 04:52	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 04:52	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 04:52	1
2,2-Dichloropropane	ND	*	0.500	0.0480	ug/L			07/24/14 04:52	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 04:52	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 04:52	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 04:52	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 04:52	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 04:52	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 04:52	1
Acetone	**1.58**	**J ***	2.50	0.537	ug/L			07/24/14 04:52	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 04:52	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 04:52	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 04:52	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 04:52	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 04:52	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 04:52	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 04:52	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 04:52	1
Carbon disulfide	**0.363**	**J ***	0.500	0.150	ug/L			07/24/14 04:52	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 04:52	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 04:52	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 04:52	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 04:52	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 04:52	1
Chloromethane	**0.382**	**J**	0.500	0.0629	ug/L			07/24/14 04:52	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 04:52	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 04:52	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 04:52	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 04:52	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 04:52	1

Client Sample ID: CC-15 (GAC-2)

Lab Sample ID: 490-57595-4

Date Collected: 07/16/14 12:20

Matrix: Water

Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 04:52	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 04:52	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 04:52	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 04:52	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 04:52	1
Methylene Chloride	**0.430**	**J**	0.500	0.250	ug/L			07/24/14 04:52	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 04:52	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 04:52	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 04:52	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 04:52	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 04:52	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 04:52	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 04:52	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 04:52	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 04:52	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 04:52	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 04:52	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 04:52	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 04:52	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 04:52	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 04:52	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 04:52	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 04:52	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 04:52	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 04:52	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 04:52	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 04:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*07/24/14 04:52*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*07/24/14 04:52*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-57595-5

Date Collected: 07/16/14 00:01
Date Received: 07/17/14 08:30

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 20:31	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 20:31	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 20:31	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 20:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 20:31	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 20:31	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 20:31	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 20:31	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 20:31	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 20:31	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 20:31	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 20:31	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 20:31	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 20:31	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 20:31	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 20:31	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 20:31	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 20:31	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 20:31	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 20:31	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 20:31	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 20:31	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 20:31	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 20:31	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 20:31	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 20:31	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 20:31	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 20:31	1
Acetone	**1.46**	**J**	2.50	0.537	ug/L			07/24/14 20:31	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 20:31	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 20:31	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 20:31	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 20:31	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 20:31	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 20:31	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 20:31	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 20:31	1
Carbon disulfide	ND		0.500	0.150	ug/L			07/24/14 20:31	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 20:31	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 20:31	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 20:31	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 20:31	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 20:31	1
Chloromethane	ND		0.500	0.0629	ug/L			07/24/14 20:31	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 20:31	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 20:31	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 20:31	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 20:31	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 20:31	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-57595-5

Date Collected: 07/16/14 00:01
Matrix: Water
Date Received: 07/17/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 20:31	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 20:31	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 20:31	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 20:31	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 20:31	1
Methylene Chloride	**0.754**		0.500	0.250	ug/L			07/24/14 20:31	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 20:31	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 20:31	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 20:31	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 20:31	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 20:31	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 20:31	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 20:31	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 20:31	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 20:31	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 20:31	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 20:31	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 20:31	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 20:31	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 20:31	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 20:31	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 20:31	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 20:31	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 20:31	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 20:31	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 20:31	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/24/14 20:31*	*1*
1,2-Dichlorobenzene-d4	*99*		*80 - 120*		*07/24/14 20:31*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-194469/7
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 01:43	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			07/24/14 01:43	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 01:43	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 01:43	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 01:43	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 01:43	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 01:43	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 01:43	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 01:43	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 01:43	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 01:43	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 01:43	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 01:43	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 01:43	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 01:43	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 01:43	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 01:43	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 01:43	1
Acetone	ND		2.50	0.537	ug/L			07/24/14 01:43	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 01:43	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 01:43	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 01:43	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 01:43	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 01:43	1
Carbon disulfide	ND		0.500	0.150	ug/L			07/24/14 01:43	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 01:43	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 01:43	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 01:43	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 01:43	1
Chloromethane	ND		0.500	0.0629	ug/L			07/24/14 01:43	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 01:43	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 01:43	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 01:43	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 01:43	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194469/7
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 01:43	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 01:43	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 01:43	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 01:43	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 01:43	1
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 01:43	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 01:43	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 01:43	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 01:43	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 01:43	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 01:43	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 01:43	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 01:43	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 01:43	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 01:43	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 01:43	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 01:43	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 01:43	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 01:43	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 01:43	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 01:43	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 01:43	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 01:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*07/24/14 01:43*	*1*
1,2-Dichlorobenzene-d4	*104*		*80 - 120*		*07/24/14 01:43*	*1*

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	4.018		ug/L		100	70 - 130
1,1,1-Trichloroethane	4.00	3.448		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.840		ug/L		96	70 - 130
1,1,2-Trichloroethane	4.00	4.357		ug/L		109	70 - 130
1,1-Dichloroethane	4.00	3.937		ug/L		98	70 - 130
1,1-Dichloroethene	4.00	3.816		ug/L		95	70 - 130
1,1-Dichloropropene	4.00	4.215		ug/L		105	70 - 130
1,2,3-Trichlorobenzene	4.00	3.293		ug/L		82	70 - 130
1,2,3-Trichloropropane	4.00	4.068		ug/L		102	70 - 130
1,2,4-Trichlorobenzene	4.00	3.474		ug/L		87	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.683		ug/L		92	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.147		ug/L		104	70 - 130
1,2-Dibromoethane	4.00	4.091		ug/L		102	70 - 130
1,2-Dichlorobenzene	4.00	3.653		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	4.163		ug/L		104	70 - 130
1,2-Dichloropropane	4.00	4.127		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	4.00	3.702		ug/L		93	70 - 130
1,3-Dichlorobenzene	4.00	3.807		ug/L		95	70 - 130
1,3-Dichloropropane	4.00	4.139		ug/L		103	70 - 130
1,4-Dichlorobenzene	4.00	3.798		ug/L		95	70 - 130
2,2-Dichloropropane	4.00	2.845		ug/L		71	70 - 130
2-Butanone (MEK)	20.0	23.55		ug/L		118	70 - 130
2-Chlorotoluene	4.00	3.661		ug/L		92	70 - 130
2-Hexanone	20.0	22.16		ug/L		111	70 - 130
4-Chlorotoluene	4.00	3.865		ug/L		97	70 - 130
4-Isopropyltoluene	4.00	3.724		ug/L		93	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	22.51		ug/L		113	70 - 130
Acetone	20.0	25.03		ug/L		125	70 - 130
Benzene	4.00	3.961		ug/L		99	70 - 130
Bromobenzene	4.00	3.766		ug/L		94	70 - 130
Bromochloromethane	4.00	3.841		ug/L		96	70 - 130
Dichlorobromomethane	4.00	4.258		ug/L		106	70 - 130
Bromoform	4.00	4.812		ug/L		120	70 - 130
Bromomethane	4.00	4.400		ug/L		110	70 - 130
Carbon disulfide	4.00	3.014		ug/L		75	70 - 130
Carbon tetrachloride	4.00	4.232		ug/L		106	70 - 130
Chlorobenzene	4.00	3.879		ug/L		97	70 - 130
Chlorodibromomethane	4.00	4.478		ug/L		112	70 - 130
Chloroethane	4.00	3.934		ug/L		98	70 - 130
Chloroform	4.00	3.797		ug/L		95	70 - 130
Chloromethane	4.00	4.875		ug/L		122	70 - 130
cis-1,2-Dichloroethene	4.00	3.783		ug/L		95	70 - 130
cis-1,3-Dichloropropene	4.00	4.656		ug/L		116	70 - 130
Dibromomethane	4.00	4.004		ug/L		100	70 - 130
Dichlorodifluoromethane	4.00	4.448		ug/L		111	70 - 130
Ethylbenzene	4.00	3.785		ug/L		95	70 - 130
Hexachlorobutadiene	4.00	3.543		ug/L		89	70 - 130
Isopropylbenzene	4.00	3.795		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.874		ug/L		97	70 - 130
Methylene Chloride	4.00	4.264		ug/L		107	70 - 130
Naphthalene	4.00	3.412		ug/L		85	70 - 130
n-Butylbenzene	4.00	3.680		ug/L		92	70 - 130
N-Propylbenzene	4.00	3.696		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.735		ug/L		93	70 - 130
Styrene	4.00	3.806		ug/L		95	70 - 130
tert-Butylbenzene	4.00	3.698		ug/L		92	70 - 130
Tetrachloroethene	4.00	3.712		ug/L		93	70 - 130
Toluene	4.00	4.073		ug/L		102	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194469/5
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.816		ug/L		95	70 - 130
trans-1,3-Dichloropropene	4.00	5.176		ug/L		129	70 - 130
Trichloroethene	4.00	3.894		ug/L		97	70 - 130
Trichlorofluoromethane	4.00	4.664		ug/L		117	70 - 130
Vinyl chloride	4.00	4.239		ug/L		106	70 - 130
Xylenes, Total	8.00	7.604		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*95*		*80 - 120*

Lab Sample ID: LCSD 480-194469/6
Matrix: Water
Analysis Batch: 194469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	4.331		ug/L		108	70 - 130	8	20
1,1,1-Trichloroethane	4.00	4.130		ug/L		103	70 - 130	18	20
1,1,2,2-Tetrachloroethane	4.00	3.923		ug/L		98	70 - 130	2	20
1,1,2-Trichloroethane	4.00	3.970		ug/L		99	70 - 130	9	20
1,1-Dichloroethane	4.00	4.232		ug/L		106	70 - 130	7	20
1,1-Dichloroethene	4.00	3.851		ug/L		96	70 - 130	1	20
1,1-Dichloropropene	4.00	4.495		ug/L		112	70 - 130	6	20
1,2,3-Trichlorobenzene	4.00	3.834		ug/L		96	70 - 130	15	20
1,2,3-Trichloropropane	4.00	4.136		ug/L		103	70 - 130	2	20
1,2,4-Trichlorobenzene	4.00	3.830		ug/L		96	70 - 130	10	20
1,2,4-Trimethylbenzene	4.00	3.973		ug/L		99	70 - 130	8	20
1,2-Dibromo-3-Chloropropane	4.00	4.396		ug/L		110	70 - 130	6	20
1,2-Dibromoethane	4.00	3.958		ug/L		99	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.839		ug/L		96	70 - 130	5	20
1,2-Dichloroethane	4.00	4.023		ug/L		101	70 - 130	3	20
1,2-Dichloropropane	4.00	4.168		ug/L		104	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	4.047		ug/L		101	70 - 130	9	20
1,3-Dichlorobenzene	4.00	3.935		ug/L		98	70 - 130	3	20
1,3-Dichloropropane	4.00	4.004		ug/L		100	70 - 130	3	20
1,4-Dichlorobenzene	4.00	3.927		ug/L		98	70 - 130	3	20
2,2-Dichloropropane	4.00	3.686	*	ug/L		92	70 - 130	26	20
2-Butanone (MEK)	20.0	23.28		ug/L		116	70 - 130	1	20
2-Chlorotoluene	4.00	4.013		ug/L		100	70 - 130	9	20
2-Hexanone	20.0	21.58		ug/L		108	70 - 130	3	20
4-Chlorotoluene	4.00	3.886		ug/L		97	70 - 130	1	20
4-Isopropyltoluene	4.00	4.050		ug/L		101	70 - 130	8	20
4-Methyl-2-pentanone (MIBK)	20.0	21.47		ug/L		107	70 - 130	5	20
Acetone	20.0	26.92	*	ug/L		135	70 - 130	7	20
Benzene	4.00	4.084		ug/L		102	70 - 130	3	20
Bromobenzene	4.00	3.824		ug/L		96	70 - 130	2	20
Bromochloromethane	4.00	4.023		ug/L		101	70 - 130	5	20
Dichlorobromomethane	4.00	4.330		ug/L		108	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-194469/6
Matrix: Water
Analysis Batch: 194469

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
Bromoform	4.00	4.611		ug/L		115	70 - 130	4	20
Bromomethane	4.00	4.244		ug/L		106	70 - 130	4	20
Carbon disulfide	4.00	3.822	*	ug/L		96	70 - 130	24	20
Carbon tetrachloride	4.00	4.600		ug/L		115	70 - 130	8	20
Chlorobenzene	4.00	3.930		ug/L		98	70 - 130	1	20
Chlorodibromomethane	4.00	4.413		ug/L		110	70 - 130	1	20
Chloroethane	4.00	4.609		ug/L		115	70 - 130	16	20
Chloroform	4.00	4.026		ug/L		101	70 - 130	6	20
Chloromethane	4.00	4.715		ug/L		118	70 - 130	3	20
cis-1,2-Dichloroethene	4.00	4.111		ug/L		103	70 - 130	8	20
cis-1,3-Dichloropropene	4.00	4.376		ug/L		109	70 - 130	6	20
Dibromomethane	4.00	4.166		ug/L		104	70 - 130	4	20
Dichlorodifluoromethane	4.00	4.984		ug/L		125	70 - 130	11	20
Ethylbenzene	4.00	3.977		ug/L		99	70 - 130	5	20
Hexachlorobutadiene	4.00	3.949		ug/L		99	70 - 130	11	20
Isopropylbenzene	4.00	4.106		ug/L		103	70 - 130	8	20
Methyl tert-butyl ether	4.00	4.048		ug/L		101	70 - 130	4	20
Methylene Chloride	4.00	4.478		ug/L		112	70 - 130	5	20
Naphthalene	4.00	3.775		ug/L		94	70 - 130	10	20
n-Butylbenzene	4.00	3.982		ug/L		100	70 - 130	8	20
N-Propylbenzene	4.00	3.973		ug/L		99	70 - 130	7	20
sec-Butylbenzene	4.00	4.054		ug/L		101	70 - 130	8	20
Styrene	4.00	3.829		ug/L		96	70 - 130	1	20
tert-Butylbenzene	4.00	4.005		ug/L		100	70 - 130	8	20
Tetrachloroethene	4.00	3.941		ug/L		99	70 - 130	6	20
Toluene	4.00	4.050		ug/L		101	70 - 130	1	20
trans-1,2-Dichloroethene	4.00	4.083		ug/L		102	70 - 130	7	20
trans-1,3-Dichloropropene	4.00	4.705		ug/L		118	70 - 130	10	20
Trichloroethene	4.00	4.104		ug/L		103	70 - 130	5	20
Trichlorofluoromethane	4.00	4.793		ug/L		120	70 - 130	3	20
Vinyl chloride	4.00	4.522		ug/L		113	70 - 130	6	20
Xylenes, Total	8.00	8.037		ug/L		100	70 - 130	6	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			07/24/14 12:17	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

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		0.500	0.0590	ug/L			07/24/14 12:17	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			07/24/14 12:17	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			07/24/14 12:17	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			07/24/14 12:17	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			07/24/14 12:17	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			07/24/14 12:17	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			07/24/14 12:17	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			07/24/14 12:17	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			07/24/14 12:17	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			07/24/14 12:17	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			07/24/14 12:17	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			07/24/14 12:17	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 12:17	1
2-Hexanone	ND		2.50	0.231	ug/L			07/24/14 12:17	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			07/24/14 12:17	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			07/24/14 12:17	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			07/24/14 12:17	1
Acetone	ND		2.50	0.537	ug/L			07/24/14 12:17	1
Acrylonitrile	ND		10.0	0.476	ug/L			07/24/14 12:17	1
Allyl chloride	ND		0.500	0.0910	ug/L			07/24/14 12:17	1
Benzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromobenzene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromochloromethane	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			07/24/14 12:17	1
Bromoform	ND		0.500	0.130	ug/L			07/24/14 12:17	1
Bromomethane	ND		0.500	0.0510	ug/L			07/24/14 12:17	1
Carbon disulfide	ND		0.500	0.150	ug/L			07/24/14 12:17	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			07/24/14 12:17	1
Chlorobenzene	ND		0.500	0.120	ug/L			07/24/14 12:17	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			07/24/14 12:17	1
Chloroethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
Chloroform	ND		0.500	0.140	ug/L			07/24/14 12:17	1
Chloromethane	ND		0.500	0.0629	ug/L			07/24/14 12:17	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			07/24/14 12:17	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			07/24/14 12:17	1
Dibromomethane	ND		0.500	0.170	ug/L			07/24/14 12:17	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			07/24/14 12:17	1
Ethyl ether	ND		0.500	0.115	ug/L			07/24/14 12:17	1
Ethylbenzene	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			07/24/14 12:17	1
Iodomethane	ND		0.500	0.150	ug/L			07/24/14 12:17	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			07/24/14 12:17	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			07/24/14 12:17	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-194535/6
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		0.500	0.250	ug/L			07/24/14 12:17	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			07/24/14 12:17	1
Naphthalene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			07/24/14 12:17	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			07/24/14 12:17	1
o-Xylene	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			07/24/14 12:17	1
Styrene	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
t-Butanol	ND		10.0	2.46	ug/L			07/24/14 12:17	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			07/24/14 12:17	1
Toluene	ND		0.500	0.100	ug/L			07/24/14 12:17	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			07/24/14 12:17	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			07/24/14 12:17	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			07/24/14 12:17	1
Trichloroethene	ND		0.500	0.0600	ug/L			07/24/14 12:17	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			07/24/14 12:17	1
Vinyl acetate	ND		2.50	0.172	ug/L			07/24/14 12:17	1
Vinyl chloride	ND		0.500	0.0590	ug/L			07/24/14 12:17	1
Xylenes, Total	ND		1.00	0.200	ug/L			07/24/14 12:17	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			07/24/14 12:17	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			07/24/14 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*07/24/14 12:17*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*07/24/14 12:17*	*1*

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.556		ug/L		89	70 - 130
1,1,1-Trichloroethane	4.00	3.356		ug/L		84	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.308		ug/L		83	70 - 130
1,1,2-Trichloroethane	4.00	3.293		ug/L		82	70 - 130
1,1-Dichloroethane	4.00	3.458		ug/L		86	70 - 130
1,1-Dichloroethene	4.00	3.210		ug/L		80	70 - 130
1,1-Dichloropropene	4.00	3.645		ug/L		91	70 - 130
1,2,3-Trichlorobenzene	4.00	3.309		ug/L		83	70 - 130
1,2,3-Trichloropropane	4.00	3.484		ug/L		87	70 - 130
1,2,4-Trichlorobenzene	4.00	3.330		ug/L		83	70 - 130
1,2,4-Trimethylbenzene	4.00	3.307		ug/L		83	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	3.600		ug/L		90	70 - 130
1,2-Dibromoethane	4.00	3.379		ug/L		84	70 - 130
1,2-Dichlorobenzene	4.00	3.314		ug/L		83	70 - 130
1,2-Dichloroethane	4.00	3.504		ug/L		88	70 - 130
1,2-Dichloropropane	4.00	3.341		ug/L		84	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	4.00	3.375		ug/L		84	70 - 130
1,3-Dichlorobenzene	4.00	3.334		ug/L		83	70 - 130
1,3-Dichloropropane	4.00	3.410		ug/L		85	70 - 130
1,4-Dichlorobenzene	4.00	3.288		ug/L		82	70 - 130
2,2-Dichloropropane	4.00	2.962		ug/L		74	70 - 130
2-Butanone (MEK)	20.0	18.61		ug/L		93	70 - 130
2-Chlorotoluene	4.00	3.321		ug/L		83	70 - 130
2-Hexanone	20.0	17.32		ug/L		87	70 - 130
4-Chlorotoluene	4.00	3.337		ug/L		83	70 - 130
4-Isopropyltoluene	4.00	3.340		ug/L		83	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	17.39		ug/L		87	70 - 130
Acetone	20.0	23.83		ug/L		119	70 - 130
Benzene	4.00	3.394		ug/L		85	70 - 130
Bromobenzene	4.00	3.354		ug/L		84	70 - 130
Bromochloromethane	4.00	3.375		ug/L		84	70 - 130
Dichlorobromomethane	4.00	3.518		ug/L		88	70 - 130
Bromoform	4.00	3.625		ug/L		91	70 - 130
Bromomethane	4.00	4.077		ug/L		102	70 - 130
Carbon disulfide	4.00	2.959		ug/L		74	70 - 130
Carbon tetrachloride	4.00	3.714		ug/L		93	70 - 130
Chlorobenzene	4.00	3.349		ug/L		84	70 - 130
Chlorodibromomethane	4.00	3.616		ug/L		90	70 - 130
Chloroethane	4.00	4.261		ug/L		107	70 - 130
Chloroform	4.00	3.349		ug/L		84	70 - 130
Chloromethane	4.00	4.429		ug/L		111	70 - 130
cis-1,2-Dichloroethene	4.00	3.355		ug/L		84	70 - 130
cis-1,3-Dichloropropene	4.00	3.530		ug/L		88	70 - 130
Dibromomethane	4.00	3.330		ug/L		83	70 - 130
Dichlorodifluoromethane	4.00	5.138		ug/L		128	70 - 130
Ethylbenzene	4.00	3.361		ug/L		84	70 - 130
Hexachlorobutadiene	4.00	3.392		ug/L		85	70 - 130
Isopropylbenzene	4.00	3.404		ug/L		85	70 - 130
Methyl tert-butyl ether	4.00	3.357		ug/L		84	70 - 130
Methylene Chloride	4.00	3.748		ug/L		94	70 - 130
Naphthalene	4.00	3.262		ug/L		82	70 - 130
n-Butylbenzene	4.00	3.348		ug/L		84	70 - 130
N-Propylbenzene	4.00	3.306		ug/L		83	70 - 130
sec-Butylbenzene	4.00	3.311		ug/L		83	70 - 130
Styrene	4.00	3.206		ug/L		80	70 - 130
tert-Butylbenzene	4.00	3.322		ug/L		83	70 - 130
Tetrachloroethene	4.00	3.275		ug/L		82	70 - 130
Toluene	4.00	3.330		ug/L		83	70 - 130
trans-1,2-Dichloroethene	4.00	3.348		ug/L		84	70 - 130
trans-1,3-Dichloropropene	4.00	3.830		ug/L		96	70 - 130
Trichloroethene	4.00	3.393		ug/L		85	70 - 130
Trichlorofluoromethane	4.00	4.554		ug/L		114	70 - 130
Vinyl chloride	4.00	4.183		ug/L		105	70 - 130
Xylenes, Total	8.00	6.765		ug/L		85	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-194535/4
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*80 - 120*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*

Lab Sample ID: LCSD 480-194535/5
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.448		ug/L		86	70 - 130	3	20
1,1,1-Trichloroethane	4.00	3.180		ug/L		80	70 - 130	5	20
1,1,2,2-Tetrachloroethane	4.00	3.210		ug/L		80	70 - 130	3	20
1,1,2-Trichloroethane	4.00	3.162		ug/L		79	70 - 130	4	20
1,1-Dichloroethane	4.00	3.349		ug/L		84	70 - 130	3	20
1,1-Dichloroethene	4.00	2.961		ug/L		74	70 - 130	8	20
1,1-Dichloropropene	4.00	3.403		ug/L		85	70 - 130	7	20
1,2,3-Trichlorobenzene	4.00	3.210		ug/L		80	70 - 130	3	20
1,2,3-Trichloropropane	4.00	3.385		ug/L		85	70 - 130	3	20
1,2,4-Trichlorobenzene	4.00	3.258		ug/L		81	70 - 130	2	20
1,2,4-Trimethylbenzene	4.00	3.204		ug/L		80	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	3.301		ug/L		83	70 - 130	9	20
1,2-Dibromoethane	4.00	3.249		ug/L		81	70 - 130	4	20
1,2-Dichlorobenzene	4.00	3.282		ug/L		82	70 - 130	1	20
1,2-Dichloroethane	4.00	3.329		ug/L		83	70 - 130	5	20
1,2-Dichloropropane	4.00	3.281		ug/L		82	70 - 130	2	20
1,3,5-Trimethylbenzene	4.00	3.251		ug/L		81	70 - 130	4	20
1,3-Dichlorobenzene	4.00	3.256		ug/L		81	70 - 130	2	20
1,3-Dichloropropane	4.00	3.261		ug/L		82	70 - 130	4	20
1,4-Dichlorobenzene	4.00	3.227		ug/L		81	70 - 130	2	20
2,2-Dichloropropane	4.00	2.998		ug/L		75	70 - 130	1	20
2-Butanone (MEK)	20.0	18.45		ug/L		92	70 - 130	1	20
2-Chlorotoluene	4.00	3.228		ug/L		81	70 - 130	3	20
2-Hexanone	20.0	17.21		ug/L		86	70 - 130	1	20
4-Chlorotoluene	4.00	3.186		ug/L		80	70 - 130	5	20
4-Isopropyltoluene	4.00	3.215		ug/L		80	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	17.20		ug/L		86	70 - 130	1	20
Acetone	20.0	22.10		ug/L		111	70 - 130	8	20
Benzene	4.00	3.198		ug/L		80	70 - 130	6	20
Bromobenzene	4.00	3.134		ug/L		78	70 - 130	7	20
Bromochloromethane	4.00	3.202		ug/L		80	70 - 130	5	20
Dichlorobromomethane	4.00	3.402		ug/L		85	70 - 130	3	20
Bromoform	4.00	3.419		ug/L		85	70 - 130	6	20
Bromomethane	4.00	3.829		ug/L		96	70 - 130	6	20
Carbon disulfide	4.00	2.845		ug/L		71	70 - 130	4	20
Carbon tetrachloride	4.00	3.427		ug/L		86	70 - 130	8	20
Chlorobenzene	4.00	3.136		ug/L		78	70 - 130	7	20
Chlorodibromomethane	4.00	3.415		ug/L		85	70 - 130	6	20
Chloroethane	4.00	3.896		ug/L		97	70 - 130	9	20
Chloroform	4.00	3.207		ug/L		80	70 - 130	4	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-194535/5
Matrix: Water
Analysis Batch: 194535

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
Chloromethane	4.00	4.244		ug/L		106	70 - 130	4	20
cis-1,2-Dichloroethene	4.00	3.237		ug/L		81	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.428		ug/L		86	70 - 130	3	20
Dibromomethane	4.00	3.328		ug/L		83	70 - 130	0	20
Dichlorodifluoromethane	4.00	4.789		ug/L		120	70 - 130	7	20
Ethylbenzene	4.00	3.169		ug/L		79	70 - 130	6	20
Hexachlorobutadiene	4.00	3.129		ug/L		78	70 - 130	8	20
Isopropylbenzene	4.00	3.191		ug/L		80	70 - 130	6	20
Methyl tert-butyl ether	4.00	3.295		ug/L		82	70 - 130	2	20
Methylene Chloride	4.00	3.858		ug/L		96	70 - 130	3	20
Naphthalene	4.00	3.218		ug/L		80	70 - 130	1	20
n-Butylbenzene	4.00	3.172		ug/L		79	70 - 130	5	20
N-Propylbenzene	4.00	3.199		ug/L		80	70 - 130	3	20
sec-Butylbenzene	4.00	3.143		ug/L		79	70 - 130	5	20
Styrene	4.00	3.074		ug/L		77	70 - 130	4	20
tert-Butylbenzene	4.00	3.179		ug/L		79	70 - 130	4	20
Tetrachloroethene	4.00	3.197		ug/L		80	70 - 130	2	20
Toluene	4.00	3.196		ug/L		80	70 - 130	4	20
trans-1,2-Dichloroethene	4.00	3.201		ug/L		80	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.724		ug/L		93	70 - 130	3	20
Trichloroethene	4.00	3.272		ug/L		82	70 - 130	4	20
Trichlorofluoromethane	4.00	4.263		ug/L		107	70 - 130	7	20
Vinyl chloride	4.00	3.945		ug/L		99	70 - 130	6	20
Xylenes, Total	8.00	6.404		ug/L		80	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: 490-57721-B-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		32.0	29.12		ug/L		91	70 - 130
1,1,1-Trichloroethane	ND		32.0	27.50		ug/L		86	70 - 130
1,1,2,2-Tetrachloroethane	ND		32.0	27.91		ug/L		87	70 - 130
1,1,2-Trichloroethane	ND		32.0	27.89		ug/L		87	70 - 130
1,1-Dichloroethane	ND		32.0	28.84		ug/L		90	70 - 130
1,1-Dichloroethene	ND		32.0	27.45		ug/L		86	70 - 130
1,1-Dichloropropene	ND		32.0	30.40		ug/L		95	70 - 130
1,2,3-Trichlorobenzene	ND		32.0	26.50		ug/L		83	70 - 130
1,2,3-Trichloropropane	ND		32.0	28.05		ug/L		88	70 - 130
1,2,4-Trichlorobenzene	ND		32.0	26.88		ug/L		84	70 - 130
1,2,4-Trimethylbenzene	ND		32.0	27.01		ug/L		84	70 - 130
1,2-Dibromo-3-Chloropropane	ND		32.0	27.00		ug/L		84	70 - 130
1,2-Dibromoethane	ND		32.0	28.22		ug/L		88	70 - 130
1,2-Dichlorobenzene	ND		32.0	27.25		ug/L		85	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-B-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	ND		32.0	28.15		ug/L		88	70 - 130
1,2-Dichloropropane	ND		32.0	28.65		ug/L		90	70 - 130
1,3,5-Trimethylbenzene	ND		32.0	27.44		ug/L		86	70 - 130
1,3-Dichlorobenzene	ND		32.0	27.07		ug/L		85	70 - 130
1,3-Dichloropropane	ND		32.0	27.49		ug/L		86	70 - 130
1,4-Dichlorobenzene	ND		32.0	27.38		ug/L		86	70 - 130
2,2-Dichloropropane	ND		32.0	21.54	F1	ug/L		67	70 - 130
2-Butanone (MEK)	ND		160	146.3		ug/L		91	70 - 130
2-Chlorotoluene	ND		32.0	27.31		ug/L		85	70 - 130
2-Hexanone	ND		160	142.3		ug/L		89	70 - 130
4-Chlorotoluene	ND		32.0	26.88		ug/L		84	70 - 130
4-Isopropyltoluene	ND		32.0	27.08		ug/L		85	70 - 130
4-Methyl-2-pentanone (MIBK)	ND		160	144.5		ug/L		90	70 - 130
Acetone	ND		160	153.9		ug/L		96	70 - 130
Benzene	ND		32.0	28.17		ug/L		88	70 - 130
Bromobenzene	ND		32.0	27.20		ug/L		85	70 - 130
Bromochloromethane	ND		32.0	27.48		ug/L		86	70 - 130
Dichlorobromomethane	ND		32.0	28.34		ug/L		89	70 - 130
Bromoform	ND		32.0	26.32		ug/L		82	70 - 130
Bromomethane	ND		32.0	31.82		ug/L		99	70 - 130
Carbon disulfide	ND		32.0	22.73		ug/L		71	70 - 130
Carbon tetrachloride	ND		32.0	28.24		ug/L		88	70 - 130
Chlorobenzene	ND		32.0	27.87		ug/L		87	70 - 130
Chlorodibromomethane	ND		32.0	27.15		ug/L		85	70 - 130
Chloroethane	ND		32.0	32.31		ug/L		101	70 - 130
Chloroform	ND		32.0	27.51		ug/L		86	70 - 130
Chloromethane	ND		32.0	32.11		ug/L		100	70 - 130
cis-1,2-Dichloroethene	47.6		32.0	67.27	F1	ug/L		62	70 - 130
cis-1,3-Dichloropropene	ND		32.0	27.21		ug/L		85	70 - 130
Dibromomethane	ND		32.0	28.86		ug/L		90	70 - 130
Dichlorodifluoromethane	ND		32.0	37.25		ug/L		116	70 - 130
Ethylbenzene	ND		32.0	27.71		ug/L		87	70 - 130
Hexachlorobutadiene	ND		32.0	25.89		ug/L		81	70 - 130
Isopropylbenzene	ND		32.0	28.14		ug/L		88	70 - 130
Methyl tert-butyl ether	ND		32.0	28.84		ug/L		90	70 - 130
Methylene Chloride	ND		32.0	31.74		ug/L		99	70 - 130
Naphthalene	ND		32.0	26.50		ug/L		83	70 - 130
n-Butylbenzene	ND		32.0	26.80		ug/L		84	70 - 130
N-Propylbenzene	ND		32.0	27.27		ug/L		85	70 - 130
sec-Butylbenzene	ND		32.0	27.28		ug/L		85	70 - 130
Styrene	ND		32.0	26.26		ug/L		82	70 - 130
tert-Butylbenzene	ND		32.0	27.98		ug/L		87	70 - 130
Tetrachloroethene	ND		32.0	27.67		ug/L		86	70 - 130
Toluene	ND		32.0	28.04		ug/L		88	70 - 130
trans-1,2-Dichloroethene	ND		32.0	28.56		ug/L		89	70 - 130
trans-1,3-Dichloropropene	ND		32.0	29.21		ug/L		91	70 - 130
Trichloroethene	3.75	J	32.0	31.81		ug/L		88	70 - 130
Trichlorofluoromethane	ND		32.0	29.34		ug/L		92	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-B-1 MS
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	ND		32.0	31.28		ug/L		98	70 - 130
Xylenes, Total	ND		64.0	56.54		ug/L		88	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*99*		*80 - 120*

Lab Sample ID: 490-57721-B-1 MSD
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		32.0	27.98		ug/L		87	70 - 130	4	20
1,1,1-Trichloroethane	ND		32.0	27.02		ug/L		84	70 - 130	2	20
1,1,2,2-Tetrachloroethane	ND		32.0	27.83		ug/L		87	70 - 130	0	20
1,1,2-Trichloroethane	ND		32.0	26.92		ug/L		84	70 - 130	4	20
1,1-Dichloroethane	ND		32.0	27.78		ug/L		87	70 - 130	4	20
1,1-Dichloroethene	ND		32.0	26.17		ug/L		82	70 - 130	5	20
1,1-Dichloropropene	ND		32.0	29.45		ug/L		92	70 - 130	3	20
1,2,3-Trichlorobenzene	ND		32.0	26.23		ug/L		82	70 - 130	1	20
1,2,3-Trichloropropane	ND		32.0	27.58		ug/L		86	70 - 130	2	20
1,2,4-Trichlorobenzene	ND		32.0	26.94		ug/L		84	70 - 130	0	20
1,2,4-Trimethylbenzene	ND		32.0	27.13		ug/L		85	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	ND		32.0	28.34		ug/L		89	70 - 130	5	20
1,2-Dibromoethane	ND		32.0	27.18		ug/L		85	70 - 130	4	20
1,2-Dichlorobenzene	ND		32.0	27.28		ug/L		85	70 - 130	0	20
1,2-Dichloroethane	ND		32.0	27.94		ug/L		87	70 - 130	1	20
1,2-Dichloropropane	ND		32.0	27.64		ug/L		86	70 - 130	4	20
1,3,5-Trimethylbenzene	ND		32.0	26.91		ug/L		84	70 - 130	2	20
1,3-Dichlorobenzene	ND		32.0	27.36		ug/L		86	70 - 130	1	20
1,3-Dichloropropane	ND		32.0	26.94		ug/L		84	70 - 130	2	20
1,4-Dichlorobenzene	ND		32.0	26.68		ug/L		83	70 - 130	3	20
2,2-Dichloropropane	ND		32.0	21.71	F1	ug/L		68	70 - 130	1	20
2-Butanone (MEK)	ND		160	142.4		ug/L		89	70 - 130	3	20
2-Chlorotoluene	ND		32.0	27.47		ug/L		86	70 - 130	1	20
2-Hexanone	ND		160	142.3		ug/L		89	70 - 130	0	20
4-Chlorotoluene	ND		32.0	26.83		ug/L		84	70 - 130	0	20
4-Isopropyltoluene	ND		32.0	27.08		ug/L		85	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	ND		160	142.3		ug/L		89	70 - 130	2	20
Acetone	ND		160	135.3		ug/L		85	70 - 130	13	20
Benzene	ND		32.0	27.63		ug/L		86	70 - 130	2	20
Bromobenzene	ND		32.0	27.22		ug/L		85	70 - 130	0	20
Bromochloromethane	ND		32.0	27.65		ug/L		86	70 - 130	1	20
Dichlorobromomethane	ND		32.0	27.08		ug/L		85	70 - 130	5	20
Bromoform	ND		32.0	26.05		ug/L		81	70 - 130	1	20
Bromomethane	ND		32.0	30.27		ug/L		95	70 - 130	5	20
Carbon disulfide	ND		32.0	22.09	F1	ug/L		69	70 - 130	3	20
Carbon tetrachloride	ND		32.0	27.57		ug/L		86	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-57721-B-1 MSD
Matrix: Water
Analysis Batch: 194535

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	ND		32.0	26.83		ug/L		84	70 - 130	4	20
Chlorodibromomethane	ND		32.0	26.53		ug/L		83	70 - 130	2	20
Chloroethane	ND		32.0	31.28		ug/L		98	70 - 130	3	20
Chloroform	ND		32.0	26.76		ug/L		84	70 - 130	3	20
Chloromethane	ND		32.0	31.35		ug/L		98	70 - 130	2	20
cis-1,2-Dichloroethene	47.6		32.0	66.52	F1	ug/L		59	70 - 130	1	20
cis-1,3-Dichloropropene	ND		32.0	27.35		ug/L		85	70 - 130	1	20
Dibromomethane	ND		32.0	27.45		ug/L		86	70 - 130	5	20
Dichlorodifluoromethane	ND		32.0	34.85		ug/L		109	70 - 130	7	20
Ethylbenzene	ND		32.0	26.64		ug/L		83	70 - 130	4	20
Hexachlorobutadiene	ND		32.0	25.32		ug/L		79	70 - 130	2	20
Isopropylbenzene	ND		32.0	27.03		ug/L		84	70 - 130	4	20
Methyl tert-butyl ether	ND		32.0	28.49		ug/L		89	70 - 130	1	20
Methylene Chloride	ND		32.0	32.42		ug/L		101	70 - 130	2	20
Naphthalene	ND		32.0	26.90		ug/L		84	70 - 130	1	20
n-Butylbenzene	ND		32.0	26.65		ug/L		83	70 - 130	1	20
N-Propylbenzene	ND		32.0	27.04		ug/L		84	70 - 130	1	20
sec-Butylbenzene	ND		32.0	27.11		ug/L		85	70 - 130	1	20
Styrene	ND		32.0	25.48		ug/L		80	70 - 130	3	20
tert-Butylbenzene	ND		32.0	27.18		ug/L		85	70 - 130	3	20
Tetrachloroethene	ND		32.0	25.93		ug/L		81	70 - 130	7	20
Toluene	ND		32.0	27.22		ug/L		85	70 - 130	3	20
trans-1,2-Dichloroethene	ND		32.0	28.38		ug/L		89	70 - 130	1	20
trans-1,3-Dichloropropene	ND		32.0	29.58		ug/L		92	70 - 130	1	20
Trichloroethene	3.75	J	32.0	30.73		ug/L		84	70 - 130	3	20
Trichlorofluoromethane	ND		32.0	30.53		ug/L		95	70 - 130	4	20
Vinyl chloride	ND		32.0	30.68		ug/L		96	70 - 130	2	20
Xylenes, Total	ND		64.0	54.84		ug/L		86	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-194974/1-A
Matrix: Water
Analysis Batch: 195162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 194974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		07/28/14 07:40	07/28/14 15:47	1
Manganese	ND		0.00300	0.000400	mg/L		07/28/14 07:40	07/28/14 15:47	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-194974/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	10.18		mg/L		102	85 - 115
Manganese	0.200	0.2029		mg/L		101	85 - 115

Lab Sample ID: 490-57721-D-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.0347	J	10.0	10.17		mg/L		101	70 - 130
Manganese	0.0526		0.200	0.2566		mg/L		102	70 - 130

Lab Sample ID: 490-57721-D-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 195162 — **Prep Batch: 194974**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.0347	J	10.0	10.05		mg/L		100	70 - 130	1	20
Manganese	0.0526		0.200	0.2528		mg/L		100	70 - 130	2	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

GC/MS VOA

Analysis Batch: 194469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57595-1	CC-15 (raw)	Total/NA	Water	524.2	
490-57595-3	CC-15 (GAC-1)	Total/NA	Water	524.2	
490-57595-4	CC-15 (GAC-2)	Total/NA	Water	524.2	
LCS 480-194469/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-194469/6	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-194469/7	Method Blank	Total/NA	Water	524.2	

Analysis Batch: 194535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57595-1 - DL	CC-15 (raw)	Total/NA	Water	524.2	
490-57595-5	Trip Blank	Total/NA	Water	524.2	
490-57721-B-1 MS	Matrix Spike	Total/NA	Water	524.2	
490-57721-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	524.2	
LCS 480-194535/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-194535/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-194535/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 194974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57595-1	CC-15 (raw)	Total/NA	Water	200.7	
490-57595-2	CC-15 (post filter)	Total/NA	Water	200.7	
490-57721-D-1-B MS	Matrix Spike	Total/NA	Water	200.7	
490-57721-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
LCS 480-194974/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-194974/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 195162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-57595-1	CC-15 (raw)	Total/NA	Water	200.7 Rev 4.4	194974
490-57595-2	CC-15 (post filter)	Total/NA	Water	200.7 Rev 4.4	194974
490-57721-D-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	194974
490-57721-D-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	194974
LCS 480-194974/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	194974
MB 480-194974/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	194974

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

Client Sample ID: CC-15 (raw)

Lab Sample ID: 490-57595-1
Date Collected: 07/16/14 12:05
Matrix: Water
Date Received: 07/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 04:01	RAS	TAL BUF
Total/NA	Analysis	524.2	DL	4	25 mL	25 mL	194535	07/24/14 14:12	CDC	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	194974	07/28/14 07:40	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	195162	07/28/14 16:04	JRK	TAL BUF

Client Sample ID: CC-15 (post filter)

Lab Sample ID: 490-57595-2
Date Collected: 07/16/14 12:10
Matrix: Water
Date Received: 07/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	194974	07/28/14 07:40	EHD	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	195162	07/28/14 16:07	JRK	TAL BUF

Client Sample ID: CC-15 (GAC-1)

Lab Sample ID: 490-57595-3
Date Collected: 07/16/14 12:15
Matrix: Water
Date Received: 07/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 04:26	RAS	TAL BUF

Client Sample ID: CC-15 (GAC-2)

Lab Sample ID: 490-57595-4
Date Collected: 07/16/14 12:20
Matrix: Water
Date Received: 07/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194469	07/24/14 04:52	RAS	TAL BUF

Client Sample ID: Trip Blank

Lab Sample ID: 490-57595-5
Date Collected: 07/16/14 00:01
Matrix: Water
Date Received: 07/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	194535	07/24/14 20:31	CDC	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-57595-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Acrylonitrile
524.2		Water	Allyl chloride
524.2		Water	Carbon disulfide
524.2		Water	Dichlorofluoromethane
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	Naphthalene
524.2		Water	o-Xylene
524.2		Water	t-Butanol
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-57595 Chain of Custody

Cooler Received/Opened On : 07/17/2014 @ 0830

1. Tracking # 0012 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 96210146

2. Temperature of rep. sample or temp blank when opened: 2.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____ MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) _____ MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) _____ MDM

I certify that I attached a label with the unique LIMS number to each container (intial) _____ MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica THE LEADER IN ENVIRO

Loc: 490
57595

7/29/2014

Client Information	Sampler: Ian Martz	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-24404-8963.1
Client Contact: Chuck Castelluccio	Phone: 978 322 4526	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Standard			
State, Zip: MA, 01824				
Phone: 781 213 4962	PO #: MA000725.2014.00107			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: FORD Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_ Preserved - Standard Analyte list (Buffalo)	200.7 - Iron/Manganese (Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-15 (raw)	7/16/14	1205	G	W			✓	✓		-1
CC-15 (post-filter)	↓	1210	↓	↓				✓		2
CC-15 (GAC-1)	↓	1215	↓	↓			✓			3
CC-15 (GAC-2)	↓	1220	↓	↓			✓			4
Trip Blank	—	—	—	✓			✓			5

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) II

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 7/16/14 @ 1700	Company: ARCADIS	Received by:	Date/Time: 7-17-14 @ 0830	Company: TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 2.1c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57595-1

Login Number: 57595

List Source: TestAmerica Nashville

List Number: 1

Creator: McBride, Mike

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57595-1

Login Number: 57595
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 07/22/14 04:17 PM

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	4.8 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-57595-1

Login Number: 57595
List Number: 3
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 07/22/14 04:20 PM

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	4.8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the 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	
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 Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-59187-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
8/28/2014 9:23:36 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-59187-1	CC02 RAW	Water	08/11/14 15:45	08/12/14 08:30
490-59187-2	CC02 Softener	Water	08/11/14 15:45	08/12/14 08:30
490-59187-3	CC-02 GAC-1	Water	08/11/14 15:50	08/12/14 08:30
490-59187-4	CC-02 GAC-2	Water	08/11/14 15:55	08/12/14 08:30
490-59187-5	Trip Blank	Water	08/11/14 00:01	08/12/14 08:30

Job ID: 490-59187-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-59187-1

Comments
No additional comments.

Receipt
The samples were received on 8/12/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 4.6º C.

GC/MS VOA
Method(s) 524.2: The following samples were diluted to bring the concentration of target analytes within the calibration range:
(490-59187-1), (490-59187-1 MS), (490-59187-1 MSD), CC02 RAW (490-59187-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

Client Sample ID: CC02 RAW

Date Collected: 08/11/14 15:45
Date Received: 08/12/14 08:30

Lab Sample ID: 490-59187-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.00	0.560	ug/L			08/14/14 18:59	4
1,1,1-Trichloroethane	ND		2.00	0.252	ug/L			08/14/14 18:59	4
1,1,2,2-Tetrachloroethane	ND		2.00	0.280	ug/L			08/14/14 18:59	4
1,1,2-Trichloroethane	ND		2.00	0.680	ug/L			08/14/14 18:59	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.00	0.680	ug/L			08/14/14 18:59	4
1,1-Dichloroethane	ND		2.00	0.296	ug/L			08/14/14 18:59	4
1,1-Dichloroethene	ND		2.00	0.236	ug/L			08/14/14 18:59	4
1,1-Dichloropropene	ND		2.00	0.252	ug/L			08/14/14 18:59	4
1,2,3-Trichlorobenzene	ND		2.00	0.228	ug/L			08/14/14 18:59	4
1,2,3-Trichloropropane	ND		2.00	0.488	ug/L			08/14/14 18:59	4
1,2,4-Trichlorobenzene	ND		2.00	0.508	ug/L			08/14/14 18:59	4
1,2,4-Trimethylbenzene	ND		2.00	0.360	ug/L			08/14/14 18:59	4
1,2-Dibromo-3-Chloropropane	ND		2.00	0.840	ug/L			08/14/14 18:59	4
1,2-Dibromoethane	ND		2.00	0.560	ug/L			08/14/14 18:59	4
1,2-Dichlorobenzene	ND		2.00	0.640	ug/L			08/14/14 18:59	4
1,2-Dichloroethane	ND		2.00	0.560	ug/L			08/14/14 18:59	4
1,2-Dichloropropane	ND		2.00	0.440	ug/L			08/14/14 18:59	4
1,3,5-Trimethylbenzene	ND		2.00	0.172	ug/L			08/14/14 18:59	4
1,3-Dichlorobenzene	ND		2.00	0.520	ug/L			08/14/14 18:59	4
1,3-Dichloropropane	ND		2.00	0.600	ug/L			08/14/14 18:59	4
1,4-Dichlorobenzene	ND		2.00	0.520	ug/L			08/14/14 18:59	4
2,2-Dichloropropane	ND		2.00	0.192	ug/L			08/14/14 18:59	4
2-Butanone (MEK)	ND		10.0	0.996	ug/L			08/14/14 18:59	4
2-Chlorotoluene	ND		2.00	0.200	ug/L			08/14/14 18:59	4
2-Hexanone	ND		10.0	0.924	ug/L			08/14/14 18:59	4
4-Chlorotoluene	ND		2.00	0.200	ug/L			08/14/14 18:59	4
4-Isopropyltoluene	ND		2.00	0.252	ug/L			08/14/14 18:59	4
4-Methyl-2-pentanone (MIBK)	ND		10.0	1.05	ug/L			08/14/14 18:59	4
Acetone	**3.70**	**J**	10.0	2.15	ug/L			08/14/14 18:59	4
Acrylonitrile	ND		40.0	1.90	ug/L			08/14/14 18:59	4
Allyl chloride	ND		2.00	0.364	ug/L			08/14/14 18:59	4
Benzene	ND		2.00	0.520	ug/L			08/14/14 18:59	4
Bromobenzene	ND		2.00	0.520	ug/L			08/14/14 18:59	4
Bromochloromethane	ND		2.00	0.440	ug/L			08/14/14 18:59	4
Dichlorobromomethane	ND		2.00	0.560	ug/L			08/14/14 18:59	4
Bromoform	ND		2.00	0.520	ug/L			08/14/14 18:59	4
Bromomethane	ND		2.00	0.204	ug/L			08/14/14 18:59	4
Carbon disulfide	ND		2.00	0.600	ug/L			08/14/14 18:59	4
Carbon tetrachloride	ND		2.00	0.212	ug/L			08/14/14 18:59	4
Chlorobenzene	ND		2.00	0.480	ug/L			08/14/14 18:59	4
Chlorodibromomethane	ND		2.00	0.640	ug/L			08/14/14 18:59	4
Chloroethane	ND		2.00	0.280	ug/L			08/14/14 18:59	4
Chloroform	ND		2.00	0.560	ug/L			08/14/14 18:59	4
Chloromethane	ND		2.00	0.252	ug/L			08/14/14 18:59	4
cis-1,2-Dichloroethene	**51.9**		2.00	0.480	ug/L			08/14/14 18:59	4
cis-1,3-Dichloropropene	ND		2.00	0.320	ug/L			08/14/14 18:59	4
Dibromomethane	ND		2.00	0.680	ug/L			08/14/14 18:59	4
Dichlorodifluoromethane	ND		2.00	0.280	ug/L			08/14/14 18:59	4
Ethyl ether	ND		2.00	0.460	ug/L			08/14/14 18:59	4

Client Sample ID: CC02 RAW

Lab Sample ID: 490-59187-1

Date Collected: 08/11/14 15:45

Matrix: Water

Date Received: 08/12/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		2.00	0.440	ug/L			08/14/14 18:59	4
Hexachlorobutadiene	ND		2.00	0.440	ug/L			08/14/14 18:59	4
Iodomethane	ND		2.00	0.600	ug/L			08/14/14 18:59	4
Isopropylbenzene	ND		2.00	0.212	ug/L			08/14/14 18:59	4
Methyl tert-butyl ether	ND		2.00	0.480	ug/L			08/14/14 18:59	4
Methylene Chloride	ND		2.00	1.00	ug/L			08/14/14 18:59	4
m-Xylene & p-Xylene	ND		4.00	0.348	ug/L			08/14/14 18:59	4
Naphthalene	ND		2.00	0.240	ug/L			08/14/14 18:59	4
n-Butylbenzene	ND		2.00	0.324	ug/L			08/14/14 18:59	4
N-Propylbenzene	ND		2.00	0.228	ug/L			08/14/14 18:59	4
o-Xylene	ND		2.00	0.176	ug/L			08/14/14 18:59	4
sec-Butylbenzene	ND		2.00	0.272	ug/L			08/14/14 18:59	4
Styrene	ND		2.00	0.176	ug/L			08/14/14 18:59	4
t-Butanol	ND		40.0	9.83	ug/L			08/14/14 18:59	4
tert-Butylbenzene	ND		2.00	0.240	ug/L			08/14/14 18:59	4
Tetrachloroethene	ND		2.00	0.268	ug/L			08/14/14 18:59	4
Toluene	ND		2.00	0.400	ug/L			08/14/14 18:59	4
trans-1,2-Dichloroethene	**1.03**	**J**	2.00	0.520	ug/L			08/14/14 18:59	4
trans-1,3-Dichloropropene	ND		2.00	0.400	ug/L			08/14/14 18:59	4
trans-1,4-Dichloro-2-butene	ND		10.0	5.00	ug/L			08/14/14 18:59	4
Trichloroethene	**4.48**		2.00	0.240	ug/L			08/14/14 18:59	4
Trichlorofluoromethane	ND		2.00	0.176	ug/L			08/14/14 18:59	4
Vinyl acetate	ND		10.0	0.688	ug/L			08/14/14 18:59	4
Vinyl chloride	ND		2.00	0.236	ug/L			08/14/14 18:59	4
Xylenes, Total	ND		4.00	0.800	ug/L			08/14/14 18:59	4
Trihalomethanes, Total	ND		8.00	4.00	ug/L			08/14/14 18:59	4
Dichlorofluoromethane	ND		2.00	0.536	ug/L			08/14/14 18:59	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/14/14 18:59*	*4*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*08/14/14 18:59*	*4*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		08/25/14 09:30	08/26/14 18:12	1
Manganese	**0.00594**		0.00300	0.000400	mg/L		08/25/14 09:30	08/26/14 18:12	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

Client Sample ID: CC02 Softener

Lab Sample ID: 490-59187-2

Date Collected: 08/11/14 15:45

Matrix: Water

Date Received: 08/12/14 08:30

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		08/25/14 09:30	08/26/14 18:15	1
Manganese	**0.123**		0.00300	0.000400	mg/L		08/25/14 09:30	08/26/14 18:15	1

Client Sample ID: CC-02 GAC-1

Lab Sample ID: 490-59187-3

Date Collected: 08/11/14 15:50

Matrix: Water

Date Received: 08/12/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			08/14/14 19:23	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			08/14/14 19:23	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			08/14/14 19:23	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			08/14/14 19:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			08/14/14 19:23	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			08/14/14 19:23	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			08/14/14 19:23	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			08/14/14 19:23	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			08/14/14 19:23	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			08/14/14 19:23	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			08/14/14 19:23	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			08/14/14 19:23	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			08/14/14 19:23	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			08/14/14 19:23	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			08/14/14 19:23	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			08/14/14 19:23	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			08/14/14 19:23	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			08/14/14 19:23	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			08/14/14 19:23	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			08/14/14 19:23	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			08/14/14 19:23	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			08/14/14 19:23	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			08/14/14 19:23	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			08/14/14 19:23	1
2-Hexanone	ND		2.50	0.231	ug/L			08/14/14 19:23	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			08/14/14 19:23	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			08/14/14 19:23	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			08/14/14 19:23	1
Acetone	**0.941**	**J**	2.50	0.537	ug/L			08/14/14 19:23	1
Acrylonitrile	ND		10.0	0.476	ug/L			08/14/14 19:23	1
Allyl chloride	ND		0.500	0.0910	ug/L			08/14/14 19:23	1
Benzene	ND		0.500	0.130	ug/L			08/14/14 19:23	1
Bromobenzene	ND		0.500	0.130	ug/L			08/14/14 19:23	1
Bromochloromethane	ND		0.500	0.110	ug/L			08/14/14 19:23	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			08/14/14 19:23	1
Bromoform	ND		0.500	0.130	ug/L			08/14/14 19:23	1
Bromomethane	ND		0.500	0.0510	ug/L			08/14/14 19:23	1
Carbon disulfide	ND		0.500	0.150	ug/L			08/14/14 19:23	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			08/14/14 19:23	1
Chlorobenzene	ND		0.500	0.120	ug/L			08/14/14 19:23	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			08/14/14 19:23	1
Chloroethane	ND		0.500	0.0700	ug/L			08/14/14 19:23	1
Chloroform	ND		0.500	0.140	ug/L			08/14/14 19:23	1
Chloromethane	**0.112**	**J**	0.500	0.0629	ug/L			08/14/14 19:23	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			08/14/14 19:23	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			08/14/14 19:23	1
Dibromomethane	ND		0.500	0.170	ug/L			08/14/14 19:23	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			08/14/14 19:23	1
Ethyl ether	ND		0.500	0.115	ug/L			08/14/14 19:23	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

Client Sample ID: CC-02 GAC-1

Lab Sample ID: 490-59187-3

Date Collected: 08/11/14 15:50

Matrix: Water

Date Received: 08/12/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			08/14/14 19:23	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			08/14/14 19:23	1
Iodomethane	ND		0.500	0.150	ug/L			08/14/14 19:23	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			08/14/14 19:23	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			08/14/14 19:23	1
Methylene Chloride	ND		0.500	0.250	ug/L			08/14/14 19:23	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			08/14/14 19:23	1
Naphthalene	ND		0.500	0.0600	ug/L			08/14/14 19:23	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			08/14/14 19:23	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			08/14/14 19:23	1
o-Xylene	ND		0.500	0.0440	ug/L			08/14/14 19:23	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			08/14/14 19:23	1
Styrene	ND		0.500	0.0440	ug/L			08/14/14 19:23	1
t-Butanol	ND		10.0	2.46	ug/L			08/14/14 19:23	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			08/14/14 19:23	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			08/14/14 19:23	1
Toluene	ND		0.500	0.100	ug/L			08/14/14 19:23	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			08/14/14 19:23	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			08/14/14 19:23	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			08/14/14 19:23	1
Trichloroethene	ND		0.500	0.0600	ug/L			08/14/14 19:23	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			08/14/14 19:23	1
Vinyl acetate	ND		2.50	0.172	ug/L			08/14/14 19:23	1
Vinyl chloride	ND		0.500	0.0590	ug/L			08/14/14 19:23	1
Xylenes, Total	ND		1.00	0.200	ug/L			08/14/14 19:23	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			08/14/14 19:23	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			08/14/14 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/14/14 19:23*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*08/14/14 19:23*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

Client Sample ID: CC-02 GAC-2

Lab Sample ID: 490-59187-4

Date Collected: 08/11/14 15:55
Matrix: Water
Date Received: 08/12/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			08/14/14 19:48	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			08/14/14 19:48	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			08/14/14 19:48	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			08/14/14 19:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			08/14/14 19:48	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			08/14/14 19:48	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			08/14/14 19:48	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			08/14/14 19:48	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			08/14/14 19:48	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			08/14/14 19:48	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			08/14/14 19:48	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			08/14/14 19:48	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			08/14/14 19:48	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			08/14/14 19:48	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			08/14/14 19:48	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			08/14/14 19:48	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			08/14/14 19:48	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			08/14/14 19:48	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			08/14/14 19:48	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			08/14/14 19:48	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			08/14/14 19:48	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			08/14/14 19:48	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			08/14/14 19:48	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			08/14/14 19:48	1
2-Hexanone	ND		2.50	0.231	ug/L			08/14/14 19:48	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			08/14/14 19:48	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			08/14/14 19:48	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			08/14/14 19:48	1
Acetone	**0.680**	**J**	2.50	0.537	ug/L			08/14/14 19:48	1
Acrylonitrile	ND		10.0	0.476	ug/L			08/14/14 19:48	1
Allyl chloride	ND		0.500	0.0910	ug/L			08/14/14 19:48	1
Benzene	ND		0.500	0.130	ug/L			08/14/14 19:48	1
Bromobenzene	ND		0.500	0.130	ug/L			08/14/14 19:48	1
Bromochloromethane	ND		0.500	0.110	ug/L			08/14/14 19:48	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			08/14/14 19:48	1
Bromoform	ND		0.500	0.130	ug/L			08/14/14 19:48	1
Bromomethane	ND		0.500	0.0510	ug/L			08/14/14 19:48	1
Carbon disulfide	ND		0.500	0.150	ug/L			08/14/14 19:48	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			08/14/14 19:48	1
Chlorobenzene	ND		0.500	0.120	ug/L			08/14/14 19:48	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			08/14/14 19:48	1
Chloroethane	ND		0.500	0.0700	ug/L			08/14/14 19:48	1
Chloroform	ND		0.500	0.140	ug/L			08/14/14 19:48	1
Chloromethane	ND		0.500	0.0629	ug/L			08/14/14 19:48	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			08/14/14 19:48	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			08/14/14 19:48	1
Dibromomethane	ND		0.500	0.170	ug/L			08/14/14 19:48	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			08/14/14 19:48	1
Ethyl ether	ND		0.500	0.115	ug/L			08/14/14 19:48	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

Client Sample ID: CC-02 GAC-2

Lab Sample ID: 490-59187-4

Date Collected: 08/11/14 15:55

Matrix: Water

Date Received: 08/12/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			08/14/14 19:48	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			08/14/14 19:48	1
Iodomethane	ND		0.500	0.150	ug/L			08/14/14 19:48	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			08/14/14 19:48	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			08/14/14 19:48	1
Methylene Chloride	ND		0.500	0.250	ug/L			08/14/14 19:48	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			08/14/14 19:48	1
Naphthalene	ND		0.500	0.0600	ug/L			08/14/14 19:48	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			08/14/14 19:48	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			08/14/14 19:48	1
o-Xylene	ND		0.500	0.0440	ug/L			08/14/14 19:48	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			08/14/14 19:48	1
Styrene	ND		0.500	0.0440	ug/L			08/14/14 19:48	1
t-Butanol	ND		10.0	2.46	ug/L			08/14/14 19:48	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			08/14/14 19:48	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			08/14/14 19:48	1
Toluene	ND		0.500	0.100	ug/L			08/14/14 19:48	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			08/14/14 19:48	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			08/14/14 19:48	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			08/14/14 19:48	1
Trichloroethene	ND		0.500	0.0600	ug/L			08/14/14 19:48	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			08/14/14 19:48	1
Vinyl acetate	ND		2.50	0.172	ug/L			08/14/14 19:48	1
Vinyl chloride	ND		0.500	0.0590	ug/L			08/14/14 19:48	1
Xylenes, Total	ND		1.00	0.200	ug/L			08/14/14 19:48	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			08/14/14 19:48	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			08/14/14 19:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/14/14 19:48*	*1*
1,2-Dichlorobenzene-d4	*99*		*80 - 120*		*08/14/14 19:48*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-59187-5

Date Collected: 08/11/14 00:01
Date Received: 08/12/14 08:30

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			08/14/14 20:12	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			08/14/14 20:12	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			08/14/14 20:12	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			08/14/14 20:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			08/14/14 20:12	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			08/14/14 20:12	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			08/14/14 20:12	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			08/14/14 20:12	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			08/14/14 20:12	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			08/14/14 20:12	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			08/14/14 20:12	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			08/14/14 20:12	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			08/14/14 20:12	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			08/14/14 20:12	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			08/14/14 20:12	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			08/14/14 20:12	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			08/14/14 20:12	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			08/14/14 20:12	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			08/14/14 20:12	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			08/14/14 20:12	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			08/14/14 20:12	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			08/14/14 20:12	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			08/14/14 20:12	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			08/14/14 20:12	1
2-Hexanone	ND		2.50	0.231	ug/L			08/14/14 20:12	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			08/14/14 20:12	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			08/14/14 20:12	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			08/14/14 20:12	1
Acetone	ND		2.50	0.537	ug/L			08/14/14 20:12	1
Acrylonitrile	ND		10.0	0.476	ug/L			08/14/14 20:12	1
Allyl chloride	ND		0.500	0.0910	ug/L			08/14/14 20:12	1
Benzene	ND		0.500	0.130	ug/L			08/14/14 20:12	1
Bromobenzene	ND		0.500	0.130	ug/L			08/14/14 20:12	1
Bromochloromethane	ND		0.500	0.110	ug/L			08/14/14 20:12	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			08/14/14 20:12	1
Bromoform	ND		0.500	0.130	ug/L			08/14/14 20:12	1
Bromomethane	ND		0.500	0.0510	ug/L			08/14/14 20:12	1
Carbon disulfide	ND		0.500	0.150	ug/L			08/14/14 20:12	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			08/14/14 20:12	1
Chlorobenzene	ND		0.500	0.120	ug/L			08/14/14 20:12	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			08/14/14 20:12	1
Chloroethane	ND		0.500	0.0700	ug/L			08/14/14 20:12	1
Chloroform	ND		0.500	0.140	ug/L			08/14/14 20:12	1
Chloromethane	ND		0.500	0.0629	ug/L			08/14/14 20:12	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			08/14/14 20:12	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			08/14/14 20:12	1
Dibromomethane	ND		0.500	0.170	ug/L			08/14/14 20:12	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			08/14/14 20:12	1
Ethyl ether	ND		0.500	0.115	ug/L			08/14/14 20:12	1

Client Sample ID: Trip Blank

Lab Sample ID: 490-59187-5

Date Collected: 08/11/14 00:01

Matrix: Water

Date Received: 08/12/14 08:30

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			08/14/14 20:12	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			08/14/14 20:12	1
Iodomethane	ND		0.500	0.150	ug/L			08/14/14 20:12	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			08/14/14 20:12	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			08/14/14 20:12	1
Methylene Chloride	**1.21**		0.500	0.250	ug/L			08/14/14 20:12	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			08/14/14 20:12	1
Naphthalene	ND		0.500	0.0600	ug/L			08/14/14 20:12	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			08/14/14 20:12	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			08/14/14 20:12	1
o-Xylene	ND		0.500	0.0440	ug/L			08/14/14 20:12	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			08/14/14 20:12	1
Styrene	ND		0.500	0.0440	ug/L			08/14/14 20:12	1
t-Butanol	ND		10.0	2.46	ug/L			08/14/14 20:12	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			08/14/14 20:12	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			08/14/14 20:12	1
Toluene	ND		0.500	0.100	ug/L			08/14/14 20:12	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			08/14/14 20:12	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			08/14/14 20:12	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			08/14/14 20:12	1
Trichloroethene	ND		0.500	0.0600	ug/L			08/14/14 20:12	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			08/14/14 20:12	1
Vinyl acetate	ND		2.50	0.172	ug/L			08/14/14 20:12	1
Vinyl chloride	ND		0.500	0.0590	ug/L			08/14/14 20:12	1
Xylenes, Total	ND		1.00	0.200	ug/L			08/14/14 20:12	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			08/14/14 20:12	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			08/14/14 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*08/14/14 20:12*	*1*
1,2-Dichlorobenzene-d4	*105*		*80 - 120*		*08/14/14 20:12*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-197747/7
Matrix: Water
Analysis Batch: 197747

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			08/14/14 11:38	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			08/14/14 11:38	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			08/14/14 11:38	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			08/14/14 11:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			08/14/14 11:38	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			08/14/14 11:38	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			08/14/14 11:38	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			08/14/14 11:38	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			08/14/14 11:38	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			08/14/14 11:38	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			08/14/14 11:38	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			08/14/14 11:38	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			08/14/14 11:38	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			08/14/14 11:38	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			08/14/14 11:38	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			08/14/14 11:38	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			08/14/14 11:38	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			08/14/14 11:38	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			08/14/14 11:38	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			08/14/14 11:38	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			08/14/14 11:38	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			08/14/14 11:38	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			08/14/14 11:38	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			08/14/14 11:38	1
2-Hexanone	ND		2.50	0.231	ug/L			08/14/14 11:38	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			08/14/14 11:38	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			08/14/14 11:38	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			08/14/14 11:38	1
Acetone	ND		2.50	0.537	ug/L			08/14/14 11:38	1
Acrylonitrile	ND		10.0	0.476	ug/L			08/14/14 11:38	1
Allyl chloride	ND		0.500	0.0910	ug/L			08/14/14 11:38	1
Benzene	ND		0.500	0.130	ug/L			08/14/14 11:38	1
Bromobenzene	ND		0.500	0.130	ug/L			08/14/14 11:38	1
Bromochloromethane	ND		0.500	0.110	ug/L			08/14/14 11:38	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			08/14/14 11:38	1
Bromoform	ND		0.500	0.130	ug/L			08/14/14 11:38	1
Bromomethane	ND		0.500	0.0510	ug/L			08/14/14 11:38	1
Carbon disulfide	ND		0.500	0.150	ug/L			08/14/14 11:38	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			08/14/14 11:38	1
Chlorobenzene	ND		0.500	0.120	ug/L			08/14/14 11:38	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			08/14/14 11:38	1
Chloroethane	ND		0.500	0.0700	ug/L			08/14/14 11:38	1
Chloroform	ND		0.500	0.140	ug/L			08/14/14 11:38	1
Chloromethane	ND		0.500	0.0629	ug/L			08/14/14 11:38	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			08/14/14 11:38	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			08/14/14 11:38	1
Dibromomethane	ND		0.500	0.170	ug/L			08/14/14 11:38	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			08/14/14 11:38	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-197747/7
Matrix: Water
Analysis Batch: 197747

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			08/14/14 11:38	1
Ethylbenzene	ND		0.500	0.110	ug/L			08/14/14 11:38	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			08/14/14 11:38	1
Iodomethane	ND		0.500	0.150	ug/L			08/14/14 11:38	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			08/14/14 11:38	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			08/14/14 11:38	1
Methylene Chloride	ND		0.500	0.250	ug/L			08/14/14 11:38	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			08/14/14 11:38	1
Naphthalene	ND		0.500	0.0600	ug/L			08/14/14 11:38	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			08/14/14 11:38	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			08/14/14 11:38	1
o-Xylene	ND		0.500	0.0440	ug/L			08/14/14 11:38	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			08/14/14 11:38	1
Styrene	ND		0.500	0.0440	ug/L			08/14/14 11:38	1
t-Butanol	ND		10.0	2.46	ug/L			08/14/14 11:38	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			08/14/14 11:38	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			08/14/14 11:38	1
Toluene	ND		0.500	0.100	ug/L			08/14/14 11:38	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			08/14/14 11:38	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			08/14/14 11:38	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			08/14/14 11:38	1
Trichloroethene	ND		0.500	0.0600	ug/L			08/14/14 11:38	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			08/14/14 11:38	1
Vinyl acetate	ND		2.50	0.172	ug/L			08/14/14 11:38	1
Vinyl chloride	ND		0.500	0.0590	ug/L			08/14/14 11:38	1
Xylenes, Total	ND		1.00	0.200	ug/L			08/14/14 11:38	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			08/14/14 11:38	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			08/14/14 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/14/14 11:38*	*1*
1,2-Dichlorobenzene-d4	*98*		*80 - 120*		*08/14/14 11:38*	*1*

Lab Sample ID: LCS 480-197747/5
Matrix: Water
Analysis Batch: 197747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.969		ug/L		99	70 - 130
1,1,1-Trichloroethane	4.00	3.956		ug/L		99	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.256		ug/L		81	70 - 130
1,1,2-Trichloroethane	4.00	3.179		ug/L		79	70 - 130
1,1-Dichloroethane	4.00	3.544		ug/L		89	70 - 130
1,1-Dichloroethene	4.00	3.421		ug/L		86	70 - 130
1,1-Dichloropropene	4.00	3.941		ug/L		99	70 - 130
1,2,3-Trichlorobenzene	4.00	3.516		ug/L		88	70 - 130
1,2,3-Trichloropropane	4.00	3.397		ug/L		85	70 - 130
1,2,4-Trichlorobenzene	4.00	3.446		ug/L		86	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-197747/5
Matrix: Water
Analysis Batch: 197747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.514		ug/L		88	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	3.487		ug/L		87	70 - 130
1,2-Dibromoethane	4.00	3.278		ug/L		82	70 - 130
1,2-Dichlorobenzene	4.00	3.535		ug/L		88	70 - 130
1,2-Dichloroethane	4.00	3.595		ug/L		90	70 - 130
1,2-Dichloropropane	4.00	3.191		ug/L		80	70 - 130
1,3,5-Trimethylbenzene	4.00	3.568		ug/L		89	70 - 130
1,3-Dichlorobenzene	4.00	3.510		ug/L		88	70 - 130
1,3-Dichloropropane	4.00	3.225		ug/L		81	70 - 130
1,4-Dichlorobenzene	4.00	3.551		ug/L		89	70 - 130
2,2-Dichloropropane	4.00	3.623		ug/L		91	70 - 130
2-Butanone (MEK)	20.0	15.43		ug/L		77	70 - 130
2-Chlorotoluene	4.00	3.476		ug/L		87	70 - 130
2-Hexanone	20.0	14.82		ug/L		74	70 - 130
4-Chlorotoluene	4.00	3.498		ug/L		87	70 - 130
4-Isopropyltoluene	4.00	3.576		ug/L		89	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	14.89		ug/L		74	70 - 130
Acetone	20.0	14.20		ug/L		71	70 - 130
Benzene	4.00	3.491		ug/L		87	70 - 130
Bromobenzene	4.00	3.499		ug/L		87	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.603		ug/L		90	70 - 130
Bromoform	4.00	3.628		ug/L		91	70 - 130
Bromomethane	4.00	3.921		ug/L		98	70 - 130
Carbon disulfide	4.00	3.200		ug/L		80	70 - 130
Carbon tetrachloride	4.00	4.263		ug/L		107	70 - 130
Chlorobenzene	4.00	3.495		ug/L		87	70 - 130
Chlorodibromomethane	4.00	3.715		ug/L		93	70 - 130
Chloroethane	4.00	3.318		ug/L		83	70 - 130
Chloroform	4.00	3.618		ug/L		90	70 - 130
Chloromethane	4.00	3.408		ug/L		85	70 - 130
cis-1,2-Dichloroethene	4.00	3.451		ug/L		86	70 - 130
cis-1,3-Dichloropropene	4.00	3.601		ug/L		90	70 - 130
Dibromomethane	4.00	3.356		ug/L		84	70 - 130
Dichlorodifluoromethane	4.00	4.496		ug/L		112	70 - 130
Ethylbenzene	4.00	3.459		ug/L		86	70 - 130
Hexachlorobutadiene	4.00	3.590		ug/L		90	70 - 130
Isopropylbenzene	4.00	3.594		ug/L		90	70 - 130
Methyl tert-butyl ether	4.00	3.567		ug/L		89	70 - 130
Methylene Chloride	4.00	3.916		ug/L		98	70 - 130
Naphthalene	4.00	3.358		ug/L		84	70 - 130
n-Butylbenzene	4.00	3.460		ug/L		87	70 - 130
N-Propylbenzene	4.00	3.457		ug/L		86	70 - 130
sec-Butylbenzene	4.00	3.486		ug/L		87	70 - 130
Styrene	4.00	3.208		ug/L		80	70 - 130
tert-Butylbenzene	4.00	3.551		ug/L		89	70 - 130
Tetrachloroethene	4.00	3.645		ug/L		91	70 - 130
Toluene	4.00	3.472		ug/L		87	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-197747/5
Matrix: Water
Analysis Batch: 197747

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.605		ug/L		90	70 - 130
trans-1,3-Dichloropropene	4.00	3.837		ug/L		96	70 - 130
Trichloroethene	4.00	3.713		ug/L		93	70 - 130
Trichlorofluoromethane	4.00	4.184		ug/L		105	70 - 130
Vinyl chloride	4.00	3.367		ug/L		84	70 - 130
Xylenes, Total	8.00	7.088		ug/L		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
1,2-Dichlorobenzene-d4	*99*		*80 - 120*

Lab Sample ID: LCSD 480-197747/6
Matrix: Water
Analysis Batch: 197747

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.858		ug/L		96	70 - 130	3	20
1,1,1-Trichloroethane	4.00	3.875		ug/L		97	70 - 130	2	20
1,1,2,2-Tetrachloroethane	4.00	3.113		ug/L		78	70 - 130	5	20
1,1,2-Trichloroethane	4.00	3.159		ug/L		79	70 - 130	1	20
1,1-Dichloroethane	4.00	3.424		ug/L		86	70 - 130	3	20
1,1-Dichloroethene	4.00	3.337		ug/L		83	70 - 130	2	20
1,1-Dichloropropene	4.00	3.783		ug/L		95	70 - 130	4	20
1,2,3-Trichlorobenzene	4.00	3.485		ug/L		87	70 - 130	1	20
1,2,3-Trichloropropane	4.00	3.504		ug/L		88	70 - 130	3	20
1,2,4-Trichlorobenzene	4.00	3.403		ug/L		85	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.447		ug/L		86	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	4.00	3.475		ug/L		87	70 - 130	0	20
1,2-Dibromoethane	4.00	3.395		ug/L		85	70 - 130	4	20
1,2-Dichlorobenzene	4.00	3.454		ug/L		86	70 - 130	2	20
1,2-Dichloroethane	4.00	3.478		ug/L		87	70 - 130	3	20
1,2-Dichloropropane	4.00	3.130		ug/L		78	70 - 130	2	20
1,3,5-Trimethylbenzene	4.00	3.492		ug/L		87	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.520		ug/L		88	70 - 130	0	20
1,3-Dichloropropane	4.00	3.244		ug/L		81	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.448		ug/L		86	70 - 130	3	20
2,2-Dichloropropane	4.00	3.808		ug/L		95	70 - 130	5	20
2-Butanone (MEK)	20.0	15.44		ug/L		77	70 - 130	0	20
2-Chlorotoluene	4.00	3.411		ug/L		85	70 - 130	2	20
2-Hexanone	20.0	14.93		ug/L		75	70 - 130	1	20
4-Chlorotoluene	4.00	3.414		ug/L		85	70 - 130	2	20
4-Isopropyltoluene	4.00	3.462		ug/L		87	70 - 130	3	20
4-Methyl-2-pentanone (MIBK)	20.0	14.78		ug/L		74	70 - 130	1	20
Acetone	20.0	15.37		ug/L		77	70 - 130	8	20
Benzene	4.00	3.432		ug/L		86	70 - 130	2	20
Bromobenzene	4.00	3.539		ug/L		88	70 - 130	1	20
Bromochloromethane	4.00	3.553		ug/L		89	70 - 130	1	20
Dichlorobromomethane	4.00	3.522		ug/L		88	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-197747/6
Matrix: Water
Analysis Batch: 197747

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
Bromoform	4.00	3.498		ug/L		87	70 - 130	4	20
Bromomethane	4.00	3.710		ug/L		93	70 - 130	6	20
Carbon disulfide	4.00	3.181		ug/L		80	70 - 130	1	20
Carbon tetrachloride	4.00	4.156		ug/L		104	70 - 130	3	20
Chlorobenzene	4.00	3.431		ug/L		86	70 - 130	2	20
Chlorodibromomethane	4.00	3.650		ug/L		91	70 - 130	2	20
Chloroethane	4.00	3.324		ug/L		83	70 - 130	0	20
Chloroform	4.00	3.603		ug/L		90	70 - 130	0	20
Chloromethane	4.00	3.350		ug/L		84	70 - 130	2	20
cis-1,2-Dichloroethene	4.00	3.401		ug/L		85	70 - 130	1	20
cis-1,3-Dichloropropene	4.00	3.442		ug/L		86	70 - 130	5	20
Dibromomethane	4.00	3.368		ug/L		84	70 - 130	0	20
Dichlorodifluoromethane	4.00	4.174		ug/L		104	70 - 130	7	20
Ethylbenzene	4.00	3.426		ug/L		86	70 - 130	1	20
Hexachlorobutadiene	4.00	3.495		ug/L		87	70 - 130	3	20
Isopropylbenzene	4.00	3.563		ug/L		89	70 - 130	1	20
Methyl tert-butyl ether	4.00	3.568		ug/L		89	70 - 130	0	20
Methylene Chloride	4.00	3.944		ug/L		99	70 - 130	1	20
Naphthalene	4.00	3.466		ug/L		87	70 - 130	3	20
n-Butylbenzene	4.00	3.385		ug/L		85	70 - 130	2	20
N-Propylbenzene	4.00	3.380		ug/L		85	70 - 130	2	20
sec-Butylbenzene	4.00	3.391		ug/L		85	70 - 130	3	20
Styrene	4.00	3.170		ug/L		79	70 - 130	1	20
tert-Butylbenzene	4.00	3.465		ug/L		87	70 - 130	2	20
Tetrachloroethene	4.00	3.581		ug/L		90	70 - 130	2	20
Toluene	4.00	3.389		ug/L		85	70 - 130	2	20
trans-1,2-Dichloroethene	4.00	3.566		ug/L		89	70 - 130	1	20
trans-1,3-Dichloropropene	4.00	3.768		ug/L		94	70 - 130	2	20
Trichloroethene	4.00	3.516		ug/L		88	70 - 130	5	20
Trichlorofluoromethane	4.00	3.872		ug/L		97	70 - 130	8	20
Vinyl chloride	4.00	3.247		ug/L		81	70 - 130	4	20
Xylenes, Total	8.00	7.052		ug/L		88	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
1,2-Dichlorobenzene-d4	*99*		*80 - 120*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-199386/1-A
Matrix: Water
Analysis Batch: 199817

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 199386

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		08/25/14 09:30	08/26/14 16:57	1
Manganese	ND		0.00300	0.000400	mg/L		08/25/14 09:30	08/26/14 16:57	1

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-199386/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 199817 — **Prep Batch: 199386**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.626		mg/L		96	85 - 115
Manganese	0.200	0.2158		mg/L		108	85 - 115

Lab Sample ID: 480-65365-B-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 199817 — **Prep Batch: 199386**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		10.0	9.547		mg/L		95	70 - 130
Manganese	ND		0.200	0.2127		mg/L		106	70 - 130

Lab Sample ID: 480-65365-B-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 199817 — **Prep Batch: 199386**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.514		mg/L		95	70 - 130	0	20
Manganese	ND		0.200	0.2117		mg/L		106	70 - 130	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

GC/MS VOA

Analysis Batch: 197747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-59187-1	CC02 RAW	Total/NA	Water	524.2	
490-59187-3	CC-02 GAC-1	Total/NA	Water	524.2	
490-59187-4	CC-02 GAC-2	Total/NA	Water	524.2	
490-59187-5	Trip Blank	Total/NA	Water	524.2	
LCS 480-197747/5	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-197747/6	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-197747/7	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 199386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-65365-B-1-B MS	Matrix Spike	Total/NA	Water	200.7	
480-65365-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
490-59187-1	CC02 RAW	Total/NA	Water	200.7	
490-59187-2	CC02 Softener	Total/NA	Water	200.7	
LCS 480-199386/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-199386/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 199817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-65365-B-1-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	199386
480-65365-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	199386
490-59187-1	CC02 RAW	Total/NA	Water	200.7 Rev 4.4	199386
490-59187-2	CC02 Softener	Total/NA	Water	200.7 Rev 4.4	199386
LCS 480-199386/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	199386
MB 480-199386/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	199386

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

Client Sample ID: CC02 RAW — Lab Sample ID: 490-59187-1

Date Collected: 08/11/14 15:45 — **Matrix: Water**
Date Received: 08/12/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		4	25 mL	25 mL	197747	08/14/14 18:59	RAS	TAL BUF
Total/NA	Prep	200.7			50 mL	50 mL	199386	08/25/14 09:30	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	199817	08/26/14 18:12	LMH	TAL BUF

Client Sample ID: CC02 Softener — Lab Sample ID: 490-59187-2

Date Collected: 08/11/14 15:45 — **Matrix: Water**
Date Received: 08/12/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			50 mL	50 mL	199386	08/25/14 09:30	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	50 mL	50 mL	199817	08/26/14 18:15	LMH	TAL BUF

Client Sample ID: CC-02 GAC-1 — Lab Sample ID: 490-59187-3

Date Collected: 08/11/14 15:50 — **Matrix: Water**
Date Received: 08/12/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	197747	08/14/14 19:23	RAS	TAL BUF

Client Sample ID: CC-02 GAC-2 — Lab Sample ID: 490-59187-4

Date Collected: 08/11/14 15:55 — **Matrix: Water**
Date Received: 08/12/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	197747	08/14/14 19:48	RAS	TAL BUF

Client Sample ID: Trip Blank — Lab Sample ID: 490-59187-5

Date Collected: 08/11/14 00:01 — **Matrix: Water**
Date Received: 08/12/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	197747	08/14/14 20:12	RAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59187-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
524.2		Water	1,2,3-Trichloropropane
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Acrylonitrile
524.2		Water	Allyl chloride
524.2		Water	Carbon disulfide
524.2		Water	Dichlorofluoromethane
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	Naphthalene
524.2		Water	o-Xylene
524.2		Water	t-Butanol
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-59187 Chain of Custody

Cooler Received/Opened On 8/12/2014 @ 0830

1. Tracking # 979 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 4.6 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: (1) Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) MDM

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) AJH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AJH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AJH

I certify that I attached a label with the unique LIMS number to each container (intial) AJH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

ARCADIS
Infrastructure · Water · Environment · Buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Chuck Castelluccio
Telephone: 978-937-9999
Address: 200 Harvard Mill SQ
Fax: 978-937-7555
City: Wakefield State: MA Zip:
E-mail Address: Chuck.Castelluccio@arcadis-us.com
Project Name/Location (City, State): Tibbetts Rd Barrington NH
Project #: MA000725201400103
Sampler's Printed Name: DC/BL
Sampler's Signature:

Preservative	C	B										
Filtered (✓)												
# of Containers	1	3										
Container Information	4	1										
PARAMETER ANALYSIS & METHOD	Iron/Manganese 200.7 rev 4	VOC's 524.2										
Sample ID	**Collection Date**	**Collection Time**	**Type (✓) Comp**	**Type (✓) Grab**	**Matrix**							
CC02 RAW	8/11/14	1545		✓	W	1	3					
CC02 Post Softener	8/11/14	1545		✓	W	1						
CC-02 GAC-1	8/11/14	1550		✓	W		3					
CC-02 GAC-2	8/11/14	1555		✓	W		3					
Trip Blank	—	—	—	—	W		2					

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

REMARKS

Loc: 490
59187

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Test America	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Diane Champagne	Printed Name: Adam Huskey	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)		Signature: Diane Champagne	Signature: Adam Huskey	Signature:	Signature:
Specify Turnaround Requirements: Standard	Sample Receipt:	Firm: Arcadis	Firm/Courier: TAN 4.6	Firm/Courier:	Firm:
Shipping Tracking #: Fed-ex #	Condition/Cooler Temp: _____	Date/Time: 8/11/14 1715	Date/Time: 8/12/14 8:30	Date/Time:	Date/Time:

20730826 CofC AR Form 01.12.2007

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-59187-1

Login Number: 59187
List Number: 1
Creator: Huskey, Adam

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-59187-1

Login Number: 59187
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 08/13/14 02:14 PM

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	3.4 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-59187-1

Login Number: 59187
List Number: 3
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 08/13/14 02:14 PM

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	3.4 C
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	
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: 480-69814-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
11/4/2014 5:41:04 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and 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.
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Job ID: 480-69814-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69814-1

Comments
No additional comments.

Receipt
The samples were received on 10/22/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 202626 recovered outside control limits for the following analytes: bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 524.2: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 202626 recovered outside control limits for the following analytes: 1,2,3-trichlorobenzene.

Method(s) 524.2: The method blank for batch 202626 contained chloroform, chloromethane, and trichloroethene 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 was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

Client Sample ID: CC-03 (RAW) — Lab Sample ID: 480-69814-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.408	J	0.500	0.0700	ug/L	1		524.2	Total/NA
Carbon disulfide	0.365	J	0.500	0.210	ug/L	1		524.2	Total/NA
cis-1,2-Dichloroethene	25.8		0.500	0.110	ug/L	1		524.2	Total/NA
Methyl tert-butyl ether	0.425	J	0.500	0.0900	ug/L	1		524.2	Total/NA
trans-1,2-Dichloroethene	0.489	J	0.500	0.0700	ug/L	1		524.2	Total/NA
Trichloroethene	2.11	B	0.500	0.0800	ug/L	1		524.2	Total/NA
Iron	0.0964		0.0500	0.0193	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.0464		0.00300	0.000400	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: CC-03 (POST FILTER) — Lab Sample ID: 480-69814-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.0608		0.00300	0.000400	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: CC-03 (GAC1) — Lab Sample ID: 480-69814-3

No Detections.

Client Sample ID: CC-03 (GAC2) — Lab Sample ID: 480-69814-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

Client Sample ID: CC-03 (RAW)

Date Collected: 10/21/14 15:30
Date Received: 10/22/14 09:00

Lab Sample ID: 480-69814-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 14:10	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 14:10	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 14:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 14:10	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 14:10	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 14:10	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 14:10	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 14:10	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 14:10	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 14:10	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 14:10	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 14:10	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 14:10	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 14:10	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 14:10	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 14:10	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 14:10	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 14:10	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 14:10	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 14:10	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 14:10	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 14:10	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 14:10	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 14:10	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 14:10	1
Benzene	**0.408**	**J**	0.500	0.0700	ug/L			11/01/14 14:10	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 14:10	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 14:10	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 14:10	1
Carbon disulfide	**0.365**	**J**	0.500	0.210	ug/L			11/01/14 14:10	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 14:10	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 14:10	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 14:10	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 14:10	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 14:10	1
cis-1,2-Dichloroethene	**25.8**		0.500	0.110	ug/L			11/01/14 14:10	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 14:10	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 14:10	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 14:10	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 14:10	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 14:10	1

Client Sample ID: CC-03 (RAW)

Lab Sample ID: 480-69814-1

Date Collected: 10/21/14 15:30

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 14:10	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 14:10	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 14:10	1
Methyl tert-butyl ether	**0.425**	**J**	0.500	0.0900	ug/L			11/01/14 14:10	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 14:10	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 14:10	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 14:10	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 14:10	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 14:10	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 14:10	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 14:10	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 14:10	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
trans-1,2-Dichloroethene	**0.489**	**J**	0.500	0.0700	ug/L			11/01/14 14:10	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 14:10	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 14:10	1
Trichloroethene	**2.11**	**B**	0.500	0.0800	ug/L			11/01/14 14:10	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 14:10	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 14:10	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 14:10	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 14:10	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 14:10	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*11/01/14 14:10*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/01/14 14:10*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*		*11/01/14 14:10*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*11/01/14 14:10*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.0964**		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 23:08	1
Manganese	**0.0464**		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 23:08	1

Client Sample ID: CC-03 (POST FILTER)

Lab Sample ID: 480-69814-2

Date Collected: 10/21/14 15:32

Matrix: Water

Date Received: 10/22/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 23:11	1
Manganese	**0.0608**		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 23:11	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

Client Sample ID: CC-03 (GAC1)

Date Collected: 10/21/14 15:35
Date Received: 10/22/14 09:00

Lab Sample ID: 480-69814-3

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 13:44	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 13:44	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 13:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 13:44	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 13:44	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 13:44	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 13:44	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 13:44	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 13:44	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 13:44	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 13:44	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 13:44	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 13:44	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 13:44	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 13:44	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 13:44	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 13:44	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 13:44	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 13:44	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 13:44	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 13:44	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 13:44	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 13:44	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 13:44	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 13:44	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 13:44	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 13:44	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 13:44	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 13:44	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 13:44	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 13:44	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 13:44	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 13:44	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 13:44	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 13:44	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 13:44	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 13:44	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 13:44	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 13:44	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 13:44	1

Client Sample ID: CC-03 (GAC1)

Lab Sample ID: 480-69814-3

Date Collected: 10/21/14 15:35

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 13:44	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 13:44	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 13:44	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 13:44	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 13:44	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 13:44	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 13:44	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 13:44	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 13:44	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 13:44	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 13:44	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 13:44	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 13:44	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 13:44	1
Trichloroethene	ND		0.500	0.0800	ug/L			11/01/14 13:44	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 13:44	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 13:44	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 13:44	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 13:44	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 13:44	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*70 - 130*		*11/01/14 13:44*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/01/14 13:44*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/01/14 13:44*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/01/14 13:44*	*1*

Client Sample ID: CC-03 (GAC2)

Lab Sample ID: 480-69814-4

Date Collected: 10/21/14 15:40

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 14:36	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 14:36	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 14:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 14:36	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 14:36	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 14:36	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 14:36	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 14:36	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 14:36	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 14:36	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

Client Sample ID: CC-03 (GAC2)

Lab Sample ID: 480-69814-4

Date Collected: 10/21/14 15:40
Matrix: Water
Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 14:36	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 14:36	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 14:36	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 14:36	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 14:36	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 14:36	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 14:36	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 14:36	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 14:36	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 14:36	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 14:36	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 14:36	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 14:36	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 14:36	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 14:36	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 14:36	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 14:36	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 14:36	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 14:36	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 14:36	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 14:36	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 14:36	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 14:36	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 14:36	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 14:36	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 14:36	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 14:36	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 14:36	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 14:36	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 14:36	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 14:36	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 14:36	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 14:36	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 14:36	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 14:36	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 14:36	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 14:36	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 14:36	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 14:36	1

Client Sample ID: CC-03 (GAC2)

Lab Sample ID: 480-69814-4

Date Collected: 10/21/14 15:40

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 14:36	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 14:36	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 14:36	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 14:36	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 14:36	1
Trichloroethene	ND		0.500	0.0800	ug/L			11/01/14 14:36	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 14:36	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 14:36	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 14:36	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 14:36	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 14:36	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/01/14 14:36*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/01/14 14:36*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*		*11/01/14 14:36*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/01/14 14:36*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-69814-1	CC-03 (RAW)	109	101	108	95
480-69814-3	CC-03 (GAC1)	121	102	105	92
480-69814-4	CC-03 (GAC2)	107	98	108	93
LCS 490-202626/3	Lab Control Sample	106	96	107	95
LCSD 490-202626/4	Lab Control Sample Dup	108	100	105	96
MB 490-202626/6	Method Blank	106	99	104	94

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-202626/6
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 12:52	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
1,2,3-Trichlorobenzene	ND		0.500	0.120	ug/L			11/01/14 12:52	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 12:52	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 12:52	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 12:52	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 12:52	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 12:52	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 12:52	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 12:52	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 12:52	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 12:52	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 12:52	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 12:52	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 12:52	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Chloroform	0.2097	J	0.500	0.130	ug/L			11/01/14 12:52	1
Chloromethane	0.3368	J	0.500	0.140	ug/L			11/01/14 12:52	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 12:52	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 12:52	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 12:52	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-202626/6
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 12:52	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 12:52	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 12:52	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 12:52	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 12:52	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 12:52	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 12:52	1
Trichloroethene	0.09305	J	0.500	0.0800	ug/L			11/01/14 12:52	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 12:52	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 12:52	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 12:52	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 12:52	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 12:52	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 12:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/01/14 12:52*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/01/14 12:52*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/01/14 12:52*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/01/14 12:52*	*1*

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.019		ug/L		100	70 - 130
1,1,1-Trichloroethane	5.00	5.038		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.625		ug/L		112	70 - 130
1,1,2-Trichloroethane	5.00	5.789		ug/L		116	70 - 130
1,1-Dichloroethane	5.00	5.680		ug/L		114	70 - 130
1,1-Dichloroethene	5.00	5.309		ug/L		106	70 - 130
1,1-Dichloropropene	5.00	5.413		ug/L		108	70 - 130
1,2,3-Trichlorobenzene	5.00	4.980		ug/L		100	70 - 130
1,2,3-Trichloropropane	5.00	5.690		ug/L		114	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	5.00	4.311		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	5.00	5.044		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.812		ug/L		76	70 - 130
1,2-Dibromoethane	5.00	5.286		ug/L		106	70 - 130
1,2-Dichlorobenzene	5.00	5.100		ug/L		102	70 - 130
1,2-Dichloroethane	5.00	5.547		ug/L		111	70 - 130
1,2-Dichloropropane	5.00	5.570		ug/L		111	70 - 130
1,3,5-Trimethylbenzene	5.00	5.043		ug/L		101	70 - 130
1,3-Dichlorobenzene	5.00	5.254		ug/L		105	70 - 130
1,3-Dichloropropane	5.00	5.927		ug/L		119	70 - 130
1,4-Dichlorobenzene	5.00	5.258		ug/L		105	70 - 130
2,2-Dichloropropane	5.00	4.104		ug/L		82	70 - 130
2-Butanone (MEK)	25.0	24.88		ug/L		100	70 - 130
2-Chlorotoluene	5.00	5.505		ug/L		110	70 - 130
2-Hexanone	25.0	22.81		ug/L		91	70 - 130
4-Chlorotoluene	5.00	5.407		ug/L		108	70 - 130
4-Isopropyltoluene	5.00	4.752		ug/L		95	70 - 130
4-Methyl-2-pentanone (MIBK)	25.0	24.14		ug/L		97	70 - 130
Acetone	25.0	25.58	J	ug/L		102	70 - 130
Benzene	5.00	5.202		ug/L		104	70 - 130
Bromobenzene	5.00	5.234		ug/L		105	70 - 130
Bromochloromethane	5.00	4.882		ug/L		98	70 - 130
Dichlorobromomethane	5.00	4.834		ug/L		97	70 - 130
Bromoform	5.00	4.959		ug/L		99	70 - 130
Bromomethane	5.00	7.959	*	ug/L		159	70 - 130
Carbon disulfide	5.00	5.399		ug/L		108	70 - 130
Carbon tetrachloride	5.00	5.072		ug/L		101	70 - 130
Chlorobenzene	5.00	5.348		ug/L		107	70 - 130
Chlorodibromomethane	5.00	5.012		ug/L		100	70 - 130
Chloroethane	5.00	5.902		ug/L		118	70 - 130
Chloroform	5.00	5.340		ug/L		107	70 - 130
Chloromethane	5.00	5.641		ug/L		113	70 - 130
cis-1,2-Dichloroethene	5.00	5.576		ug/L		112	70 - 130
cis-1,3-Dichloropropene	5.00	5.049		ug/L		101	70 - 130
Dibromomethane	5.00	4.844		ug/L		97	70 - 130
Dichlorodifluoromethane	5.00	5.106		ug/L		102	70 - 130
Ethylbenzene	5.00	5.201		ug/L		104	70 - 130
Hexachlorobutadiene	5.00	4.414		ug/L		88	70 - 130
Isopropylbenzene	5.00	4.853		ug/L		97	70 - 130
Methyl tert-butyl ether	5.00	4.823		ug/L		96	70 - 130
Methylene Chloride	5.00	4.987	J	ug/L		100	70 - 130
Naphthalene	5.00	4.165	J	ug/L		83	70 - 130
n-Butylbenzene	5.00	4.547		ug/L		91	70 - 130
N-Propylbenzene	5.00	5.195		ug/L		104	70 - 130
sec-Butylbenzene	5.00	4.954		ug/L		99	70 - 130
Styrene	5.00	4.915		ug/L		98	70 - 130
tert-Butylbenzene	5.00	4.925		ug/L		99	70 - 130
Tetrachloroethene	5.00	5.020		ug/L		100	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	5.00	5.402		ug/L		108	70 - 130
trans-1,2-Dichloroethene	5.00	4.931		ug/L		99	70 - 130
trans-1,3-Dichloropropene	5.00	5.062		ug/L		101	70 - 130
Trichloroethene	5.00	4.848		ug/L		97	70 - 130
Trichlorofluoromethane	5.00	5.589		ug/L		112	70 - 130
Vinyl chloride	5.00	5.951		ug/L		119	70 - 130
Xylenes, Total	10.0	10.07		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 490-202626/4
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.001		ug/L		100	70 - 130	0	20
1,1,1-Trichloroethane	5.00	5.294		ug/L		106	70 - 130	5	20
1,1,2,2-Tetrachloroethane	5.00	5.716		ug/L		114	70 - 130	2	20
1,1,2-Trichloroethane	5.00	5.643		ug/L		113	70 - 130	3	20
1,1-Dichloroethane	5.00	5.837		ug/L		117	70 - 130	3	20
1,1-Dichloroethene	5.00	5.441		ug/L		109	70 - 130	2	20
1,1-Dichloropropene	5.00	5.210		ug/L		104	70 - 130	4	20
1,2,3-Trichlorobenzene	5.00	3.996	*	ug/L		80	70 - 130	22	20
1,2,3-Trichloropropane	5.00	5.179		ug/L		104	70 - 130	9	20
1,2,4-Trichlorobenzene	5.00	4.135		ug/L		83	70 - 130	4	20
1,2,4-Trimethylbenzene	5.00	5.110		ug/L		102	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	5.00	4.589		ug/L		92	70 - 130	19	20
1,2-Dibromoethane	5.00	5.329		ug/L		107	70 - 130	1	20
1,2-Dichlorobenzene	5.00	5.209		ug/L		104	70 - 130	2	20
1,2-Dichloroethane	5.00	5.586		ug/L		112	70 - 130	1	20
1,2-Dichloropropane	5.00	5.088		ug/L		102	70 - 130	9	20
1,3,5-Trimethylbenzene	5.00	4.989		ug/L		100	70 - 130	1	20
1,3-Dichlorobenzene	5.00	5.169		ug/L		103	70 - 130	2	20
1,3-Dichloropropane	5.00	5.833		ug/L		117	70 - 130	2	20
1,4-Dichlorobenzene	5.00	5.038		ug/L		101	70 - 130	4	20
2,2-Dichloropropane	5.00	4.302		ug/L		86	70 - 130	5	20
2-Butanone (MEK)	25.0	22.72		ug/L		91	70 - 130	9	20
2-Chlorotoluene	5.00	5.600		ug/L		112	70 - 130	2	20
2-Hexanone	25.0	23.56		ug/L		94	70 - 130	3	20
4-Chlorotoluene	5.00	5.298		ug/L		106	70 - 130	2	20
4-Isopropyltoluene	5.00	4.746		ug/L		95	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	25.0	24.78		ug/L		99	70 - 130	3	20
Acetone	25.0	24.68	J	ug/L		99	70 - 130	4	20
Benzene	5.00	5.283		ug/L		106	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-202626/4
Matrix: Water
Analysis Batch: 202626

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
Bromobenzene			5.00	5.232		ug/L		105	70 - 130	0	20
Bromochloromethane			5.00	4.938		ug/L		99	70 - 130	1	20
Dichlorobromomethane			5.00	4.916		ug/L		98	70 - 130	2	20
Bromoform			5.00	4.775		ug/L		95	70 - 130	4	20
Bromomethane			5.00	7.783	*	ug/L		156	70 - 130	2	20
Carbon disulfide			5.00	5.334		ug/L		107	70 - 130	1	20
Carbon tetrachloride			5.00	4.998		ug/L		100	70 - 130	1	20
Chlorobenzene			5.00	5.346		ug/L		107	70 - 130	0	20
Chlorodibromomethane			5.00	4.794		ug/L		96	70 - 130	4	20
Chloroethane			5.00	6.106		ug/L		122	70 - 130	3	20
Chloroform			5.00	5.391		ug/L		108	70 - 130	1	20
Chloromethane			5.00	5.512		ug/L		110	70 - 130	2	20
cis-1,2-Dichloroethene			5.00	5.652		ug/L		113	70 - 130	1	20
cis-1,3-Dichloropropene			5.00	5.084		ug/L		102	70 - 130	1	20
Dibromomethane			5.00	4.931		ug/L		99	70 - 130	2	20
Dichlorodifluoromethane			5.00	5.130		ug/L		103	70 - 130	0	20
Ethylbenzene			5.00	5.190		ug/L		104	70 - 130	0	20
Hexachlorobutadiene			5.00	4.078		ug/L		82	70 - 130	8	20
Isopropylbenzene			5.00	4.955		ug/L		99	70 - 130	2	20
Methyl tert-butyl ether			5.00	4.844		ug/L		97	70 - 130	0	20
Methylene Chloride			5.00	5.329		ug/L		107	70 - 130	7	20
Naphthalene			5.00	3.510	J	ug/L		70	70 - 130	17	20
n-Butylbenzene			5.00	4.578		ug/L		92	70 - 130	1	20
N-Propylbenzene			5.00	5.191		ug/L		104	70 - 130	0	20
sec-Butylbenzene			5.00	4.842		ug/L		97	70 - 130	2	20
Styrene			5.00	5.147		ug/L		103	70 - 130	5	20
tert-Butylbenzene			5.00	4.778		ug/L		96	70 - 130	3	20
Tetrachloroethene			5.00	5.113		ug/L		102	70 - 130	2	20
Toluene			5.00	5.398		ug/L		108	70 - 130	0	20
trans-1,2-Dichloroethene			5.00	5.098		ug/L		102	70 - 130	3	20
trans-1,3-Dichloropropene			5.00	4.894		ug/L		98	70 - 130	3	20
Trichloroethene			5.00	4.608		ug/L		92	70 - 130	5	20
Trichlorofluoromethane			5.00	5.368		ug/L		107	70 - 130	4	20
Vinyl chloride			5.00	5.713		ug/L		114	70 - 130	4	20
Xylenes, Total			10.0	9.705		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-209559/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 22:20	1
Manganese	ND		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 22:20	1

Lab Sample ID: LCS 480-209559/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.443		mg/L		94	85 - 115
Manganese	0.201	0.2008		mg/L		100	85 - 115

Lab Sample ID: 480-69821-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		10.0	9.500		mg/L		95	70 - 130
Manganese	0.102		0.201	0.3035		mg/L		100	70 - 130

Lab Sample ID: 480-69821-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.544		mg/L		95	70 - 130	0	20
Manganese	0.102		0.201	0.3031		mg/L		100	70 - 130	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

GC/MS VOA

Analysis Batch: 202626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69814-1	CC-03 (RAW)	Total/NA	Water	524.2	
480-69814-3	CC-03 (GAC1)	Total/NA	Water	524.2	
480-69814-4	CC-03 (GAC2)	Total/NA	Water	524.2	
LCS 490-202626/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 490-202626/4	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 490-202626/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 209559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69814-1	CC-03 (RAW)	Total/NA	Water	200.7	
480-69814-2	CC-03 (POST FILTER)	Total/NA	Water	200.7	
480-69821-A-2-B MS	Matrix Spike	Total/NA	Water	200.7	
480-69821-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
LCS 480-209559/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-209559/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 210030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69814-1	CC-03 (RAW)	Total/NA	Water	200.7 Rev 4.4	209559
480-69814-2	CC-03 (POST FILTER)	Total/NA	Water	200.7 Rev 4.4	209559
480-69821-A-2-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	209559
480-69821-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	209559
LCS 480-209559/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	209559
MB 480-209559/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	209559

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

Client Sample ID: CC-03 (RAW)

Lab Sample ID: 480-69814-1
Date Collected: 10/21/14 15:30
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 14:10	EML	TAL NSH
Total/NA	Prep	200.7			209559	10/23/14 12:22	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	210030	10/24/14 23:08	LMH	TAL BUF

Client Sample ID: CC-03 (POST FILTER)

Lab Sample ID: 480-69814-2
Date Collected: 10/21/14 15:32
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			209559	10/23/14 12:22	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	210030	10/24/14 23:11	LMH	TAL BUF

Client Sample ID: CC-03 (GAC1)

Lab Sample ID: 480-69814-3
Date Collected: 10/21/14 15:35
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 13:44	EML	TAL NSH

Client Sample ID: CC-03 (GAC2)

Lab Sample ID: 480-69814-4
Date Collected: 10/21/14 15:40
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 14:36	EML	TAL NSH

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14 *

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Carbon disulfide
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	o-Xylene
524.2		Water	t-Butanol

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	Acrylonitrile
524.2		Water	Dichlorofluoromethane
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

* Certification renewal pending - certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL NSH
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69814-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-69814-1	CC-03 (RAW)	Water	10/21/14 15:30	10/22/14 09:00
480-69814-2	CC-03 (POST FILTER)	Water	10/21/14 15:32	10/22/14 09:00
480-69814-3	CC-03 (GAC1)	Water	10/21/14 15:35	10/22/14 09:00
480-69814-4	CC-03 (GAC2)	Water	10/21/14 15:40	10/22/14 09:00

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-69814-1

Login Number: 69814
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	LAB TO CHECK

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-69814-1

Login Number: 69814
List Number: 2
Creator: McBride, Mike

List Source: TestAmerica Nashville
List Creation: 10/30/14 01:55 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody

480-69814 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: T Zakaria	Lab PM: Brown, Shali	COC No: 490-24404-8963.1
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@tes	Page: 1 of 1
Company: ARCADIS U.S., Inc.			Job #: MA000725
Address: 1 Executive Drive Suite 303	Due Date Requested: STD		
City: Chelmsford	TAT Requested (days):		
State, Zip: MA, 01824			
Phone:	PO #:		
Email: chuck.castelluccio@arcadis-us.com	WO #:		
Project Name: FORD Tibbetts Road Site E101274	Project #: 49002494		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list (Buffalo)	200.7 - Iron/Manganese (Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-03 (Raw)	10/21/14	1530	G	W			X	X		
CC-03 (Post Filter)	↓	1532	G	W				X		
CC-03 (GAC1)	↓	1535	G	W			X			
CC-03 (GAC2)	↓	1540	G	W			X			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/21/14 1800	ARCADIS	[signature]	10/22/14 0900	TA OVF
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: #2 3.2

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: 480-69819-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
11/4/2014 5:44:04 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Job ID: 480-69819-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69819-1

Comments
No additional comments.

Receipt
The samples were received on 10/22/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 202626 recovered outside control limits for the following analytes: bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 524.2: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 202626 recovered outside control limits for the following analytes: 1,2,3-trichlorobenzene.

Method(s) 524.2: The method blank for batch 202626 contained chloroform, chloromethane, and trichloroethene 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 was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Client Sample ID: CC-06 (RAW) — Lab Sample ID: 480-69819-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.131	J	0.500	0.0800	ug/L	1		524.2	Total/NA
Benzene	0.349	J	0.500	0.0700	ug/L	1		524.2	Total/NA
Chloroform	0.185	J B	0.500	0.130	ug/L	1		524.2	Total/NA
cis-1,2-Dichloroethene	48.8		0.500	0.110	ug/L	1		524.2	Total/NA
Methyl tert-butyl ether	0.113	J	0.500	0.0900	ug/L	1		524.2	Total/NA
trans-1,2-Dichloroethene	0.754		0.500	0.0700	ug/L	1		524.2	Total/NA
Trichloroethene	3.84	B	0.500	0.0800	ug/L	1		524.2	Total/NA
Iron	0.0537		0.0500	0.0193	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.0642		0.00300	0.000400	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: CC-06 (POST FILTER) — Lab Sample ID: 480-69819-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.00164	J	0.00300	0.000400	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: CC-06 (GAC IN) — Lab Sample ID: 480-69819-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.05	J	50.0	1.23	ug/L	1		524.2	Total/NA
Benzene	0.300	J	0.500	0.0700	ug/L	1		524.2	Total/NA
cis-1,2-Dichloroethene	2.93		0.500	0.110	ug/L	1		524.2	Total/NA
Ethylbenzene	0.103	J	0.500	0.100	ug/L	1		524.2	Total/NA
m-Xylene & p-Xylene	0.308	J	0.500	0.170	ug/L	1		524.2	Total/NA
o-Xylene	0.119	J	0.500	0.100	ug/L	1		524.2	Total/NA
Toluene	1.02		0.500	0.0700	ug/L	1		524.2	Total/NA
Trichloroethene	0.173	J B	0.500	0.0800	ug/L	1		524.2	Total/NA
Xylenes, Total	0.427	J	1.00	0.100	ug/L	1		524.2	Total/NA

Client Sample ID: CC-06 (GAC1) — Lab Sample ID: 480-69819-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.25	J	50.0	1.23	ug/L	1		524.2	Total/NA

Client Sample ID: CC-06 (GAC2) — Lab Sample ID: 480-69819-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Client Sample ID: CC-06 (RAW)

Date Collected: 10/20/14 10:30
Date Received: 10/22/14 09:00

Lab Sample ID: 480-69819-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 16:45	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 16:45	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 16:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 16:45	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 16:45	1
1,1-Dichloroethene	**0.131**	**J**	0.500	0.0800	ug/L			11/01/14 16:45	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 16:45	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 16:45	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 16:45	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 16:45	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 16:45	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 16:45	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 16:45	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 16:45	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 16:45	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 16:45	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 16:45	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 16:45	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 16:45	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 16:45	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 16:45	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 16:45	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 16:45	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 16:45	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 16:45	1
Benzene	**0.349**	**J**	0.500	0.0700	ug/L			11/01/14 16:45	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 16:45	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 16:45	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 16:45	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 16:45	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 16:45	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 16:45	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 16:45	1
Chloroform	**0.185**	**J B**	0.500	0.130	ug/L			11/01/14 16:45	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 16:45	1
cis-1,2-Dichloroethene	**48.8**		0.500	0.110	ug/L			11/01/14 16:45	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 16:45	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 16:45	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 16:45	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 16:45	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 16:45	1

Client Sample ID: CC-06 (RAW)

Lab Sample ID: 480-69819-1

Date Collected: 10/20/14 10:30

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 16:45	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 16:45	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 16:45	1
Methyl tert-butyl ether	**0.113**	**J**	0.500	0.0900	ug/L			11/01/14 16:45	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 16:45	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 16:45	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 16:45	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 16:45	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 16:45	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 16:45	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 16:45	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 16:45	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
trans-1,2-Dichloroethene	**0.754**		0.500	0.0700	ug/L			11/01/14 16:45	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 16:45	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 16:45	1
Trichloroethene	**3.84**	**B**	0.500	0.0800	ug/L			11/01/14 16:45	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 16:45	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 16:45	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 16:45	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 16:45	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 16:45	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*11/01/14 16:45*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/01/14 16:45*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/01/14 16:45*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*11/01/14 16:45*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.0537**		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 23:28	1
Manganese	**0.0642**		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 23:28	1

Client Sample ID: CC-06 (POST FILTER)

Lab Sample ID: 480-69819-2

Date Collected: 10/20/14 10:32

Matrix: Water

Date Received: 10/22/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 23:30	1
Manganese	**0.00164**	**J**	0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 23:30	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Client Sample ID: CC-06 (GAC IN)

Lab Sample ID: 480-69819-3

Date Collected: 10/20/14 10:35
Matrix: Water
Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 17:12	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 17:12	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 17:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 17:12	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 17:12	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 17:12	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 17:12	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 17:12	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 17:12	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 17:12	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 17:12	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 17:12	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 17:12	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 17:12	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 17:12	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 17:12	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 17:12	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 17:12	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 17:12	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 17:12	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 17:12	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 17:12	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 17:12	1
Acetone	**6.05**	**J**	50.0	1.23	ug/L			11/01/14 17:12	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 17:12	1
Benzene	**0.300**	**J**	0.500	0.0700	ug/L			11/01/14 17:12	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 17:12	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 17:12	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 17:12	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 17:12	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 17:12	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 17:12	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 17:12	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 17:12	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 17:12	1
cis-1,2-Dichloroethene	**2.93**		0.500	0.110	ug/L			11/01/14 17:12	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 17:12	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 17:12	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 17:12	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 17:12	1
Ethylbenzene	**0.103**	**J**	0.500	0.100	ug/L			11/01/14 17:12	1

Client Sample ID: CC-06 (GAC IN)

Lab Sample ID: 480-69819-3

Date Collected: 10/20/14 10:35

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 17:12	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 17:12	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 17:12	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 17:12	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 17:12	1
m-Xylene & p-Xylene	**0.308**	**J**	0.500	0.170	ug/L			11/01/14 17:12	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 17:12	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
o-Xylene	**0.119**	**J**	0.500	0.100	ug/L			11/01/14 17:12	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 17:12	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 17:12	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 17:12	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 17:12	1
Toluene	**1.02**		0.500	0.0700	ug/L			11/01/14 17:12	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 17:12	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 17:12	1
Trichloroethene	**0.173**	**J B**	0.500	0.0800	ug/L			11/01/14 17:12	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 17:12	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 17:12	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 17:12	1
Xylenes, Total	**0.427**	**J**	1.00	0.100	ug/L			11/01/14 17:12	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 17:12	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*11/01/14 17:12*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*11/01/14 17:12*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/01/14 17:12*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/01/14 17:12*	*1*

Client Sample ID: CC-06 (GAC1)

Lab Sample ID: 480-69819-4

Date Collected: 10/20/14 10:40

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 17:38	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 17:38	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 17:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 17:38	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 17:38	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 17:38	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 17:38	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 17:38	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 17:38	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 17:38	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Client Sample ID: CC-06 (GAC1)

Date Collected: 10/20/14 10:40
Date Received: 10/22/14 09:00

Lab Sample ID: 480-69819-4

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 17:38	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 17:38	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 17:38	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 17:38	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 17:38	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 17:38	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 17:38	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 17:38	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 17:38	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 17:38	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 17:38	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 17:38	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 17:38	1
Acetone	**1.25**	**J**	50.0	1.23	ug/L			11/01/14 17:38	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 17:38	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 17:38	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 17:38	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 17:38	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 17:38	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 17:38	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 17:38	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 17:38	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 17:38	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 17:38	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 17:38	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 17:38	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 17:38	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 17:38	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 17:38	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 17:38	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 17:38	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 17:38	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 17:38	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 17:38	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 17:38	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 17:38	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 17:38	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 17:38	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 17:38	1

Client Sample ID: CC-06 (GAC1)

Lab Sample ID: 480-69819-4

Date Collected: 10/20/14 10:40

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 17:38	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 17:38	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 17:38	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 17:38	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 17:38	1
Trichloroethene	ND		0.500	0.0800	ug/L			11/01/14 17:38	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 17:38	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 17:38	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 17:38	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 17:38	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 17:38	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*11/01/14 17:38*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/01/14 17:38*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*11/01/14 17:38*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/01/14 17:38*	*1*

Client Sample ID: CC-06 (GAC2)

Lab Sample ID: 480-69819-5

Date Collected: 10/20/14 10:45

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 18:04	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 18:04	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 18:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 18:04	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 18:04	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 18:04	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 18:04	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 18:04	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 18:04	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 18:04	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 18:04	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 18:04	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 18:04	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 18:04	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 18:04	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 18:04	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 18:04	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Client Sample ID: CC-06 (GAC2)

Date Collected: 10/20/14 10:45
Date Received: 10/22/14 09:00

Lab Sample ID: 480-69819-5

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 18:04	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 18:04	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 18:04	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 18:04	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 18:04	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 18:04	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 18:04	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 18:04	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 18:04	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 18:04	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 18:04	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 18:04	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 18:04	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 18:04	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 18:04	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 18:04	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 18:04	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 18:04	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 18:04	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 18:04	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 18:04	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 18:04	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 18:04	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 18:04	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 18:04	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 18:04	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 18:04	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 18:04	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 18:04	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 18:04	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 18:04	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 18:04	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 18:04	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 18:04	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 18:04	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 18:04	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 18:04	1
Trichloroethene	ND		0.500	0.0800	ug/L			11/01/14 18:04	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 18:04	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 18:04	1

Client Sample ID: CC-06 (GAC2)

Lab Sample ID: 480-69819-5

Date Collected: 10/20/14 10:45

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 18:04	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 18:04	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 18:04	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 130*		*11/01/14 18:04*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/01/14 18:04*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*		*11/01/14 18:04*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*11/01/14 18:04*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-69819-1	CC-06 (RAW)	110	98	107	96
480-69819-3	CC-06 (GAC IN)	111	103	107	93
480-69819-4	CC-06 (GAC1)	110	101	106	94
480-69819-5	CC-06 (GAC2)	111	102	109	95
LCS 490-202626/3	Lab Control Sample	106	96	107	95
LCSD 490-202626/4	Lab Control Sample Dup	108	100	105	96
MB 490-202626/6	Method Blank	106	99	104	94

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-202626/6
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 12:52	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
1,2,3-Trichlorobenzene	ND		0.500	0.120	ug/L			11/01/14 12:52	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 12:52	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 12:52	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 12:52	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 12:52	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 12:52	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 12:52	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 12:52	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 12:52	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 12:52	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 12:52	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 12:52	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 12:52	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Chloroform	0.2097	J	0.500	0.130	ug/L			11/01/14 12:52	1
Chloromethane	0.3368	J	0.500	0.140	ug/L			11/01/14 12:52	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 12:52	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 12:52	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 12:52	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-202626/6
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 12:52	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 12:52	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 12:52	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 12:52	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 12:52	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 12:52	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 12:52	1
Trichloroethene	0.09305	J	0.500	0.0800	ug/L			11/01/14 12:52	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 12:52	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 12:52	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 12:52	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 12:52	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 12:52	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 12:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/01/14 12:52*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/01/14 12:52*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/01/14 12:52*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/01/14 12:52*	*1*

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.019		ug/L		100	70 - 130
1,1,1-Trichloroethane	5.00	5.038		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.625		ug/L		112	70 - 130
1,1,2-Trichloroethane	5.00	5.789		ug/L		116	70 - 130
1,1-Dichloroethane	5.00	5.680		ug/L		114	70 - 130
1,1-Dichloroethene	5.00	5.309		ug/L		106	70 - 130
1,1-Dichloropropene	5.00	5.413		ug/L		108	70 - 130
1,2,3-Trichlorobenzene	5.00	4.980		ug/L		100	70 - 130
1,2,3-Trichloropropane	5.00	5.690		ug/L		114	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	5.00	4.311		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	5.00	5.044		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.812		ug/L		76	70 - 130
1,2-Dibromoethane	5.00	5.286		ug/L		106	70 - 130
1,2-Dichlorobenzene	5.00	5.100		ug/L		102	70 - 130
1,2-Dichloroethane	5.00	5.547		ug/L		111	70 - 130
1,2-Dichloropropane	5.00	5.570		ug/L		111	70 - 130
1,3,5-Trimethylbenzene	5.00	5.043		ug/L		101	70 - 130
1,3-Dichlorobenzene	5.00	5.254		ug/L		105	70 - 130
1,3-Dichloropropane	5.00	5.927		ug/L		119	70 - 130
1,4-Dichlorobenzene	5.00	5.258		ug/L		105	70 - 130
2,2-Dichloropropane	5.00	4.104		ug/L		82	70 - 130
2-Butanone (MEK)	25.0	24.88		ug/L		100	70 - 130
2-Chlorotoluene	5.00	5.505		ug/L		110	70 - 130
2-Hexanone	25.0	22.81		ug/L		91	70 - 130
4-Chlorotoluene	5.00	5.407		ug/L		108	70 - 130
4-Isopropyltoluene	5.00	4.752		ug/L		95	70 - 130
4-Methyl-2-pentanone (MIBK)	25.0	24.14		ug/L		97	70 - 130
Acetone	25.0	25.58	J	ug/L		102	70 - 130
Benzene	5.00	5.202		ug/L		104	70 - 130
Bromobenzene	5.00	5.234		ug/L		105	70 - 130
Bromochloromethane	5.00	4.882		ug/L		98	70 - 130
Dichlorobromomethane	5.00	4.834		ug/L		97	70 - 130
Bromoform	5.00	4.959		ug/L		99	70 - 130
Bromomethane	5.00	7.959	*	ug/L		159	70 - 130
Carbon disulfide	5.00	5.399		ug/L		108	70 - 130
Carbon tetrachloride	5.00	5.072		ug/L		101	70 - 130
Chlorobenzene	5.00	5.348		ug/L		107	70 - 130
Chlorodibromomethane	5.00	5.012		ug/L		100	70 - 130
Chloroethane	5.00	5.902		ug/L		118	70 - 130
Chloroform	5.00	5.340		ug/L		107	70 - 130
Chloromethane	5.00	5.641		ug/L		113	70 - 130
cis-1,2-Dichloroethene	5.00	5.576		ug/L		112	70 - 130
cis-1,3-Dichloropropene	5.00	5.049		ug/L		101	70 - 130
Dibromomethane	5.00	4.844		ug/L		97	70 - 130
Dichlorodifluoromethane	5.00	5.106		ug/L		102	70 - 130
Ethylbenzene	5.00	5.201		ug/L		104	70 - 130
Hexachlorobutadiene	5.00	4.414		ug/L		88	70 - 130
Isopropylbenzene	5.00	4.853		ug/L		97	70 - 130
Methyl tert-butyl ether	5.00	4.823		ug/L		96	70 - 130
Methylene Chloride	5.00	4.987	J	ug/L		100	70 - 130
Naphthalene	5.00	4.165	J	ug/L		83	70 - 130
n-Butylbenzene	5.00	4.547		ug/L		91	70 - 130
N-Propylbenzene	5.00	5.195		ug/L		104	70 - 130
sec-Butylbenzene	5.00	4.954		ug/L		99	70 - 130
Styrene	5.00	4.915		ug/L		98	70 - 130
tert-Butylbenzene	5.00	4.925		ug/L		99	70 - 130
Tetrachloroethene	5.00	5.020		ug/L		100	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	5.00	5.402		ug/L		108	70 - 130
trans-1,2-Dichloroethene	5.00	4.931		ug/L		99	70 - 130
trans-1,3-Dichloropropene	5.00	5.062		ug/L		101	70 - 130
Trichloroethene	5.00	4.848		ug/L		97	70 - 130
Trichlorofluoromethane	5.00	5.589		ug/L		112	70 - 130
Vinyl chloride	5.00	5.951		ug/L		119	70 - 130
Xylenes, Total	10.0	10.07		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 490-202626/4
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.001		ug/L		100	70 - 130	0	20
1,1,1-Trichloroethane	5.00	5.294		ug/L		106	70 - 130	5	20
1,1,2,2-Tetrachloroethane	5.00	5.716		ug/L		114	70 - 130	2	20
1,1,2-Trichloroethane	5.00	5.643		ug/L		113	70 - 130	3	20
1,1-Dichloroethane	5.00	5.837		ug/L		117	70 - 130	3	20
1,1-Dichloroethene	5.00	5.441		ug/L		109	70 - 130	2	20
1,1-Dichloropropene	5.00	5.210		ug/L		104	70 - 130	4	20
1,2,3-Trichlorobenzene	5.00	3.996	*	ug/L		80	70 - 130	22	20
1,2,3-Trichloropropane	5.00	5.179		ug/L		104	70 - 130	9	20
1,2,4-Trichlorobenzene	5.00	4.135		ug/L		83	70 - 130	4	20
1,2,4-Trimethylbenzene	5.00	5.110		ug/L		102	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	5.00	4.589		ug/L		92	70 - 130	19	20
1,2-Dibromoethane	5.00	5.329		ug/L		107	70 - 130	1	20
1,2-Dichlorobenzene	5.00	5.209		ug/L		104	70 - 130	2	20
1,2-Dichloroethane	5.00	5.586		ug/L		112	70 - 130	1	20
1,2-Dichloropropane	5.00	5.088		ug/L		102	70 - 130	9	20
1,3,5-Trimethylbenzene	5.00	4.989		ug/L		100	70 - 130	1	20
1,3-Dichlorobenzene	5.00	5.169		ug/L		103	70 - 130	2	20
1,3-Dichloropropane	5.00	5.833		ug/L		117	70 - 130	2	20
1,4-Dichlorobenzene	5.00	5.038		ug/L		101	70 - 130	4	20
2,2-Dichloropropane	5.00	4.302		ug/L		86	70 - 130	5	20
2-Butanone (MEK)	25.0	22.72		ug/L		91	70 - 130	9	20
2-Chlorotoluene	5.00	5.600		ug/L		112	70 - 130	2	20
2-Hexanone	25.0	23.56		ug/L		94	70 - 130	3	20
4-Chlorotoluene	5.00	5.298		ug/L		106	70 - 130	2	20
4-Isopropyltoluene	5.00	4.746		ug/L		95	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	25.0	24.78		ug/L		99	70 - 130	3	20
Acetone	25.0	24.68	J	ug/L		99	70 - 130	4	20
Benzene	5.00	5.283		ug/L		106	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-202626/4
Matrix: Water
Analysis Batch: 202626

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
Bromobenzene			5.00	5.232		ug/L		105	70 - 130	0	20
Bromochloromethane			5.00	4.938		ug/L		99	70 - 130	1	20
Dichlorobromomethane			5.00	4.916		ug/L		98	70 - 130	2	20
Bromoform			5.00	4.775		ug/L		95	70 - 130	4	20
Bromomethane			5.00	7.783	*	ug/L		156	70 - 130	2	20
Carbon disulfide			5.00	5.334		ug/L		107	70 - 130	1	20
Carbon tetrachloride			5.00	4.998		ug/L		100	70 - 130	1	20
Chlorobenzene			5.00	5.346		ug/L		107	70 - 130	0	20
Chlorodibromomethane			5.00	4.794		ug/L		96	70 - 130	4	20
Chloroethane			5.00	6.106		ug/L		122	70 - 130	3	20
Chloroform			5.00	5.391		ug/L		108	70 - 130	1	20
Chloromethane			5.00	5.512		ug/L		110	70 - 130	2	20
cis-1,2-Dichloroethene			5.00	5.652		ug/L		113	70 - 130	1	20
cis-1,3-Dichloropropene			5.00	5.084		ug/L		102	70 - 130	1	20
Dibromomethane			5.00	4.931		ug/L		99	70 - 130	2	20
Dichlorodifluoromethane			5.00	5.130		ug/L		103	70 - 130	0	20
Ethylbenzene			5.00	5.190		ug/L		104	70 - 130	0	20
Hexachlorobutadiene			5.00	4.078		ug/L		82	70 - 130	8	20
Isopropylbenzene			5.00	4.955		ug/L		99	70 - 130	2	20
Methyl tert-butyl ether			5.00	4.844		ug/L		97	70 - 130	0	20
Methylene Chloride			5.00	5.329		ug/L		107	70 - 130	7	20
Naphthalene			5.00	3.510	J	ug/L		70	70 - 130	17	20
n-Butylbenzene			5.00	4.578		ug/L		92	70 - 130	1	20
N-Propylbenzene			5.00	5.191		ug/L		104	70 - 130	0	20
sec-Butylbenzene			5.00	4.842		ug/L		97	70 - 130	2	20
Styrene			5.00	5.147		ug/L		103	70 - 130	5	20
tert-Butylbenzene			5.00	4.778		ug/L		96	70 - 130	3	20
Tetrachloroethene			5.00	5.113		ug/L		102	70 - 130	2	20
Toluene			5.00	5.398		ug/L		108	70 - 130	0	20
trans-1,2-Dichloroethene			5.00	5.098		ug/L		102	70 - 130	3	20
trans-1,3-Dichloropropene			5.00	4.894		ug/L		98	70 - 130	3	20
Trichloroethene			5.00	4.608		ug/L		92	70 - 130	5	20
Trichlorofluoromethane			5.00	5.368		ug/L		107	70 - 130	4	20
Vinyl chloride			5.00	5.713		ug/L		114	70 - 130	4	20
Xylenes, Total			10.0	9.705		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-209559/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 22:20	1
Manganese	ND		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 22:20	1

Lab Sample ID: LCS 480-209559/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.443		mg/L		94	85 - 115
Manganese	0.201	0.2008		mg/L		100	85 - 115

Lab Sample ID: 480-69821-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		10.0	9.500		mg/L		95	70 - 130
Manganese	0.102		0.201	0.3035		mg/L		100	70 - 130

Lab Sample ID: 480-69821-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.544		mg/L		95	70 - 130	0	20
Manganese	0.102		0.201	0.3031		mg/L		100	70 - 130	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

GC/MS VOA

Analysis Batch: 202626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69819-1	CC-06 (RAW)	Total/NA	Water	524.2	
480-69819-3	CC-06 (GAC IN)	Total/NA	Water	524.2	
480-69819-4	CC-06 (GAC1)	Total/NA	Water	524.2	
480-69819-5	CC-06 (GAC2)	Total/NA	Water	524.2	
LCS 490-202626/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 490-202626/4	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 490-202626/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 209559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69819-1	CC-06 (RAW)	Total/NA	Water	200.7	
480-69819-2	CC-06 (POST FILTER)	Total/NA	Water	200.7	
480-69821-A-2-B MS	Matrix Spike	Total/NA	Water	200.7	
480-69821-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
LCS 480-209559/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-209559/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 210030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69819-1	CC-06 (RAW)	Total/NA	Water	200.7 Rev 4.4	209559
480-69819-2	CC-06 (POST FILTER)	Total/NA	Water	200.7 Rev 4.4	209559
480-69821-A-2-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	209559
480-69821-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	209559
LCS 480-209559/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	209559
MB 480-209559/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	209559

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Client Sample ID: CC-06 (RAW)

Lab Sample ID: 480-69819-1
Date Collected: 10/20/14 10:30
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 16:45	EML	TAL NSH
Total/NA	Prep	200.7			209559	10/23/14 12:22	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	210030	10/24/14 23:28	LMH	TAL BUF

Client Sample ID: CC-06 (POST FILTER)

Lab Sample ID: 480-69819-2
Date Collected: 10/20/14 10:32
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			209559	10/23/14 12:22	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	210030	10/24/14 23:30	LMH	TAL BUF

Client Sample ID: CC-06 (GAC IN)

Lab Sample ID: 480-69819-3
Date Collected: 10/20/14 10:35
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 17:12	EML	TAL NSH

Client Sample ID: CC-06 (GAC1)

Lab Sample ID: 480-69819-4
Date Collected: 10/20/14 10:40
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 17:38	EML	TAL NSH

Client Sample ID: CC-06 (GAC2)

Lab Sample ID: 480-69819-5
Date Collected: 10/20/14 10:45
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 18:04	EML	TAL NSH

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14 *

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Carbon disulfide
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	o-Xylene
524.2		Water	t-Butanol

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	Acrylonitrile
524.2		Water	Dichlorofluoromethane
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

* Certification renewal pending - certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL NSH
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69819-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-69819-1	CC-06 (RAW)	Water	10/20/14 10:30	10/22/14 09:00
480-69819-2	CC-06 (POST FILTER)	Water	10/20/14 10:32	10/22/14 09:00
480-69819-3	CC-06 (GAC IN)	Water	10/20/14 10:35	10/22/14 09:00
480-69819-4	CC-06 (GAC1)	Water	10/20/14 10:40	10/22/14 09:00
480-69819-5	CC-06 (GAC2)	Water	10/20/14 10:45	10/22/14 09:00

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-69819-1

Login Number: 69819
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	LAB TO CHECK

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-69819-1

Login Number: 69819
List Number: 2
Creator: McBride, Mike

List Source: TestAmerica Nashville
List Creation: 10/30/14 01:58 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of

480-69819 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: T Zakarian	Lab PM: Brown, S	COC No: 490-24404-8963.1
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com	Page: 1 of 1
Company: ARCADIS U.S., Inc.			Job #: MA000725
Address: 1 Executive Drive Suite 303	Due Date Requested: STD		
City: Chelmsford	TAT Requested (days):		
State, Zip: MA, 01824			
Phone:	PO #:		
Email: chuck.castelluccio@arcadis-us.com	WO #:		
Project Name: FORD Tibbetts Road Site E101274	Project #: 49002494		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list (Buffalo)	200.7 - Iron/Manganese (Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-06 (Raw)	10/20/14	1030	G	W			X	X		
CC-06 (Post Filter)		1032	G	W				X		
CC-06 (GAC in)		1035	G	W			X			
CC-06 (GAC 1)		1040	G	W			X			
CC06 (GAC2)		1045	G	W			X			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	10/21/14 1800	ARCADIS	[signature]	10/22/14 0900	TA BUFF
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: #2 3.2

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: 480-69823-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
11/4/2014 5:45:29 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Job ID: 480-69823-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69823-1

Comments
No additional comments.

Receipt
The samples were received on 10/22/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 202626 recovered outside control limits for the following analytes: bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 524.2: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 202626 recovered outside control limits for the following analytes: 1,2,3-trichlorobenzene.

Method(s) 524.2: The method blank for batch 202626 contained chloroform, chloromethane, and trichloroethene 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 was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

Client Sample ID: CC-15 (RAW) — Lab Sample ID: 480-69823-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.141	J	0.500	0.0800	ug/L	1		524.2	Total/NA
Benzene	0.334	J	0.500	0.0700	ug/L	1		524.2	Total/NA
cis-1,2-Dichloroethene	48.0		0.500	0.110	ug/L	1		524.2	Total/NA
trans-1,2-Dichloroethene	0.910		0.500	0.0700	ug/L	1		524.2	Total/NA
Trichloroethene	4.38	B	0.500	0.0800	ug/L	1		524.2	Total/NA
Iron	0.0198	J	0.0500	0.0193	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.0962		0.00300	0.000400	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: CC-15 (POST FILTER) — Lab Sample ID: 480-69823-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.0962		0.00300	0.000400	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: CC-15 (GAC1) — Lab Sample ID: 480-69823-3

No Detections.

Client Sample ID: CC-15 (GAC2) — Lab Sample ID: 480-69823-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

Client Sample ID: CC-15 (RAW)

Date Collected: 10/20/14 12:00
Date Received: 10/22/14 09:00

Lab Sample ID: 480-69823-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 19:47	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 19:47	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 19:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 19:47	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 19:47	1
1,1-Dichloroethene	**0.141**	**J**	0.500	0.0800	ug/L			11/01/14 19:47	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 19:47	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 19:47	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 19:47	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 19:47	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 19:47	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 19:47	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 19:47	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 19:47	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 19:47	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 19:47	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 19:47	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 19:47	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 19:47	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 19:47	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 19:47	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 19:47	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 19:47	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 19:47	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 19:47	1
Benzene	**0.334**	**J**	0.500	0.0700	ug/L			11/01/14 19:47	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 19:47	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 19:47	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 19:47	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 19:47	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 19:47	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 19:47	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 19:47	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 19:47	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 19:47	1
cis-1,2-Dichloroethene	**48.0**		0.500	0.110	ug/L			11/01/14 19:47	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 19:47	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 19:47	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 19:47	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 19:47	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 19:47	1

Client Sample ID: CC-15 (RAW)

Lab Sample ID: 480-69823-1

Date Collected: 10/20/14 12:00

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 19:47	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 19:47	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 19:47	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 19:47	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 19:47	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 19:47	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 19:47	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 19:47	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 19:47	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 19:47	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 19:47	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 19:47	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
trans-1,2-Dichloroethene	**0.910**		0.500	0.0700	ug/L			11/01/14 19:47	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 19:47	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 19:47	1
Trichloroethene	**4.38**	**B**	0.500	0.0800	ug/L			11/01/14 19:47	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 19:47	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 19:47	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 19:47	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 19:47	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 19:47	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*11/01/14 19:47*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/01/14 19:47*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*11/01/14 19:47*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/01/14 19:47*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.0198**	**J**	0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 23:44	1
Manganese	**0.0962**		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 23:44	1

Client Sample ID: CC-15 (POST FILTER)

Lab Sample ID: 480-69823-2

Date Collected: 10/20/14 12:02

Matrix: Water

Date Received: 10/22/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 23:47	1
Manganese	**0.0962**		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 23:47	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

Client Sample ID: CC-15 (GAC1)

Date Collected: 10/20/14 12:05
Date Received: 10/22/14 09:00

Lab Sample ID: 480-69823-3

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 20:13	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 20:13	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 20:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 20:13	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 20:13	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 20:13	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 20:13	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 20:13	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 20:13	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 20:13	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 20:13	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 20:13	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 20:13	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 20:13	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 20:13	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 20:13	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 20:13	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 20:13	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 20:13	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 20:13	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 20:13	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 20:13	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 20:13	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 20:13	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 20:13	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 20:13	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 20:13	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 20:13	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 20:13	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 20:13	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 20:13	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 20:13	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 20:13	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 20:13	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 20:13	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 20:13	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 20:13	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 20:13	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 20:13	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 20:13	1

Client Sample ID: CC-15 (GAC1)

Lab Sample ID: 480-69823-3

Date Collected: 10/20/14 12:05

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 20:13	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 20:13	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 20:13	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 20:13	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 20:13	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 20:13	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 20:13	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 20:13	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 20:13	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 20:13	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 20:13	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 20:13	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 20:13	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 20:13	1
Trichloroethene	ND		0.500	0.0800	ug/L			11/01/14 20:13	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 20:13	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 20:13	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 20:13	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 20:13	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 20:13	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/01/14 20:13*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/01/14 20:13*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/01/14 20:13*	*1*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/01/14 20:13*	*1*

Client Sample ID: CC-15 (GAC2)

Lab Sample ID: 480-69823-4

Date Collected: 10/20/14 12:10

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 20:39	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 20:39	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 20:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 20:39	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 20:39	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 20:39	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 20:39	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 20:39	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 20:39	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 20:39	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

Client Sample ID: CC-15 (GAC2)

Lab Sample ID: 480-69823-4

Date Collected: 10/20/14 12:10
Matrix: Water
Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 20:39	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 20:39	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 20:39	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 20:39	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 20:39	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 20:39	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 20:39	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 20:39	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 20:39	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 20:39	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 20:39	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 20:39	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 20:39	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 20:39	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 20:39	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 20:39	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 20:39	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 20:39	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 20:39	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 20:39	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 20:39	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 20:39	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 20:39	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 20:39	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 20:39	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 20:39	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 20:39	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 20:39	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 20:39	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 20:39	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 20:39	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 20:39	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 20:39	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 20:39	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 20:39	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 20:39	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 20:39	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 20:39	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 20:39	1

Client Sample ID: CC-15 (GAC2)

Lab Sample ID: 480-69823-4

Date Collected: 10/20/14 12:10

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 20:39	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 20:39	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 20:39	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 20:39	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 20:39	1
Trichloroethene	ND		0.500	0.0800	ug/L			11/01/14 20:39	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 20:39	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 20:39	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 20:39	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 20:39	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 20:39	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*11/01/14 20:39*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*11/01/14 20:39*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/01/14 20:39*	*1*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*11/01/14 20:39*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-69823-1	CC-15 (RAW)	108	99	106	94
480-69823-3	CC-15 (GAC1)	106	100	107	91
480-69823-4	CC-15 (GAC2)	103	96	107	98
LCS 490-202626/3	Lab Control Sample	106	96	107	95
LCSD 490-202626/4	Lab Control Sample Dup	108	100	105	96
MB 490-202626/6	Method Blank	106	99	104	94

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-202626/6
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 12:52	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
1,2,3-Trichlorobenzene	ND		0.500	0.120	ug/L			11/01/14 12:52	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 12:52	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 12:52	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 12:52	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 12:52	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 12:52	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 12:52	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 12:52	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 12:52	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 12:52	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 12:52	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 12:52	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 12:52	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Chloroform	0.2097	J	0.500	0.130	ug/L			11/01/14 12:52	1
Chloromethane	0.3368	J	0.500	0.140	ug/L			11/01/14 12:52	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 12:52	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 12:52	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 12:52	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-202626/6
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 12:52	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 12:52	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 12:52	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 12:52	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 12:52	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 12:52	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 12:52	1
Trichloroethene	0.09305	J	0.500	0.0800	ug/L			11/01/14 12:52	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 12:52	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 12:52	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 12:52	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 12:52	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 12:52	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 12:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/01/14 12:52*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/01/14 12:52*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/01/14 12:52*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/01/14 12:52*	*1*

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.019		ug/L		100	70 - 130
1,1,1-Trichloroethane	5.00	5.038		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.625		ug/L		112	70 - 130
1,1,2-Trichloroethane	5.00	5.789		ug/L		116	70 - 130
1,1-Dichloroethane	5.00	5.680		ug/L		114	70 - 130
1,1-Dichloroethene	5.00	5.309		ug/L		106	70 - 130
1,1-Dichloropropene	5.00	5.413		ug/L		108	70 - 130
1,2,3-Trichlorobenzene	5.00	4.980		ug/L		100	70 - 130
1,2,3-Trichloropropane	5.00	5.690		ug/L		114	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	5.00	4.311		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	5.00	5.044		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.812		ug/L		76	70 - 130
1,2-Dibromoethane	5.00	5.286		ug/L		106	70 - 130
1,2-Dichlorobenzene	5.00	5.100		ug/L		102	70 - 130
1,2-Dichloroethane	5.00	5.547		ug/L		111	70 - 130
1,2-Dichloropropane	5.00	5.570		ug/L		111	70 - 130
1,3,5-Trimethylbenzene	5.00	5.043		ug/L		101	70 - 130
1,3-Dichlorobenzene	5.00	5.254		ug/L		105	70 - 130
1,3-Dichloropropane	5.00	5.927		ug/L		119	70 - 130
1,4-Dichlorobenzene	5.00	5.258		ug/L		105	70 - 130
2,2-Dichloropropane	5.00	4.104		ug/L		82	70 - 130
2-Butanone (MEK)	25.0	24.88		ug/L		100	70 - 130
2-Chlorotoluene	5.00	5.505		ug/L		110	70 - 130
2-Hexanone	25.0	22.81		ug/L		91	70 - 130
4-Chlorotoluene	5.00	5.407		ug/L		108	70 - 130
4-Isopropyltoluene	5.00	4.752		ug/L		95	70 - 130
4-Methyl-2-pentanone (MIBK)	25.0	24.14		ug/L		97	70 - 130
Acetone	25.0	25.58	J	ug/L		102	70 - 130
Benzene	5.00	5.202		ug/L		104	70 - 130
Bromobenzene	5.00	5.234		ug/L		105	70 - 130
Bromochloromethane	5.00	4.882		ug/L		98	70 - 130
Dichlorobromomethane	5.00	4.834		ug/L		97	70 - 130
Bromoform	5.00	4.959		ug/L		99	70 - 130
Bromomethane	5.00	7.959	*	ug/L		159	70 - 130
Carbon disulfide	5.00	5.399		ug/L		108	70 - 130
Carbon tetrachloride	5.00	5.072		ug/L		101	70 - 130
Chlorobenzene	5.00	5.348		ug/L		107	70 - 130
Chlorodibromomethane	5.00	5.012		ug/L		100	70 - 130
Chloroethane	5.00	5.902		ug/L		118	70 - 130
Chloroform	5.00	5.340		ug/L		107	70 - 130
Chloromethane	5.00	5.641		ug/L		113	70 - 130
cis-1,2-Dichloroethene	5.00	5.576		ug/L		112	70 - 130
cis-1,3-Dichloropropene	5.00	5.049		ug/L		101	70 - 130
Dibromomethane	5.00	4.844		ug/L		97	70 - 130
Dichlorodifluoromethane	5.00	5.106		ug/L		102	70 - 130
Ethylbenzene	5.00	5.201		ug/L		104	70 - 130
Hexachlorobutadiene	5.00	4.414		ug/L		88	70 - 130
Isopropylbenzene	5.00	4.853		ug/L		97	70 - 130
Methyl tert-butyl ether	5.00	4.823		ug/L		96	70 - 130
Methylene Chloride	5.00	4.987	J	ug/L		100	70 - 130
Naphthalene	5.00	4.165	J	ug/L		83	70 - 130
n-Butylbenzene	5.00	4.547		ug/L		91	70 - 130
N-Propylbenzene	5.00	5.195		ug/L		104	70 - 130
sec-Butylbenzene	5.00	4.954		ug/L		99	70 - 130
Styrene	5.00	4.915		ug/L		98	70 - 130
tert-Butylbenzene	5.00	4.925		ug/L		99	70 - 130
Tetrachloroethene	5.00	5.020		ug/L		100	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	5.00	5.402		ug/L		108	70 - 130
trans-1,2-Dichloroethene	5.00	4.931		ug/L		99	70 - 130
trans-1,3-Dichloropropene	5.00	5.062		ug/L		101	70 - 130
Trichloroethene	5.00	4.848		ug/L		97	70 - 130
Trichlorofluoromethane	5.00	5.589		ug/L		112	70 - 130
Vinyl chloride	5.00	5.951		ug/L		119	70 - 130
Xylenes, Total	10.0	10.07		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 490-202626/4
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.001		ug/L		100	70 - 130	0	20
1,1,1-Trichloroethane	5.00	5.294		ug/L		106	70 - 130	5	20
1,1,2,2-Tetrachloroethane	5.00	5.716		ug/L		114	70 - 130	2	20
1,1,2-Trichloroethane	5.00	5.643		ug/L		113	70 - 130	3	20
1,1-Dichloroethane	5.00	5.837		ug/L		117	70 - 130	3	20
1,1-Dichloroethene	5.00	5.441		ug/L		109	70 - 130	2	20
1,1-Dichloropropene	5.00	5.210		ug/L		104	70 - 130	4	20
1,2,3-Trichlorobenzene	5.00	3.996	*	ug/L		80	70 - 130	22	20
1,2,3-Trichloropropane	5.00	5.179		ug/L		104	70 - 130	9	20
1,2,4-Trichlorobenzene	5.00	4.135		ug/L		83	70 - 130	4	20
1,2,4-Trimethylbenzene	5.00	5.110		ug/L		102	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	5.00	4.589		ug/L		92	70 - 130	19	20
1,2-Dibromoethane	5.00	5.329		ug/L		107	70 - 130	1	20
1,2-Dichlorobenzene	5.00	5.209		ug/L		104	70 - 130	2	20
1,2-Dichloroethane	5.00	5.586		ug/L		112	70 - 130	1	20
1,2-Dichloropropane	5.00	5.088		ug/L		102	70 - 130	9	20
1,3,5-Trimethylbenzene	5.00	4.989		ug/L		100	70 - 130	1	20
1,3-Dichlorobenzene	5.00	5.169		ug/L		103	70 - 130	2	20
1,3-Dichloropropane	5.00	5.833		ug/L		117	70 - 130	2	20
1,4-Dichlorobenzene	5.00	5.038		ug/L		101	70 - 130	4	20
2,2-Dichloropropane	5.00	4.302		ug/L		86	70 - 130	5	20
2-Butanone (MEK)	25.0	22.72		ug/L		91	70 - 130	9	20
2-Chlorotoluene	5.00	5.600		ug/L		112	70 - 130	2	20
2-Hexanone	25.0	23.56		ug/L		94	70 - 130	3	20
4-Chlorotoluene	5.00	5.298		ug/L		106	70 - 130	2	20
4-Isopropyltoluene	5.00	4.746		ug/L		95	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	25.0	24.78		ug/L		99	70 - 130	3	20
Acetone	25.0	24.68	J	ug/L		99	70 - 130	4	20
Benzene	5.00	5.283		ug/L		106	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-202626/4
Matrix: Water
Analysis Batch: 202626

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
Bromobenzene			5.00	5.232		ug/L		105	70 - 130	0	20
Bromochloromethane			5.00	4.938		ug/L		99	70 - 130	1	20
Dichlorobromomethane			5.00	4.916		ug/L		98	70 - 130	2	20
Bromoform			5.00	4.775		ug/L		95	70 - 130	4	20
Bromomethane			5.00	7.783	*	ug/L		156	70 - 130	2	20
Carbon disulfide			5.00	5.334		ug/L		107	70 - 130	1	20
Carbon tetrachloride			5.00	4.998		ug/L		100	70 - 130	1	20
Chlorobenzene			5.00	5.346		ug/L		107	70 - 130	0	20
Chlorodibromomethane			5.00	4.794		ug/L		96	70 - 130	4	20
Chloroethane			5.00	6.106		ug/L		122	70 - 130	3	20
Chloroform			5.00	5.391		ug/L		108	70 - 130	1	20
Chloromethane			5.00	5.512		ug/L		110	70 - 130	2	20
cis-1,2-Dichloroethene			5.00	5.652		ug/L		113	70 - 130	1	20
cis-1,3-Dichloropropene			5.00	5.084		ug/L		102	70 - 130	1	20
Dibromomethane			5.00	4.931		ug/L		99	70 - 130	2	20
Dichlorodifluoromethane			5.00	5.130		ug/L		103	70 - 130	0	20
Ethylbenzene			5.00	5.190		ug/L		104	70 - 130	0	20
Hexachlorobutadiene			5.00	4.078		ug/L		82	70 - 130	8	20
Isopropylbenzene			5.00	4.955		ug/L		99	70 - 130	2	20
Methyl tert-butyl ether			5.00	4.844		ug/L		97	70 - 130	0	20
Methylene Chloride			5.00	5.329		ug/L		107	70 - 130	7	20
Naphthalene			5.00	3.510	J	ug/L		70	70 - 130	17	20
n-Butylbenzene			5.00	4.578		ug/L		92	70 - 130	1	20
N-Propylbenzene			5.00	5.191		ug/L		104	70 - 130	0	20
sec-Butylbenzene			5.00	4.842		ug/L		97	70 - 130	2	20
Styrene			5.00	5.147		ug/L		103	70 - 130	5	20
tert-Butylbenzene			5.00	4.778		ug/L		96	70 - 130	3	20
Tetrachloroethene			5.00	5.113		ug/L		102	70 - 130	2	20
Toluene			5.00	5.398		ug/L		108	70 - 130	0	20
trans-1,2-Dichloroethene			5.00	5.098		ug/L		102	70 - 130	3	20
trans-1,3-Dichloropropene			5.00	4.894		ug/L		98	70 - 130	3	20
Trichloroethene			5.00	4.608		ug/L		92	70 - 130	5	20
Trichlorofluoromethane			5.00	5.368		ug/L		107	70 - 130	4	20
Vinyl chloride			5.00	5.713		ug/L		114	70 - 130	4	20
Xylenes, Total			10.0	9.705		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*

QC Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-209559/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 22:20	1
Manganese	ND		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 22:20	1

Lab Sample ID: LCS 480-209559/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.443		mg/L		94	85 - 115
Manganese	0.201	0.2008		mg/L		100	85 - 115

Lab Sample ID: 480-69821-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		10.0	9.500		mg/L		95	70 - 130
Manganese	0.102		0.201	0.3035		mg/L		100	70 - 130

Lab Sample ID: 480-69821-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.544		mg/L		95	70 - 130	0	20
Manganese	0.102		0.201	0.3031		mg/L		100	70 - 130	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

GC/MS VOA

Analysis Batch: 202626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69823-1	CC-15 (RAW)	Total/NA	Water	524.2	
480-69823-3	CC-15 (GAC1)	Total/NA	Water	524.2	
480-69823-4	CC-15 (GAC2)	Total/NA	Water	524.2	
LCS 490-202626/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 490-202626/4	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 490-202626/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 209559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69821-A-2-B MS	Matrix Spike	Total/NA	Water	200.7	
480-69821-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
480-69823-1	CC-15 (RAW)	Total/NA	Water	200.7	
480-69823-2	CC-15 (POST FILTER)	Total/NA	Water	200.7	
LCS 480-209559/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-209559/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 210030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69821-A-2-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	209559
480-69821-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	209559
480-69823-1	CC-15 (RAW)	Total/NA	Water	200.7 Rev 4.4	209559
480-69823-2	CC-15 (POST FILTER)	Total/NA	Water	200.7 Rev 4.4	209559
LCS 480-209559/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	209559
MB 480-209559/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	209559

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

Client Sample ID: CC-15 (RAW)

Lab Sample ID: 480-69823-1

Date Collected: 10/20/14 12:00
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 19:47	EML	TAL NSH
Total/NA	Prep	200.7			209559	10/23/14 12:22	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	210030	10/24/14 23:44	LMH	TAL BUF

Client Sample ID: CC-15 (POST FILTER)

Lab Sample ID: 480-69823-2

Date Collected: 10/20/14 12:02
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			209559	10/23/14 12:22	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	210030	10/24/14 23:47	LMH	TAL BUF

Client Sample ID: CC-15 (GAC1)

Lab Sample ID: 480-69823-3

Date Collected: 10/20/14 12:05
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 20:13	EML	TAL NSH

Client Sample ID: CC-15 (GAC2)

Lab Sample ID: 480-69823-4

Date Collected: 10/20/14 12:10
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 20:39	EML	TAL NSH

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14 *

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Carbon disulfide
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	o-Xylene
524.2		Water	t-Butanol

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	Acrylonitrile
524.2		Water	Dichlorofluoromethane
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

* Certification renewal pending - certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL NSH
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69823-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-69823-1	CC-15 (RAW)	Water	10/20/14 12:00	10/22/14 09:00
480-69823-2	CC-15 (POST FILTER)	Water	10/20/14 12:02	10/22/14 09:00
480-69823-3	CC-15 (GAC1)	Water	10/20/14 12:05	10/22/14 09:00
480-69823-4	CC-15 (GAC2)	Water	10/20/14 12:10	10/22/14 09:00

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-69823-1

Login Number: 69823
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	LAB TO CHECK

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-69823-1

Login Number: 69823
List Number: 2
Creator: McBride, Mike

List Source: TestAmerica Nashville
List Creation: 10/30/14 01:54 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Re

480-69823 Chain of Custody

TestAmerica

04-8963.1

1 of 1

Client Information	Sampler: T Zakarian	Lab PM: Brown, Shali
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com
Company: ARCADIS U.S., Inc.		Job #: MA0000725
Address: 1 Executive Drive Suite 303	Due Date Requested: STD	
City: Chelmsford	TAT Requested (days):	
State, Zip: MA, 01824		
Phone:	PO #:	
Email: chuck.castelluccio@arcadis-us.com	WO #:	
Project Name: FORD Tibbetts Road Site E101274	Project #: 49002494	
Site:	SSOW#:	

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list (Buffalo)	200.7 - Iron/Manganese (Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-15 (Raw)	10/20/14	1200	G	W			X	X		
CC-15 (Post Filter)	↓	1202	G	W				X		
CC-15 (GAC1)	↓	1205	G	W			X			
CC-15 (GAC2)	↓	1210	G	W			X			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/21/14 1800	ARCADIS		10/22/14 0900	TA CAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #2 3.2

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: 480-69818-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
11/5/2014 2:42:11 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Job ID: 480-69818-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69818-1

Comments
No additional comments.

Receipt
The samples were received on 10/22/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 202626 and 202894 recovered outside control limits for the following analytes: bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 524.2: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 202626 recovered outside control limits for the following analytes: 1,2,3-trichlorobenzene.

Method(s) 524.2: The method blank for batch 202626 and 202894 contained chloroform, chloromethane, and trichloroethene 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 was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69818-1

Client Sample ID: CC-04 (RAW) — Lab Sample ID: 480-69818-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.129	J	0.500	0.0800	ug/L	1		524.2	Total/NA
Toluene	0.0741	J	0.500	0.0700	ug/L	1		524.2	Total/NA
trans-1,2-Dichloroethene	0.528		0.500	0.0700	ug/L	1		524.2	Total/NA
Trichloroethene	4.59	B	0.500	0.0800	ug/L	1		524.2	Total/NA
cis-1,2-Dichloroethene - DL	43.4		2.50	0.550	ug/L	5		524.2	Total/NA
Iron	0.369		0.0500	0.0193	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.127		0.00300	0.000400	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: CC-04 (POST SOFTENER) — Lab Sample ID: 480-69818-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.0221	J	0.0500	0.0193	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: CC-04 (GAC IN) — Lab Sample ID: 480-69818-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.66	J	50.0	1.23	ug/L	1		524.2	Total/NA
cis-1,2-Dichloroethene	2.23		0.500	0.110	ug/L	1		524.2	Total/NA
Toluene	0.561		0.500	0.0700	ug/L	1		524.2	Total/NA
Trichloroethene	0.171	J B	0.500	0.0800	ug/L	1		524.2	Total/NA

Client Sample ID: CC-04 (GAC1) — Lab Sample ID: 480-69818-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.178	J B	0.500	0.140	ug/L	1		524.2	Total/NA
Trichloroethene	0.0830	J B	0.500	0.0800	ug/L	1		524.2	Total/NA

Client Sample ID: CC-04 (GAC2) — Lab Sample ID: 480-69818-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69818-1

Client Sample ID: CC-04 (RAW)

Lab Sample ID: 480-69818-1

Date Collected: 10/20/14 11:30
Date Received: 10/22/14 09:00

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 15:01	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 15:01	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 15:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 15:01	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 15:01	1
1,1-Dichloroethene	**0.129**	**J**	0.500	0.0800	ug/L			11/01/14 15:01	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 15:01	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 15:01	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 15:01	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 15:01	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 15:01	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 15:01	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 15:01	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 15:01	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 15:01	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 15:01	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 15:01	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 15:01	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 15:01	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 15:01	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 15:01	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 15:01	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 15:01	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 15:01	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 15:01	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 15:01	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 15:01	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 15:01	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 15:01	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 15:01	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 15:01	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 15:01	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 15:01	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 15:01	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 15:01	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 15:01	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 15:01	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 15:01	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 15:01	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 15:01	1

Client Sample ID: CC-04 (RAW)

Lab Sample ID: 480-69818-1

Date Collected: 10/20/14 11:30

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 15:01	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 15:01	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 15:01	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 15:01	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 15:01	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 15:01	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 15:01	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 15:01	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 15:01	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 15:01	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 15:01	1
Toluene	**0.0741**	**J**	0.500	0.0700	ug/L			11/01/14 15:01	1
trans-1,2-Dichloroethene	**0.528**		0.500	0.0700	ug/L			11/01/14 15:01	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 15:01	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 15:01	1
Trichloroethene	**4.59**	**B**	0.500	0.0800	ug/L			11/01/14 15:01	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 15:01	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 15:01	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 15:01	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 15:01	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 15:01	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/01/14 15:01*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/01/14 15:01*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/01/14 15:01*	*1*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*11/01/14 15:01*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**43.4**		2.50	0.550	ug/L			11/03/14 03:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*11/03/14 03:30*	*5*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*11/03/14 03:30*	*5*
Toluene-d8 (Surr)	*100*		*70 - 130*		*11/03/14 03:30*	*5*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/03/14 03:30*	*5*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.369**		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 23:13	1
Manganese	**0.127**		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 23:13	1

Client Sample ID: CC-04 (POST SOFTENER)

Lab Sample ID: 480-69818-2

Date Collected: 10/20/14 11:35

Matrix: Water

Date Received: 10/22/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.0221**	**J**	0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 23:16	1
Manganese	ND		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 23:16	1

Client Sample ID: CC-04 (GAC IN)

Lab Sample ID: 480-69818-3

Date Collected: 10/20/14 11:40

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 15:27	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 15:27	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 15:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 15:27	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 15:27	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 15:27	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 15:27	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 15:27	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 15:27	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 15:27	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 15:27	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 15:27	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 15:27	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 15:27	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 15:27	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 15:27	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 15:27	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 15:27	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 15:27	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 15:27	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 15:27	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 15:27	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 15:27	1
Acetone	**4.66**	**J**	50.0	1.23	ug/L			11/01/14 15:27	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 15:27	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 15:27	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 15:27	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 15:27	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 15:27	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 15:27	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 15:27	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 15:27	1

Client Sample ID: CC-04 (GAC IN)

Lab Sample ID: 480-69818-3

Date Collected: 10/20/14 11:40

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		0.500	0.130	ug/L			11/01/14 15:27	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 15:27	1
cis-1,2-Dichloroethene	**2.23**		0.500	0.110	ug/L			11/01/14 15:27	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 15:27	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 15:27	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 15:27	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 15:27	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 15:27	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 15:27	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 15:27	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 15:27	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 15:27	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 15:27	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 15:27	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 15:27	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 15:27	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 15:27	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 15:27	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 15:27	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 15:27	1
Toluene	**0.561**		0.500	0.0700	ug/L			11/01/14 15:27	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 15:27	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 15:27	1
Trichloroethene	**0.171**	**J B**	0.500	0.0800	ug/L			11/01/14 15:27	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 15:27	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 15:27	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 15:27	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 15:27	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 15:27	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 130*		*11/01/14 15:27*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/01/14 15:27*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/01/14 15:27*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/01/14 15:27*	*1*

Client Sample ID: CC-04 (GAC1)

Lab Sample ID: 480-69818-4

Date Collected: 10/20/14 11:45

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 15:53	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 15:53	1

Client Sample ID: CC-04 (GAC1)

Lab Sample ID: 480-69818-4

Date Collected: 10/20/14 11:45

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 15:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 15:53	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 15:53	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 15:53	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 15:53	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 15:53	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 15:53	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 15:53	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 15:53	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 15:53	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 15:53	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 15:53	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 15:53	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 15:53	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 15:53	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 15:53	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 15:53	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 15:53	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 15:53	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 15:53	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 15:53	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 15:53	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 15:53	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 15:53	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 15:53	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 15:53	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 15:53	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 15:53	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 15:53	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 15:53	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 15:53	1
Chloromethane	**0.178**	**J B**	0.500	0.140	ug/L			11/01/14 15:53	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 15:53	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 15:53	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 15:53	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 15:53	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 15:53	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 15:53	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 15:53	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 15:53	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 15:53	1

Client Sample ID: CC-04 (GAC1)

Lab Sample ID: 480-69818-4

Date Collected: 10/20/14 11:45

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 15:53	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 15:53	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 15:53	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 15:53	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 15:53	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 15:53	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 15:53	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 15:53	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 15:53	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 15:53	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 15:53	1
Trichloroethene	**0.0830**	**J B**	0.500	0.0800	ug/L			11/01/14 15:53	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 15:53	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 15:53	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 15:53	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 15:53	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 15:53	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/01/14 15:53*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*11/01/14 15:53*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/01/14 15:53*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/01/14 15:53*	*1*

Client Sample ID: CC-04 (GAC2)

Lab Sample ID: 480-69818-5

Date Collected: 10/20/14 11:50

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 16:19	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 16:19	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 16:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 16:19	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 16:19	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 16:19	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 16:19	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 16:19	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 16:19	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 16:19	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 16:19	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 16:19	1

Client Sample ID: CC-04 (GAC2)

Lab Sample ID: 480-69818-5

Date Collected: 10/20/14 11:50

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 16:19	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 16:19	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 16:19	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 16:19	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 16:19	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 16:19	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 16:19	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 16:19	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 16:19	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 16:19	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 16:19	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 16:19	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 16:19	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 16:19	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 16:19	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 16:19	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 16:19	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 16:19	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 16:19	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 16:19	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 16:19	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 16:19	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 16:19	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 16:19	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 16:19	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 16:19	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 16:19	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 16:19	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 16:19	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 16:19	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 16:19	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 16:19	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 16:19	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 16:19	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 16:19	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 16:19	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 16:19	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 16:19	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 16:19	1

Client Sample ID: CC-04 (GAC2)

Lab Sample ID: 480-69818-5

Date Collected: 10/20/14 11:50

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 16:19	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 16:19	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 16:19	1
Trichloroethene	ND		0.500	0.0800	ug/L			11/01/14 16:19	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 16:19	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 16:19	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 16:19	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 16:19	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 16:19	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*11/01/14 16:19*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/01/14 16:19*	*1*
Toluene-d8 (Surr)	*107*		*70 - 130*		*11/01/14 16:19*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/01/14 16:19*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69818-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-69818-1	CC-04 (RAW)	106	99	107	96
480-69818-1 - DL	CC-04 (RAW)	105	100	100	93
480-69818-3	CC-04 (GAC IN)	110	98	105	93
480-69818-4	CC-04 (GAC1)	107	103	107	94
480-69818-5	CC-04 (GAC2)	104	99	107	94
LCS 490-202626/3	Lab Control Sample	106	96	107	95
LCS 490-202894/3	Lab Control Sample	107	98	102	92
LCSD 490-202626/4	Lab Control Sample Dup	108	100	105	96
LCSD 490-202894/4	Lab Control Sample Dup	104	95	101	93
MB 490-202626/6	Method Blank	106	99	104	94
MB 490-202894/6	Method Blank	102	93	99	94

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-202626/6
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 12:52	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
1,2,3-Trichlorobenzene	ND		0.500	0.120	ug/L			11/01/14 12:52	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 12:52	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 12:52	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 12:52	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 12:52	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 12:52	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 12:52	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 12:52	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 12:52	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 12:52	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 12:52	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 12:52	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 12:52	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Chloroform	0.2097	J	0.500	0.130	ug/L			11/01/14 12:52	1
Chloromethane	0.3368	J	0.500	0.140	ug/L			11/01/14 12:52	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 12:52	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 12:52	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 12:52	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-202626/6
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 12:52	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 12:52	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 12:52	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 12:52	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 12:52	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 12:52	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 12:52	1
Trichloroethene	0.09305	J	0.500	0.0800	ug/L			11/01/14 12:52	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 12:52	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 12:52	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 12:52	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 12:52	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 12:52	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 12:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/01/14 12:52*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/01/14 12:52*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/01/14 12:52*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/01/14 12:52*	*1*

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.019		ug/L		100	70 - 130
1,1,1-Trichloroethane	5.00	5.038		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.625		ug/L		112	70 - 130
1,1,2-Trichloroethane	5.00	5.789		ug/L		116	70 - 130
1,1-Dichloroethane	5.00	5.680		ug/L		114	70 - 130
1,1-Dichloroethene	5.00	5.309		ug/L		106	70 - 130
1,1-Dichloropropene	5.00	5.413		ug/L		108	70 - 130
1,2,3-Trichlorobenzene	5.00	4.980		ug/L		100	70 - 130
1,2,3-Trichloropropane	5.00	5.690		ug/L		114	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	5.00	4.311		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	5.00	5.044		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.812		ug/L		76	70 - 130
1,2-Dibromoethane	5.00	5.286		ug/L		106	70 - 130
1,2-Dichlorobenzene	5.00	5.100		ug/L		102	70 - 130
1,2-Dichloroethane	5.00	5.547		ug/L		111	70 - 130
1,2-Dichloropropane	5.00	5.570		ug/L		111	70 - 130
1,3,5-Trimethylbenzene	5.00	5.043		ug/L		101	70 - 130
1,3-Dichlorobenzene	5.00	5.254		ug/L		105	70 - 130
1,3-Dichloropropane	5.00	5.927		ug/L		119	70 - 130
1,4-Dichlorobenzene	5.00	5.258		ug/L		105	70 - 130
2,2-Dichloropropane	5.00	4.104		ug/L		82	70 - 130
2-Butanone (MEK)	25.0	24.88		ug/L		100	70 - 130
2-Chlorotoluene	5.00	5.505		ug/L		110	70 - 130
2-Hexanone	25.0	22.81		ug/L		91	70 - 130
4-Chlorotoluene	5.00	5.407		ug/L		108	70 - 130
4-Isopropyltoluene	5.00	4.752		ug/L		95	70 - 130
4-Methyl-2-pentanone (MIBK)	25.0	24.14		ug/L		97	70 - 130
Acetone	25.0	25.58	J	ug/L		102	70 - 130
Benzene	5.00	5.202		ug/L		104	70 - 130
Bromobenzene	5.00	5.234		ug/L		105	70 - 130
Bromochloromethane	5.00	4.882		ug/L		98	70 - 130
Dichlorobromomethane	5.00	4.834		ug/L		97	70 - 130
Bromoform	5.00	4.959		ug/L		99	70 - 130
Bromomethane	5.00	7.959	*	ug/L		159	70 - 130
Carbon disulfide	5.00	5.399		ug/L		108	70 - 130
Carbon tetrachloride	5.00	5.072		ug/L		101	70 - 130
Chlorobenzene	5.00	5.348		ug/L		107	70 - 130
Chlorodibromomethane	5.00	5.012		ug/L		100	70 - 130
Chloroethane	5.00	5.902		ug/L		118	70 - 130
Chloroform	5.00	5.340		ug/L		107	70 - 130
Chloromethane	5.00	5.641		ug/L		113	70 - 130
cis-1,2-Dichloroethene	5.00	5.576		ug/L		112	70 - 130
cis-1,3-Dichloropropene	5.00	5.049		ug/L		101	70 - 130
Dibromomethane	5.00	4.844		ug/L		97	70 - 130
Dichlorodifluoromethane	5.00	5.106		ug/L		102	70 - 130
Ethylbenzene	5.00	5.201		ug/L		104	70 - 130
Hexachlorobutadiene	5.00	4.414		ug/L		88	70 - 130
Isopropylbenzene	5.00	4.853		ug/L		97	70 - 130
Methyl tert-butyl ether	5.00	4.823		ug/L		96	70 - 130
Methylene Chloride	5.00	4.987	J	ug/L		100	70 - 130
Naphthalene	5.00	4.165	J	ug/L		83	70 - 130
n-Butylbenzene	5.00	4.547		ug/L		91	70 - 130
N-Propylbenzene	5.00	5.195		ug/L		104	70 - 130
sec-Butylbenzene	5.00	4.954		ug/L		99	70 - 130
Styrene	5.00	4.915		ug/L		98	70 - 130
tert-Butylbenzene	5.00	4.925		ug/L		99	70 - 130
Tetrachloroethene	5.00	5.020		ug/L		100	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	5.00	5.402		ug/L		108	70 - 130
trans-1,2-Dichloroethene	5.00	4.931		ug/L		99	70 - 130
trans-1,3-Dichloropropene	5.00	5.062		ug/L		101	70 - 130
Trichloroethene	5.00	4.848		ug/L		97	70 - 130
Trichlorofluoromethane	5.00	5.589		ug/L		112	70 - 130
Vinyl chloride	5.00	5.951		ug/L		119	70 - 130
Xylenes, Total	10.0	10.07		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 490-202626/4
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.001		ug/L		100	70 - 130	0	20
1,1,1-Trichloroethane	5.00	5.294		ug/L		106	70 - 130	5	20
1,1,2,2-Tetrachloroethane	5.00	5.716		ug/L		114	70 - 130	2	20
1,1,2-Trichloroethane	5.00	5.643		ug/L		113	70 - 130	3	20
1,1-Dichloroethane	5.00	5.837		ug/L		117	70 - 130	3	20
1,1-Dichloroethene	5.00	5.441		ug/L		109	70 - 130	2	20
1,1-Dichloropropene	5.00	5.210		ug/L		104	70 - 130	4	20
1,2,3-Trichlorobenzene	5.00	3.996	*	ug/L		80	70 - 130	22	20
1,2,3-Trichloropropane	5.00	5.179		ug/L		104	70 - 130	9	20
1,2,4-Trichlorobenzene	5.00	4.135		ug/L		83	70 - 130	4	20
1,2,4-Trimethylbenzene	5.00	5.110		ug/L		102	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	5.00	4.589		ug/L		92	70 - 130	19	20
1,2-Dibromoethane	5.00	5.329		ug/L		107	70 - 130	1	20
1,2-Dichlorobenzene	5.00	5.209		ug/L		104	70 - 130	2	20
1,2-Dichloroethane	5.00	5.586		ug/L		112	70 - 130	1	20
1,2-Dichloropropane	5.00	5.088		ug/L		102	70 - 130	9	20
1,3,5-Trimethylbenzene	5.00	4.989		ug/L		100	70 - 130	1	20
1,3-Dichlorobenzene	5.00	5.169		ug/L		103	70 - 130	2	20
1,3-Dichloropropane	5.00	5.833		ug/L		117	70 - 130	2	20
1,4-Dichlorobenzene	5.00	5.038		ug/L		101	70 - 130	4	20
2,2-Dichloropropane	5.00	4.302		ug/L		86	70 - 130	5	20
2-Butanone (MEK)	25.0	22.72		ug/L		91	70 - 130	9	20
2-Chlorotoluene	5.00	5.600		ug/L		112	70 - 130	2	20
2-Hexanone	25.0	23.56		ug/L		94	70 - 130	3	20
4-Chlorotoluene	5.00	5.298		ug/L		106	70 - 130	2	20
4-Isopropyltoluene	5.00	4.746		ug/L		95	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	25.0	24.78		ug/L		99	70 - 130	3	20
Acetone	25.0	24.68	J	ug/L		99	70 - 130	4	20
Benzene	5.00	5.283		ug/L		106	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-202626/4
Matrix: Water
Analysis Batch: 202626

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
Bromobenzene	5.00	5.232		ug/L		105	70 - 130	0	20
Bromochloromethane	5.00	4.938		ug/L		99	70 - 130	1	20
Dichlorobromomethane	5.00	4.916		ug/L		98	70 - 130	2	20
Bromoform	5.00	4.775		ug/L		95	70 - 130	4	20
Bromomethane	5.00	7.783	*	ug/L		156	70 - 130	2	20
Carbon disulfide	5.00	5.334		ug/L		107	70 - 130	1	20
Carbon tetrachloride	5.00	4.998		ug/L		100	70 - 130	1	20
Chlorobenzene	5.00	5.346		ug/L		107	70 - 130	0	20
Chlorodibromomethane	5.00	4.794		ug/L		96	70 - 130	4	20
Chloroethane	5.00	6.106		ug/L		122	70 - 130	3	20
Chloroform	5.00	5.391		ug/L		108	70 - 130	1	20
Chloromethane	5.00	5.512		ug/L		110	70 - 130	2	20
cis-1,2-Dichloroethene	5.00	5.652		ug/L		113	70 - 130	1	20
cis-1,3-Dichloropropene	5.00	5.084		ug/L		102	70 - 130	1	20
Dibromomethane	5.00	4.931		ug/L		99	70 - 130	2	20
Dichlorodifluoromethane	5.00	5.130		ug/L		103	70 - 130	0	20
Ethylbenzene	5.00	5.190		ug/L		104	70 - 130	0	20
Hexachlorobutadiene	5.00	4.078		ug/L		82	70 - 130	8	20
Isopropylbenzene	5.00	4.955		ug/L		99	70 - 130	2	20
Methyl tert-butyl ether	5.00	4.844		ug/L		97	70 - 130	0	20
Methylene Chloride	5.00	5.329		ug/L		107	70 - 130	7	20
Naphthalene	5.00	3.510	J	ug/L		70	70 - 130	17	20
n-Butylbenzene	5.00	4.578		ug/L		92	70 - 130	1	20
N-Propylbenzene	5.00	5.191		ug/L		104	70 - 130	0	20
sec-Butylbenzene	5.00	4.842		ug/L		97	70 - 130	2	20
Styrene	5.00	5.147		ug/L		103	70 - 130	5	20
tert-Butylbenzene	5.00	4.778		ug/L		96	70 - 130	3	20
Tetrachloroethene	5.00	5.113		ug/L		102	70 - 130	2	20
Toluene	5.00	5.398		ug/L		108	70 - 130	0	20
trans-1,2-Dichloroethene	5.00	5.098		ug/L		102	70 - 130	3	20
trans-1,3-Dichloropropene	5.00	4.894		ug/L		98	70 - 130	3	20
Trichloroethene	5.00	4.608		ug/L		92	70 - 130	5	20
Trichlorofluoromethane	5.00	5.368		ug/L		107	70 - 130	4	20
Vinyl chloride	5.00	5.713		ug/L		114	70 - 130	4	20
Xylenes, Total	10.0	9.705		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 490-202894/6
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/03/14 03:04	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-202894/6
Matrix: Water
Analysis Batch: 202894

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		0.500	0.0700	ug/L			11/03/14 03:04	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/03/14 03:04	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/03/14 03:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/03/14 03:04	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/03/14 03:04	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
1,2,3-Trichlorobenzene	ND		0.500	0.120	ug/L			11/03/14 03:04	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/03/14 03:04	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/03/14 03:04	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/03/14 03:04	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/03/14 03:04	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/03/14 03:04	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/03/14 03:04	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/03/14 03:04	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/03/14 03:04	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/03/14 03:04	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/03/14 03:04	1
2-Hexanone	ND		10.0	0.810	ug/L			11/03/14 03:04	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/03/14 03:04	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/03/14 03:04	1
Acetone	ND		50.0	1.23	ug/L			11/03/14 03:04	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/03/14 03:04	1
Benzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Bromobenzene	ND		0.500	0.100	ug/L			11/03/14 03:04	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/03/14 03:04	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Bromoform	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Bromomethane	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/03/14 03:04	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/03/14 03:04	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Chloroethane	ND		0.500	0.150	ug/L			11/03/14 03:04	1
Chloroform	0.1905	J	0.500	0.130	ug/L			11/03/14 03:04	1
Chloromethane	0.2411	J	0.500	0.140	ug/L			11/03/14 03:04	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/03/14 03:04	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/03/14 03:04	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/03/14 03:04	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/03/14 03:04	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/03/14 03:04	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/03/14 03:04	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/03/14 03:04	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-202894/6
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	ND		5.00	0.680	ug/L			11/03/14 03:04	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/03/14 03:04	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/03/14 03:04	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/03/14 03:04	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
o-Xylene	ND		0.500	0.100	ug/L			11/03/14 03:04	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/03/14 03:04	1
Styrene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/03/14 03:04	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
Toluene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Trichloroethene	0.09111	J	0.500	0.0800	ug/L			11/03/14 03:04	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/03/14 03:04	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/03/14 03:04	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/03/14 03:04	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/03/14 03:04	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/03/14 03:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*11/03/14 03:04*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*11/03/14 03:04*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/03/14 03:04*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/03/14 03:04*	*1*

Lab Sample ID: LCS 490-202894/3
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	4.511		ug/L		90	70 - 130
1,1,1-Trichloroethane	5.00	4.997		ug/L		100	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.019		ug/L		100	70 - 130
1,1,2-Trichloroethane	5.00	4.535		ug/L		91	70 - 130
1,1-Dichloroethane	5.00	5.239		ug/L		105	70 - 130
1,1-Dichloroethene	5.00	5.175		ug/L		104	70 - 130
1,1-Dichloropropene	5.00	4.925		ug/L		99	70 - 130
1,2,3-Trichlorobenzene	5.00	4.009		ug/L		80	70 - 130
1,2,3-Trichloropropane	5.00	4.710		ug/L		94	70 - 130
1,2,4-Trichlorobenzene	5.00	3.664		ug/L		73	70 - 130
1,2,4-Trimethylbenzene	5.00	4.698		ug/L		94	70 - 130
1,2-Dibromoethane	5.00	4.593		ug/L		92	70 - 130
1,2-Dichlorobenzene	5.00	4.725		ug/L		94	70 - 130
1,2-Dichloroethane	5.00	5.250		ug/L		105	70 - 130
1,2-Dichloropropane	5.00	5.051		ug/L		101	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202894/3
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	5.00	4.616		ug/L		92	70 - 130
1,3-Dichlorobenzene	5.00	4.777		ug/L		96	70 - 130
1,3-Dichloropropane	5.00	4.921		ug/L		98	70 - 130
1,4-Dichlorobenzene	5.00	4.889		ug/L		98	70 - 130
2,2-Dichloropropane	5.00	4.147		ug/L		83	70 - 130
2-Butanone (MEK)	25.0	20.74		ug/L		83	70 - 130
2-Chlorotoluene	5.00	4.886		ug/L		98	70 - 130
2-Hexanone	25.0	21.00		ug/L		84	70 - 130
4-Chlorotoluene	5.00	4.824		ug/L		96	70 - 130
4-Isopropyltoluene	5.00	4.615		ug/L		92	70 - 130
4-Methyl-2-pentanone (MIBK)	25.0	20.93		ug/L		84	70 - 130
Acetone	25.0	20.84	J	ug/L		83	70 - 130
Benzene	5.00	4.908		ug/L		98	70 - 130
Bromobenzene	5.00	4.807		ug/L		96	70 - 130
Bromochloromethane	5.00	4.787		ug/L		96	70 - 130
Dichlorobromomethane	5.00	4.684		ug/L		94	70 - 130
Bromoform	5.00	4.517		ug/L		90	70 - 130
Bromomethane	5.00	7.497	*	ug/L		150	70 - 130
Carbon disulfide	5.00	5.137		ug/L		103	70 - 130
Carbon tetrachloride	5.00	4.978		ug/L		100	70 - 130
Chlorobenzene	5.00	5.022		ug/L		100	70 - 130
Chlorodibromomethane	5.00	4.444		ug/L		89	70 - 130
Chloroethane	5.00	5.499		ug/L		110	70 - 130
Chloroform	5.00	5.228		ug/L		105	70 - 130
Chloromethane	5.00	5.502		ug/L		110	70 - 130
cis-1,2-Dichloroethene	5.00	5.111		ug/L		102	70 - 130
cis-1,3-Dichloropropene	5.00	4.338		ug/L		87	70 - 130
Dibromomethane	5.00	4.538		ug/L		91	70 - 130
Dichlorodifluoromethane	5.00	4.632		ug/L		93	70 - 130
Ethylbenzene	5.00	4.703		ug/L		94	70 - 130
Hexachlorobutadiene	5.00	4.318		ug/L		86	70 - 130
Isopropylbenzene	5.00	4.609		ug/L		92	70 - 130
Methyl tert-butyl ether	5.00	4.353		ug/L		87	70 - 130
Methylene Chloride	5.00	4.897	J	ug/L		98	70 - 130
n-Butylbenzene	5.00	4.113		ug/L		82	70 - 130
N-Propylbenzene	5.00	4.587		ug/L		92	70 - 130
sec-Butylbenzene	5.00	4.569		ug/L		91	70 - 130
Styrene	5.00	4.612		ug/L		92	70 - 130
tert-Butylbenzene	5.00	4.454		ug/L		89	70 - 130
Tetrachloroethene	5.00	4.770		ug/L		95	70 - 130
Toluene	5.00	4.808		ug/L		96	70 - 130
trans-1,2-Dichloroethene	5.00	4.832		ug/L		97	70 - 130
trans-1,3-Dichloropropene	5.00	3.871		ug/L		77	70 - 130
Trichloroethene	5.00	4.984		ug/L		100	70 - 130
Trichlorofluoromethane	5.00	5.234		ug/L		105	70 - 130
Vinyl chloride	5.00	5.779		ug/L		116	70 - 130
Xylenes, Total	10.0	9.230		ug/L		92	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202894/3
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 490-202894/4
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	4.684		ug/L		94	70 - 130	4	20
1,1,1-Trichloroethane	5.00	4.684		ug/L		94	70 - 130	6	20
1,1,2,2-Tetrachloroethane	5.00	4.868		ug/L		97	70 - 130	3	20
1,1,2-Trichloroethane	5.00	4.394		ug/L		88	70 - 130	3	20
1,1-Dichloroethane	5.00	4.778		ug/L		96	70 - 130	9	20
1,1-Dichloroethene	5.00	4.762		ug/L		95	70 - 130	8	20
1,1-Dichloropropene	5.00	4.681		ug/L		94	70 - 130	5	20
1,2,3-Trichlorobenzene	5.00	3.768		ug/L		75	70 - 130	6	20
1,2,3-Trichloropropane	5.00	4.619		ug/L		92	70 - 130	2	20
1,2,4-Trichlorobenzene	5.00	3.476		ug/L		70	70 - 130	5	20
1,2,4-Trimethylbenzene	5.00	4.542		ug/L		91	70 - 130	3	20
1,2-Dibromoethane	5.00	4.489		ug/L		90	70 - 130	2	20
1,2-Dichlorobenzene	5.00	4.789		ug/L		96	70 - 130	1	20
1,2-Dichloroethane	5.00	4.929		ug/L		99	70 - 130	6	20
1,2-Dichloropropane	5.00	4.619		ug/L		92	70 - 130	9	20
1,3,5-Trimethylbenzene	5.00	4.574		ug/L		91	70 - 130	1	20
1,3-Dichlorobenzene	5.00	4.657		ug/L		93	70 - 130	3	20
1,3-Dichloropropane	5.00	4.684		ug/L		94	70 - 130	5	20
1,4-Dichlorobenzene	5.00	4.812		ug/L		96	70 - 130	2	20
2,2-Dichloropropane	5.00	3.815		ug/L		76	70 - 130	8	20
2-Butanone (MEK)	25.0	19.17		ug/L		77	70 - 130	8	20
2-Chlorotoluene	5.00	5.030		ug/L		101	70 - 130	3	20
2-Hexanone	25.0	18.83		ug/L		75	70 - 130	11	20
4-Chlorotoluene	5.00	4.750		ug/L		95	70 - 130	2	20
4-Isopropyltoluene	5.00	4.343		ug/L		87	70 - 130	6	20
4-Methyl-2-pentanone (MIBK)	25.0	20.01		ug/L		80	70 - 130	4	20
Acetone	25.0	19.95	J	ug/L		80	70 - 130	4	20
Benzene	5.00	4.696		ug/L		94	70 - 130	4	20
Bromobenzene	5.00	4.919		ug/L		98	70 - 130	2	20
Bromochloromethane	5.00	4.395		ug/L		88	70 - 130	9	20
Dichlorobromomethane	5.00	4.438		ug/L		89	70 - 130	5	20
Bromoform	5.00	4.309		ug/L		86	70 - 130	5	20
Bromomethane	5.00	6.603	*	ug/L		132	70 - 130	13	20
Carbon disulfide	5.00	4.820		ug/L		96	70 - 130	6	20
Carbon tetrachloride	5.00	4.600		ug/L		92	70 - 130	8	20
Chlorobenzene	5.00	4.999		ug/L		100	70 - 130	0	20
Chlorodibromomethane	5.00	4.318		ug/L		86	70 - 130	3	20
Chloroethane	5.00	5.278		ug/L		106	70 - 130	4	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-202894/4
Matrix: Water
Analysis Batch: 202894

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
Chloroform	5.00	4.926		ug/L		99	70 - 130	6	20
Chloromethane	5.00	5.182		ug/L		104	70 - 130	6	20
cis-1,2-Dichloroethene	5.00	4.813		ug/L		96	70 - 130	6	20
cis-1,3-Dichloropropene	5.00	4.188		ug/L		84	70 - 130	4	20
Dibromomethane	5.00	4.516		ug/L		90	70 - 130	0	20
Dichlorodifluoromethane	5.00	4.463		ug/L		89	70 - 130	4	20
Ethylbenzene	5.00	4.615		ug/L		92	70 - 130	2	20
Hexachlorobutadiene	5.00	4.209		ug/L		84	70 - 130	3	20
Isopropylbenzene	5.00	4.421		ug/L		88	70 - 130	4	20
Methyl tert-butyl ether	5.00	4.002		ug/L		80	70 - 130	8	20
Methylene Chloride	5.00	4.789	J	ug/L		96	70 - 130	2	20
n-Butylbenzene	5.00	4.109		ug/L		82	70 - 130	0	20
N-Propylbenzene	5.00	4.565		ug/L		91	70 - 130	0	20
sec-Butylbenzene	5.00	4.435		ug/L		89	70 - 130	3	20
Styrene	5.00	4.339		ug/L		87	70 - 130	6	20
tert-Butylbenzene	5.00	4.381		ug/L		88	70 - 130	2	20
Tetrachloroethene	5.00	4.530		ug/L		91	70 - 130	5	20
Toluene	5.00	4.555		ug/L		91	70 - 130	5	20
trans-1,2-Dichloroethene	5.00	4.448		ug/L		89	70 - 130	8	20
trans-1,3-Dichloropropene	5.00	3.770		ug/L		75	70 - 130	3	20
Trichloroethene	5.00	4.528		ug/L		91	70 - 130	10	20
Trichlorofluoromethane	5.00	4.733		ug/L		95	70 - 130	10	20
Vinyl chloride	5.00	5.375		ug/L		108	70 - 130	7	20
Xylenes, Total	10.0	8.989		ug/L		90	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-209559/1-A
Matrix: Water
Analysis Batch: 210030

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 22:20	1
Manganese	ND		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 22:20	1

Lab Sample ID: LCS 480-209559/2-A
Matrix: Water
Analysis Batch: 210030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.443		mg/L		94	85 - 115
Manganese	0.201	0.2008		mg/L		100	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 480-69821-A-2-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron	ND		10.0	9.500		mg/L		95	70 - 130		
Manganese	0.102		0.201	0.3035		mg/L		100	70 - 130		

Lab Sample ID: 480-69821-A-2-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 210030 — **Prep Batch: 209559**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.544		mg/L		95	70 - 130	0	20
Manganese	0.102		0.201	0.3031		mg/L		100	70 - 130	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69818-1

GC/MS VOA

Analysis Batch: 202626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69818-1	CC-04 (RAW)	Total/NA	Water	524.2	
480-69818-3	CC-04 (GAC IN)	Total/NA	Water	524.2	
480-69818-4	CC-04 (GAC1)	Total/NA	Water	524.2	
480-69818-5	CC-04 (GAC2)	Total/NA	Water	524.2	
LCS 490-202626/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 490-202626/4	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 490-202626/6	Method Blank	Total/NA	Water	524.2	

Analysis Batch: 202894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69818-1 - DL	CC-04 (RAW)	Total/NA	Water	524.2	
LCS 490-202894/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 490-202894/4	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 490-202894/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 209559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69818-1	CC-04 (RAW)	Total/NA	Water	200.7	
480-69818-2	CC-04 (POST SOFTENER)	Total/NA	Water	200.7	
480-69821-A-2-B MS	Matrix Spike	Total/NA	Water	200.7	
480-69821-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7	
LCS 480-209559/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-209559/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 210030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69818-1	CC-04 (RAW)	Total/NA	Water	200.7 Rev 4.4	209559
480-69818-2	CC-04 (POST SOFTENER)	Total/NA	Water	200.7 Rev 4.4	209559
480-69821-A-2-B MS	Matrix Spike	Total/NA	Water	200.7 Rev 4.4	209559
480-69821-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	200.7 Rev 4.4	209559
LCS 480-209559/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	209559
MB 480-209559/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	209559

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69818-1

Client Sample ID: CC-04 (RAW)

Lab Sample ID: 480-69818-1
Date Collected: 10/20/14 11:30
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 15:01	EML	TAL NSH
Total/NA	Analysis	524.2	DL	5	202894	11/03/14 03:30	EML	TAL NSH
Total/NA	Prep	200.7			209559	10/23/14 12:22	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	210030	10/24/14 23:13	LMH	TAL BUF

Client Sample ID: CC-04 (POST SOFTENER)

Lab Sample ID: 480-69818-2
Date Collected: 10/20/14 11:35
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			209559	10/23/14 12:22	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	210030	10/24/14 23:16	LMH	TAL BUF

Client Sample ID: CC-04 (GAC IN)

Lab Sample ID: 480-69818-3
Date Collected: 10/20/14 11:40
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 15:27	EML	TAL NSH

Client Sample ID: CC-04 (GAC1)

Lab Sample ID: 480-69818-4
Date Collected: 10/20/14 11:45
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 15:53	EML	TAL NSH

Client Sample ID: CC-04 (GAC2)

Lab Sample ID: 480-69818-5
Date Collected: 10/20/14 11:50
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 16:19	EML	TAL NSH

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69818-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14 *

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Carbon disulfide
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	o-Xylene
524.2		Water	t-Butanol

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	Acrylonitrile
524.2		Water	Dichlorofluoromethane
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

* Certification renewal pending - certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69818-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL NSH
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69818-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-69818-1	CC-04 (RAW)	Water	10/20/14 11:30	10/22/14 09:00
480-69818-2	CC-04 (POST SOFTENER)	Water	10/20/14 11:35	10/22/14 09:00
480-69818-3	CC-04 (GAC IN)	Water	10/20/14 11:40	10/22/14 09:00
480-69818-4	CC-04 (GAC1)	Water	10/20/14 11:45	10/22/14 09:00
480-69818-5	CC-04 (GAC2)	Water	10/20/14 11:50	10/22/14 09:00

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-69818-1

Login Number: 69818

List Source: TestAmerica Buffalo

List Number: 1

Creator: Janish, Carl M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	LAB TO CHECK

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-69818-1

Login Number: 69818
List Number: 2
Creator: McBride, Mike

List Source: TestAmerica Nashville
List Creation: 10/30/14 01:56 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custoc

480-69818 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Thomas Zuber	Lab PM: Brown, Shali	COC No: 490-24404-8963.1
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com	Page: 1 of 1
Company: ARCADIS U.S., Inc.			Job #: MA000725
Address: 1 Executive Drive Suite 303	Due Date Requested: STD		
City: Chelmsford	TAT Requested (days): STD		
State, Zip: MA, 01824			
Phone:	PO #:		
Email: chuck.castelluccio@arcadis-us.com	WO #:		
Project Name: FORD Tibbetts Road Site E101274	Project #: 49002494		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624.2_Preserved - Standard Analyte list (Buffalo)	200.7 - Iron/Manganese (Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-04 (Raw)	10/20/14	1130	G	W			X	X		
CC-04 (Post Softner)		1135	G	W				X		
CC-04 (GAC In)		1140	G	W			X			
CC-04 (GAC 1)		1145	G	W			X			
CC-04 (GAC 2)		1150	G	W			X			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/21/14 1800	ARCADIS	[signature]	10/22/14 0900	TA Buff
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: #2 3.2

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: 480-69821-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
11/5/2014 2:44:09 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD exceeds the control limits
B	Compound was found in the blank and sample.

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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Job ID: 480-69821-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-69821-1

Comments
No additional comments.

Receipt
The samples were received on 10/22/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 202626 and 202894 recovered outside control limits for the following analytes: bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 524.2: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 202626 recovered outside control limits for the following analytes: 1,2,3-trichlorobenzene.

Method(s) 524.2: The method blank for batch 202626 and 202894 contained chloroform, chloromethane, and trichloroethene 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 was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69821-1

Client Sample ID: CC-02 (RAW) — Lab Sample ID: 480-69821-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.187	J	0.500	0.0800	ug/L	1		524.2	Total/NA
Benzene	0.278	J	0.500	0.0700	ug/L	1		524.2	Total/NA
Methyl tert-butyl ether	0.146	J	0.500	0.0900	ug/L	1		524.2	Total/NA
trans-1,2-Dichloroethene	1.43		0.500	0.0700	ug/L	1		524.2	Total/NA
Trichloroethene	4.48	B	0.500	0.0800	ug/L	1		524.2	Total/NA
cis-1,2-Dichloroethene - DL	44.7		2.50	0.550	ug/L	5		524.2	Total/NA
Iron	0.0256	J	0.0500	0.0193	mg/L	1		200.7 Rev 4.4	Total/NA
Manganese	0.116		0.00300	0.000400	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: CC-02 (POST SOFTENER) — Lab Sample ID: 480-69821-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.102		0.00300	0.000400	mg/L	1		200.7 Rev 4.4	Total/NA

Client Sample ID: CC-02 (GAC 1) — Lab Sample ID: 480-69821-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.155	J	0.500	0.110	ug/L	1		524.2	Total/NA

Client Sample ID: CC-02 (GAC 2) — Lab Sample ID: 480-69821-4

No Detections.

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-69821-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.248	J B	0.500	0.140	ug/L	1		524.2	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69821-1

Client Sample ID: CC-02 (RAW)

Date Collected: 10/21/14 10:30
Date Received: 10/22/14 09:00

Lab Sample ID: 480-69821-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 18:30	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 18:30	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 18:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 18:30	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 18:30	1
1,1-Dichloroethene	**0.187**	**J**	0.500	0.0800	ug/L			11/01/14 18:30	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 18:30	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 18:30	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 18:30	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 18:30	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 18:30	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 18:30	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 18:30	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 18:30	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 18:30	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 18:30	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 18:30	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 18:30	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 18:30	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 18:30	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 18:30	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 18:30	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 18:30	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 18:30	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 18:30	1
Benzene	**0.278**	**J**	0.500	0.0700	ug/L			11/01/14 18:30	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 18:30	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 18:30	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 18:30	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 18:30	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 18:30	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 18:30	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 18:30	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 18:30	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 18:30	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 18:30	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 18:30	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 18:30	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 18:30	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 18:30	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 18:30	1

Client Sample ID: CC-02 (RAW)

Lab Sample ID: 480-69821-1

Date Collected: 10/21/14 10:30

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 18:30	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 18:30	1
Methyl tert-butyl ether	**0.146**	**J**	0.500	0.0900	ug/L			11/01/14 18:30	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 18:30	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 18:30	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 18:30	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 18:30	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 18:30	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 18:30	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 18:30	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 18:30	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
trans-1,2-Dichloroethene	**1.43**		0.500	0.0700	ug/L			11/01/14 18:30	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 18:30	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 18:30	1
Trichloroethene	**4.48**	**B**	0.500	0.0800	ug/L			11/01/14 18:30	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 18:30	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 18:30	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 18:30	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 18:30	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 18:30	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/01/14 18:30*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*11/01/14 18:30*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/01/14 18:30*	*1*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*		*11/01/14 18:30*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**44.7**		2.50	0.550	ug/L			11/03/14 03:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/03/14 03:56*	*5*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*11/03/14 03:56*	*5*
Toluene-d8 (Surr)	*102*		*70 - 130*		*11/03/14 03:56*	*5*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/03/14 03:56*	*5*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.0256**	**J**	0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 23:33	1
Manganese	**0.116**		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 23:33	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69821-1

Client Sample ID: CC-02 (POST SOFTENER)

Lab Sample ID: 480-69821-2
Date Collected: 10/21/14 10:32
Matrix: Water
Date Received: 10/22/14 09:00

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 23:36	1
Manganese	**0.102**		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 23:36	1

Client Sample ID: CC-02 (GAC 1)

Lab Sample ID: 480-69821-3
Date Collected: 10/21/14 10:35
Matrix: Water
Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 18:55	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 18:55	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 18:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 18:55	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 18:55	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 18:55	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 18:55	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 18:55	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 18:55	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 18:55	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 18:55	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 18:55	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 18:55	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 18:55	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 18:55	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 18:55	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 18:55	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 18:55	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 18:55	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 18:55	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 18:55	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 18:55	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 18:55	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 18:55	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 18:55	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 18:55	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 18:55	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 18:55	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 18:55	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 18:55	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 18:55	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 18:55	1

Client Sample ID: CC-02 (GAC 1)

Lab Sample ID: 480-69821-3

Date Collected: 10/21/14 10:35

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		0.500	0.130	ug/L			11/01/14 18:55	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 18:55	1
cis-1,2-Dichloroethene	**0.155**	**J**	0.500	0.110	ug/L			11/01/14 18:55	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 18:55	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 18:55	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 18:55	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 18:55	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 18:55	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 18:55	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 18:55	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 18:55	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 18:55	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 18:55	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 18:55	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 18:55	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 18:55	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 18:55	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 18:55	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 18:55	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 18:55	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 18:55	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 18:55	1
Trichloroethene	ND		0.500	0.0800	ug/L			11/01/14 18:55	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 18:55	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 18:55	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 18:55	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 18:55	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 18:55	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*		*11/01/14 18:55*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*11/01/14 18:55*	*1*
Toluene-d8 (Surr)	*109*		*70 - 130*		*11/01/14 18:55*	*1*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*11/01/14 18:55*	*1*

Client Sample ID: CC-02 (GAC 2)

Lab Sample ID: 480-69821-4

Date Collected: 10/21/14 10:40

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 19:21	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 19:21	1

Client Sample ID: CC-02 (GAC 2)

Lab Sample ID: 480-69821-4

Date Collected: 10/21/14 10:40

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 19:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 19:21	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 19:21	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 19:21	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 19:21	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 19:21	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 19:21	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 19:21	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 19:21	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 19:21	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 19:21	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 19:21	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 19:21	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 19:21	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 19:21	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 19:21	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 19:21	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 19:21	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 19:21	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 19:21	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 19:21	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 19:21	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 19:21	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 19:21	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 19:21	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 19:21	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 19:21	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 19:21	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 19:21	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 19:21	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 19:21	1
Chloromethane	ND		0.500	0.140	ug/L			11/01/14 19:21	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 19:21	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 19:21	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 19:21	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 19:21	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 19:21	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 19:21	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 19:21	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 19:21	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 19:21	1

Client Sample ID: CC-02 (GAC 2)

Lab Sample ID: 480-69821-4

Date Collected: 10/21/14 10:40

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 19:21	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 19:21	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 19:21	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 19:21	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 19:21	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 19:21	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 19:21	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 19:21	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 19:21	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 19:21	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 19:21	1
Trichloroethene	ND		0.500	0.0800	ug/L			11/01/14 19:21	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 19:21	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 19:21	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 19:21	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 19:21	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 19:21	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/01/14 19:21*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*11/01/14 19:21*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*11/01/14 19:21*	*1*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*11/01/14 19:21*	*1*

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-69821-5

Date Collected: 10/21/14 00:00

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 13:18	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 13:18	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 13:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 13:18	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 13:18	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 13:18	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 13:18	1
1,2,3-Trichlorobenzene	ND	*	0.500	0.120	ug/L			11/01/14 13:18	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 13:18	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 13:18	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 13:18	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 13:18	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69821-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-69821-5

Date Collected: 10/21/14 00:00
Matrix: Water
Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 13:18	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 13:18	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 13:18	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 13:18	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 13:18	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 13:18	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 13:18	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 13:18	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 13:18	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 13:18	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 13:18	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 13:18	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 13:18	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 13:18	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 13:18	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
Bromomethane	ND	*	0.500	0.0700	ug/L			11/01/14 13:18	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 13:18	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 13:18	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 13:18	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 13:18	1
Chloroform	ND		0.500	0.130	ug/L			11/01/14 13:18	1
Chloromethane	**0.248**	**J B**	0.500	0.140	ug/L			11/01/14 13:18	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 13:18	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 13:18	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 13:18	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 13:18	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 13:18	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 13:18	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 13:18	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 13:18	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 13:18	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 13:18	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 13:18	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 13:18	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 13:18	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 13:18	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 13:18	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 13:18	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 13:18	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-69821-5

Date Collected: 10/21/14 00:00

Matrix: Water

Date Received: 10/22/14 09:00

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 13:18	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 13:18	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 13:18	1
Trichloroethene	ND		0.500	0.0800	ug/L			11/01/14 13:18	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 13:18	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 13:18	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 13:18	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 13:18	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 13:18	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 130*		*11/01/14 13:18*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*11/01/14 13:18*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*11/01/14 13:18*	*1*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*11/01/14 13:18*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69821-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	(70-130)	(70-130)
480-69821-1	CC-02 (RAW)	107	97	105	91
480-69821-1 - DL	CC-02 (RAW)	107	101	102	94
480-69821-3	CC-02 (GAC 1)	107	102	109	93
480-69821-4	CC-02 (GAC 2)	106	97	106	92
480-69821-5	TRIP BLANK	109	98	105	95
LCS 490-202626/3	Lab Control Sample	106	96	107	95
LCS 490-202894/3	Lab Control Sample	107	98	102	92
LCSD 490-202626/4	Lab Control Sample Dup	108	100	105	96
LCSD 490-202894/4	Lab Control Sample Dup	104	95	101	93
MB 490-202626/6	Method Blank	106	99	104	94
MB 490-202894/6	Method Blank	102	93	99	94

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-202626/6
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/01/14 12:52	1
1,1,1-Trichloroethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/01/14 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
1,2,3-Trichlorobenzene	ND		0.500	0.120	ug/L			11/01/14 12:52	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/01/14 12:52	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/01/14 12:52	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,2-Dibromo-3-Chloropropane	ND		2.00	0.380	ug/L			11/01/14 12:52	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/01/14 12:52	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/01/14 12:52	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/01/14 12:52	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/01/14 12:52	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/01/14 12:52	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/01/14 12:52	1
2-Hexanone	ND		10.0	0.810	ug/L			11/01/14 12:52	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/01/14 12:52	1
Acetone	ND		50.0	1.23	ug/L			11/01/14 12:52	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/01/14 12:52	1
Benzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromobenzene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromoform	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Bromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/01/14 12:52	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
Chloroethane	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Chloroform	0.2097	J	0.500	0.130	ug/L			11/01/14 12:52	1
Chloromethane	0.3368	J	0.500	0.140	ug/L			11/01/14 12:52	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/01/14 12:52	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/01/14 12:52	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/01/14 12:52	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-202626/6
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/01/14 12:52	1
Iodomethane	ND		5.00	0.680	ug/L			11/01/14 12:52	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/01/14 12:52	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/01/14 12:52	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/01/14 12:52	1
Naphthalene	ND		5.00	0.140	ug/L			11/01/14 12:52	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
o-Xylene	ND		0.500	0.100	ug/L			11/01/14 12:52	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/01/14 12:52	1
Styrene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
t-Butanol	ND		10.0	1.85	ug/L			11/01/14 12:52	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/01/14 12:52	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/01/14 12:52	1
Toluene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/01/14 12:52	1
trans-1,4-Dichloro-2-butene	ND		5.00	0.220	ug/L			11/01/14 12:52	1
Trichloroethene	0.09305	J	0.500	0.0800	ug/L			11/01/14 12:52	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/01/14 12:52	1
Vinyl acetate	ND		5.00	0.530	ug/L			11/01/14 12:52	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/01/14 12:52	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/01/14 12:52	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/01/14 12:52	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/01/14 12:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*11/01/14 12:52*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*11/01/14 12:52*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*11/01/14 12:52*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/01/14 12:52*	*1*

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	5.019		ug/L		100	70 - 130
1,1,1-Trichloroethane	5.00	5.038		ug/L		101	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.625		ug/L		112	70 - 130
1,1,2-Trichloroethane	5.00	5.789		ug/L		116	70 - 130
1,1-Dichloroethane	5.00	5.680		ug/L		114	70 - 130
1,1-Dichloroethene	5.00	5.309		ug/L		106	70 - 130
1,1-Dichloropropene	5.00	5.413		ug/L		108	70 - 130
1,2,3-Trichlorobenzene	5.00	4.980		ug/L		100	70 - 130
1,2,3-Trichloropropane	5.00	5.690		ug/L		114	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	5.00	4.311		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	5.00	5.044		ug/L		101	70 - 130
1,2-Dibromo-3-Chloropropane	5.00	3.812		ug/L		76	70 - 130
1,2-Dibromoethane	5.00	5.286		ug/L		106	70 - 130
1,2-Dichlorobenzene	5.00	5.100		ug/L		102	70 - 130
1,2-Dichloroethane	5.00	5.547		ug/L		111	70 - 130
1,2-Dichloropropane	5.00	5.570		ug/L		111	70 - 130
1,3,5-Trimethylbenzene	5.00	5.043		ug/L		101	70 - 130
1,3-Dichlorobenzene	5.00	5.254		ug/L		105	70 - 130
1,3-Dichloropropane	5.00	5.927		ug/L		119	70 - 130
1,4-Dichlorobenzene	5.00	5.258		ug/L		105	70 - 130
2,2-Dichloropropane	5.00	4.104		ug/L		82	70 - 130
2-Butanone (MEK)	25.0	24.88		ug/L		100	70 - 130
2-Chlorotoluene	5.00	5.505		ug/L		110	70 - 130
2-Hexanone	25.0	22.81		ug/L		91	70 - 130
4-Chlorotoluene	5.00	5.407		ug/L		108	70 - 130
4-Isopropyltoluene	5.00	4.752		ug/L		95	70 - 130
4-Methyl-2-pentanone (MIBK)	25.0	24.14		ug/L		97	70 - 130
Acetone	25.0	25.58	J	ug/L		102	70 - 130
Benzene	5.00	5.202		ug/L		104	70 - 130
Bromobenzene	5.00	5.234		ug/L		105	70 - 130
Bromochloromethane	5.00	4.882		ug/L		98	70 - 130
Dichlorobromomethane	5.00	4.834		ug/L		97	70 - 130
Bromoform	5.00	4.959		ug/L		99	70 - 130
Bromomethane	5.00	7.959	*	ug/L		159	70 - 130
Carbon disulfide	5.00	5.399		ug/L		108	70 - 130
Carbon tetrachloride	5.00	5.072		ug/L		101	70 - 130
Chlorobenzene	5.00	5.348		ug/L		107	70 - 130
Chlorodibromomethane	5.00	5.012		ug/L		100	70 - 130
Chloroethane	5.00	5.902		ug/L		118	70 - 130
Chloroform	5.00	5.340		ug/L		107	70 - 130
Chloromethane	5.00	5.641		ug/L		113	70 - 130
cis-1,2-Dichloroethene	5.00	5.576		ug/L		112	70 - 130
cis-1,3-Dichloropropene	5.00	5.049		ug/L		101	70 - 130
Dibromomethane	5.00	4.844		ug/L		97	70 - 130
Dichlorodifluoromethane	5.00	5.106		ug/L		102	70 - 130
Ethylbenzene	5.00	5.201		ug/L		104	70 - 130
Hexachlorobutadiene	5.00	4.414		ug/L		88	70 - 130
Isopropylbenzene	5.00	4.853		ug/L		97	70 - 130
Methyl tert-butyl ether	5.00	4.823		ug/L		96	70 - 130
Methylene Chloride	5.00	4.987	J	ug/L		100	70 - 130
Naphthalene	5.00	4.165	J	ug/L		83	70 - 130
n-Butylbenzene	5.00	4.547		ug/L		91	70 - 130
N-Propylbenzene	5.00	5.195		ug/L		104	70 - 130
sec-Butylbenzene	5.00	4.954		ug/L		99	70 - 130
Styrene	5.00	4.915		ug/L		98	70 - 130
tert-Butylbenzene	5.00	4.925		ug/L		99	70 - 130
Tetrachloroethene	5.00	5.020		ug/L		100	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202626/3
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	5.00	5.402		ug/L		108	70 - 130
trans-1,2-Dichloroethene	5.00	4.931		ug/L		99	70 - 130
trans-1,3-Dichloropropene	5.00	5.062		ug/L		101	70 - 130
Trichloroethene	5.00	4.848		ug/L		97	70 - 130
Trichlorofluoromethane	5.00	5.589		ug/L		112	70 - 130
Vinyl chloride	5.00	5.951		ug/L		119	70 - 130
Xylenes, Total	10.0	10.07		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 490-202626/4
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	5.001		ug/L		100	70 - 130	0	20
1,1,1-Trichloroethane	5.00	5.294		ug/L		106	70 - 130	5	20
1,1,2,2-Tetrachloroethane	5.00	5.716		ug/L		114	70 - 130	2	20
1,1,2-Trichloroethane	5.00	5.643		ug/L		113	70 - 130	3	20
1,1-Dichloroethane	5.00	5.837		ug/L		117	70 - 130	3	20
1,1-Dichloroethene	5.00	5.441		ug/L		109	70 - 130	2	20
1,1-Dichloropropene	5.00	5.210		ug/L		104	70 - 130	4	20
1,2,3-Trichlorobenzene	5.00	3.996	*	ug/L		80	70 - 130	22	20
1,2,3-Trichloropropane	5.00	5.179		ug/L		104	70 - 130	9	20
1,2,4-Trichlorobenzene	5.00	4.135		ug/L		83	70 - 130	4	20
1,2,4-Trimethylbenzene	5.00	5.110		ug/L		102	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	5.00	4.589		ug/L		92	70 - 130	19	20
1,2-Dibromoethane	5.00	5.329		ug/L		107	70 - 130	1	20
1,2-Dichlorobenzene	5.00	5.209		ug/L		104	70 - 130	2	20
1,2-Dichloroethane	5.00	5.586		ug/L		112	70 - 130	1	20
1,2-Dichloropropane	5.00	5.088		ug/L		102	70 - 130	9	20
1,3,5-Trimethylbenzene	5.00	4.989		ug/L		100	70 - 130	1	20
1,3-Dichlorobenzene	5.00	5.169		ug/L		103	70 - 130	2	20
1,3-Dichloropropane	5.00	5.833		ug/L		117	70 - 130	2	20
1,4-Dichlorobenzene	5.00	5.038		ug/L		101	70 - 130	4	20
2,2-Dichloropropane	5.00	4.302		ug/L		86	70 - 130	5	20
2-Butanone (MEK)	25.0	22.72		ug/L		91	70 - 130	9	20
2-Chlorotoluene	5.00	5.600		ug/L		112	70 - 130	2	20
2-Hexanone	25.0	23.56		ug/L		94	70 - 130	3	20
4-Chlorotoluene	5.00	5.298		ug/L		106	70 - 130	2	20
4-Isopropyltoluene	5.00	4.746		ug/L		95	70 - 130	0	20
4-Methyl-2-pentanone (MIBK)	25.0	24.78		ug/L		99	70 - 130	3	20
Acetone	25.0	24.68	J	ug/L		99	70 - 130	4	20
Benzene	5.00	5.283		ug/L		106	70 - 130	2	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-202626/4
Matrix: Water
Analysis Batch: 202626

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
Bromobenzene	5.00	5.232		ug/L		105	70 - 130	0	20
Bromochloromethane	5.00	4.938		ug/L		99	70 - 130	1	20
Dichlorobromomethane	5.00	4.916		ug/L		98	70 - 130	2	20
Bromoform	5.00	4.775		ug/L		95	70 - 130	4	20
Bromomethane	5.00	7.783	*	ug/L		156	70 - 130	2	20
Carbon disulfide	5.00	5.334		ug/L		107	70 - 130	1	20
Carbon tetrachloride	5.00	4.998		ug/L		100	70 - 130	1	20
Chlorobenzene	5.00	5.346		ug/L		107	70 - 130	0	20
Chlorodibromomethane	5.00	4.794		ug/L		96	70 - 130	4	20
Chloroethane	5.00	6.106		ug/L		122	70 - 130	3	20
Chloroform	5.00	5.391		ug/L		108	70 - 130	1	20
Chloromethane	5.00	5.512		ug/L		110	70 - 130	2	20
cis-1,2-Dichloroethene	5.00	5.652		ug/L		113	70 - 130	1	20
cis-1,3-Dichloropropene	5.00	5.084		ug/L		102	70 - 130	1	20
Dibromomethane	5.00	4.931		ug/L		99	70 - 130	2	20
Dichlorodifluoromethane	5.00	5.130		ug/L		103	70 - 130	0	20
Ethylbenzene	5.00	5.190		ug/L		104	70 - 130	0	20
Hexachlorobutadiene	5.00	4.078		ug/L		82	70 - 130	8	20
Isopropylbenzene	5.00	4.955		ug/L		99	70 - 130	2	20
Methyl tert-butyl ether	5.00	4.844		ug/L		97	70 - 130	0	20
Methylene Chloride	5.00	5.329		ug/L		107	70 - 130	7	20
Naphthalene	5.00	3.510	J	ug/L		70	70 - 130	17	20
n-Butylbenzene	5.00	4.578		ug/L		92	70 - 130	1	20
N-Propylbenzene	5.00	5.191		ug/L		104	70 - 130	0	20
sec-Butylbenzene	5.00	4.842		ug/L		97	70 - 130	2	20
Styrene	5.00	5.147		ug/L		103	70 - 130	5	20
tert-Butylbenzene	5.00	4.778		ug/L		96	70 - 130	3	20
Tetrachloroethene	5.00	5.113		ug/L		102	70 - 130	2	20
Toluene	5.00	5.398		ug/L		108	70 - 130	0	20
trans-1,2-Dichloroethene	5.00	5.098		ug/L		102	70 - 130	3	20
trans-1,3-Dichloropropene	5.00	4.894		ug/L		98	70 - 130	3	20
Trichloroethene	5.00	4.608		ug/L		92	70 - 130	5	20
Trichlorofluoromethane	5.00	5.368		ug/L		107	70 - 130	4	20
Vinyl chloride	5.00	5.713		ug/L		114	70 - 130	4	20
Xylenes, Total	10.0	9.705		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: MB 490-202894/6
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.120	ug/L			11/03/14 03:04	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-202894/6
Matrix: Water
Analysis Batch: 202894

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		0.500	0.0700	ug/L			11/03/14 03:04	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.100	ug/L			11/03/14 03:04	1
1,1,2-Trichloroethane	ND		0.500	0.110	ug/L			11/03/14 03:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
1,1-Dichloroethane	ND		0.500	0.0800	ug/L			11/03/14 03:04	1
1,1-Dichloroethene	ND		0.500	0.0800	ug/L			11/03/14 03:04	1
1,1-Dichloropropene	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
1,2,3-Trichlorobenzene	ND		0.500	0.120	ug/L			11/03/14 03:04	1
1,2,3-Trichloropropane	ND		0.500	0.190	ug/L			11/03/14 03:04	1
1,2,4-Trichlorobenzene	ND		0.500	0.0800	ug/L			11/03/14 03:04	1
1,2,4-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			11/03/14 03:04	1
1,2-Dichlorobenzene	ND		0.500	0.130	ug/L			11/03/14 03:04	1
1,2-Dichloroethane	ND		0.500	0.100	ug/L			11/03/14 03:04	1
1,2-Dichloropropane	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
1,3,5-Trimethylbenzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
1,3-Dichlorobenzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
1,3-Dichloropropane	ND		0.500	0.0600	ug/L			11/03/14 03:04	1
1,4-Dichlorobenzene	ND		0.500	0.0500	ug/L			11/03/14 03:04	1
2,2-Dichloropropane	ND		0.500	0.100	ug/L			11/03/14 03:04	1
2-Butanone (MEK)	ND		5.00	0.810	ug/L			11/03/14 03:04	1
2-Chlorotoluene	ND		0.500	0.150	ug/L			11/03/14 03:04	1
2-Hexanone	ND		10.0	0.810	ug/L			11/03/14 03:04	1
4-Chlorotoluene	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
4-Isopropyltoluene	ND		0.500	0.130	ug/L			11/03/14 03:04	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.430	ug/L			11/03/14 03:04	1
Acetone	ND		50.0	1.23	ug/L			11/03/14 03:04	1
Acrylonitrile	ND		5.00	0.870	ug/L			11/03/14 03:04	1
Benzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Bromobenzene	ND		0.500	0.100	ug/L			11/03/14 03:04	1
Bromochloromethane	ND		0.500	0.150	ug/L			11/03/14 03:04	1
Dichlorobromomethane	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Bromoform	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Bromomethane	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Carbon disulfide	ND		0.500	0.210	ug/L			11/03/14 03:04	1
Carbon tetrachloride	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
Chlorobenzene	ND		0.500	0.130	ug/L			11/03/14 03:04	1
Chlorodibromomethane	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Chloroethane	ND		0.500	0.150	ug/L			11/03/14 03:04	1
Chloroform	0.1905	J	0.500	0.130	ug/L			11/03/14 03:04	1
Chloromethane	0.2411	J	0.500	0.140	ug/L			11/03/14 03:04	1
cis-1,2-Dichloroethene	ND		0.500	0.110	ug/L			11/03/14 03:04	1
cis-1,3-Dichloropropene	ND		0.500	0.110	ug/L			11/03/14 03:04	1
Dibromomethane	ND		0.500	0.0500	ug/L			11/03/14 03:04	1
Dichlorodifluoromethane	ND		0.500	0.230	ug/L			11/03/14 03:04	1
Ethyl ether	ND		10.0	0.0900	ug/L			11/03/14 03:04	1
Ethylbenzene	ND		0.500	0.100	ug/L			11/03/14 03:04	1
Hexachlorobutadiene	ND		0.500	0.150	ug/L			11/03/14 03:04	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-202894/6
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iodomethane	ND		5.00	0.680	ug/L			11/03/14 03:04	1
Isopropylbenzene	ND		0.500	0.130	ug/L			11/03/14 03:04	1
Methyl tert-butyl ether	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
Methylene Chloride	ND		5.00	0.140	ug/L			11/03/14 03:04	1
m-Xylene & p-Xylene	ND		0.500	0.170	ug/L			11/03/14 03:04	1
n-Butylbenzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
N-Propylbenzene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
o-Xylene	ND		0.500	0.100	ug/L			11/03/14 03:04	1
sec-Butylbenzene	ND		0.500	0.120	ug/L			11/03/14 03:04	1
Styrene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
tert-Butylbenzene	ND		0.500	0.110	ug/L			11/03/14 03:04	1
Tetrachloroethene	ND		0.500	0.0900	ug/L			11/03/14 03:04	1
Toluene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
trans-1,2-Dichloroethene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
trans-1,3-Dichloropropene	ND		0.500	0.0700	ug/L			11/03/14 03:04	1
Trichloroethene	0.09111	J	0.500	0.0800	ug/L			11/03/14 03:04	1
Trichlorofluoromethane	ND		0.500	0.190	ug/L			11/03/14 03:04	1
Vinyl chloride	ND		0.500	0.240	ug/L			11/03/14 03:04	1
Xylenes, Total	ND		1.00	0.100	ug/L			11/03/14 03:04	1
Dichlorofluoromethane	ND		0.500	0.180	ug/L			11/03/14 03:04	1
Trihalomethanes, Total	ND		2.00	0.340	ug/L			11/03/14 03:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*11/03/14 03:04*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*11/03/14 03:04*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*11/03/14 03:04*	*1*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*11/03/14 03:04*	*1*

Lab Sample ID: LCS 490-202894/3
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	5.00	4.511		ug/L		90	70 - 130
1,1,1-Trichloroethane	5.00	4.997		ug/L		100	70 - 130
1,1,2,2-Tetrachloroethane	5.00	5.019		ug/L		100	70 - 130
1,1,2-Trichloroethane	5.00	4.535		ug/L		91	70 - 130
1,1-Dichloroethane	5.00	5.239		ug/L		105	70 - 130
1,1-Dichloroethene	5.00	5.175		ug/L		104	70 - 130
1,1-Dichloropropene	5.00	4.925		ug/L		99	70 - 130
1,2,3-Trichlorobenzene	5.00	4.009		ug/L		80	70 - 130
1,2,3-Trichloropropane	5.00	4.710		ug/L		94	70 - 130
1,2,4-Trichlorobenzene	5.00	3.664		ug/L		73	70 - 130
1,2,4-Trimethylbenzene	5.00	4.698		ug/L		94	70 - 130
1,2-Dibromoethane	5.00	4.593		ug/L		92	70 - 130
1,2-Dichlorobenzene	5.00	4.725		ug/L		94	70 - 130
1,2-Dichloroethane	5.00	5.250		ug/L		105	70 - 130
1,2-Dichloropropane	5.00	5.051		ug/L		101	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202894/3
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3,5-Trimethylbenzene	5.00	4.616		ug/L		92	70 - 130
1,3-Dichlorobenzene	5.00	4.777		ug/L		96	70 - 130
1,3-Dichloropropane	5.00	4.921		ug/L		98	70 - 130
1,4-Dichlorobenzene	5.00	4.889		ug/L		98	70 - 130
2,2-Dichloropropane	5.00	4.147		ug/L		83	70 - 130
2-Butanone (MEK)	25.0	20.74		ug/L		83	70 - 130
2-Chlorotoluene	5.00	4.886		ug/L		98	70 - 130
2-Hexanone	25.0	21.00		ug/L		84	70 - 130
4-Chlorotoluene	5.00	4.824		ug/L		96	70 - 130
4-Isopropyltoluene	5.00	4.615		ug/L		92	70 - 130
4-Methyl-2-pentanone (MIBK)	25.0	20.93		ug/L		84	70 - 130
Acetone	25.0	20.84	J	ug/L		83	70 - 130
Benzene	5.00	4.908		ug/L		98	70 - 130
Bromobenzene	5.00	4.807		ug/L		96	70 - 130
Bromochloromethane	5.00	4.787		ug/L		96	70 - 130
Dichlorobromomethane	5.00	4.684		ug/L		94	70 - 130
Bromoform	5.00	4.517		ug/L		90	70 - 130
Bromomethane	5.00	7.497	*	ug/L		150	70 - 130
Carbon disulfide	5.00	5.137		ug/L		103	70 - 130
Carbon tetrachloride	5.00	4.978		ug/L		100	70 - 130
Chlorobenzene	5.00	5.022		ug/L		100	70 - 130
Chlorodibromomethane	5.00	4.444		ug/L		89	70 - 130
Chloroethane	5.00	5.499		ug/L		110	70 - 130
Chloroform	5.00	5.228		ug/L		105	70 - 130
Chloromethane	5.00	5.502		ug/L		110	70 - 130
cis-1,2-Dichloroethene	5.00	5.111		ug/L		102	70 - 130
cis-1,3-Dichloropropene	5.00	4.338		ug/L		87	70 - 130
Dibromomethane	5.00	4.538		ug/L		91	70 - 130
Dichlorodifluoromethane	5.00	4.632		ug/L		93	70 - 130
Ethylbenzene	5.00	4.703		ug/L		94	70 - 130
Hexachlorobutadiene	5.00	4.318		ug/L		86	70 - 130
Isopropylbenzene	5.00	4.609		ug/L		92	70 - 130
Methyl tert-butyl ether	5.00	4.353		ug/L		87	70 - 130
Methylene Chloride	5.00	4.897	J	ug/L		98	70 - 130
n-Butylbenzene	5.00	4.113		ug/L		82	70 - 130
N-Propylbenzene	5.00	4.587		ug/L		92	70 - 130
sec-Butylbenzene	5.00	4.569		ug/L		91	70 - 130
Styrene	5.00	4.612		ug/L		92	70 - 130
tert-Butylbenzene	5.00	4.454		ug/L		89	70 - 130
Tetrachloroethene	5.00	4.770		ug/L		95	70 - 130
Toluene	5.00	4.808		ug/L		96	70 - 130
trans-1,2-Dichloroethene	5.00	4.832		ug/L		97	70 - 130
trans-1,3-Dichloropropene	5.00	3.871		ug/L		77	70 - 130
Trichloroethene	5.00	4.984		ug/L		100	70 - 130
Trichlorofluoromethane	5.00	5.234		ug/L		105	70 - 130
Vinyl chloride	5.00	5.779		ug/L		116	70 - 130
Xylenes, Total	10.0	9.230		ug/L		92	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-202894/3
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 490-202894/4
Matrix: Water
Analysis Batch: 202894

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	5.00	4.684		ug/L		94	70 - 130	4	20
1,1,1-Trichloroethane	5.00	4.684		ug/L		94	70 - 130	6	20
1,1,2,2-Tetrachloroethane	5.00	4.868		ug/L		97	70 - 130	3	20
1,1,2-Trichloroethane	5.00	4.394		ug/L		88	70 - 130	3	20
1,1-Dichloroethane	5.00	4.778		ug/L		96	70 - 130	9	20
1,1-Dichloroethene	5.00	4.762		ug/L		95	70 - 130	8	20
1,1-Dichloropropene	5.00	4.681		ug/L		94	70 - 130	5	20
1,2,3-Trichlorobenzene	5.00	3.768		ug/L		75	70 - 130	6	20
1,2,3-Trichloropropane	5.00	4.619		ug/L		92	70 - 130	2	20
1,2,4-Trichlorobenzene	5.00	3.476		ug/L		70	70 - 130	5	20
1,2,4-Trimethylbenzene	5.00	4.542		ug/L		91	70 - 130	3	20
1,2-Dibromoethane	5.00	4.489		ug/L		90	70 - 130	2	20
1,2-Dichlorobenzene	5.00	4.789		ug/L		96	70 - 130	1	20
1,2-Dichloroethane	5.00	4.929		ug/L		99	70 - 130	6	20
1,2-Dichloropropane	5.00	4.619		ug/L		92	70 - 130	9	20
1,3,5-Trimethylbenzene	5.00	4.574		ug/L		91	70 - 130	1	20
1,3-Dichlorobenzene	5.00	4.657		ug/L		93	70 - 130	3	20
1,3-Dichloropropane	5.00	4.684		ug/L		94	70 - 130	5	20
1,4-Dichlorobenzene	5.00	4.812		ug/L		96	70 - 130	2	20
2,2-Dichloropropane	5.00	3.815		ug/L		76	70 - 130	8	20
2-Butanone (MEK)	25.0	19.17		ug/L		77	70 - 130	8	20
2-Chlorotoluene	5.00	5.030		ug/L		101	70 - 130	3	20
2-Hexanone	25.0	18.83		ug/L		75	70 - 130	11	20
4-Chlorotoluene	5.00	4.750		ug/L		95	70 - 130	2	20
4-Isopropyltoluene	5.00	4.343		ug/L		87	70 - 130	6	20
4-Methyl-2-pentanone (MIBK)	25.0	20.01		ug/L		80	70 - 130	4	20
Acetone	25.0	19.95	J	ug/L		80	70 - 130	4	20
Benzene	5.00	4.696		ug/L		94	70 - 130	4	20
Bromobenzene	5.00	4.919		ug/L		98	70 - 130	2	20
Bromochloromethane	5.00	4.395		ug/L		88	70 - 130	9	20
Dichlorobromomethane	5.00	4.438		ug/L		89	70 - 130	5	20
Bromoform	5.00	4.309		ug/L		86	70 - 130	5	20
Bromomethane	5.00	6.603	*	ug/L		132	70 - 130	13	20
Carbon disulfide	5.00	4.820		ug/L		96	70 - 130	6	20
Carbon tetrachloride	5.00	4.600		ug/L		92	70 - 130	8	20
Chlorobenzene	5.00	4.999		ug/L		100	70 - 130	0	20
Chlorodibromomethane	5.00	4.318		ug/L		86	70 - 130	3	20
Chloroethane	5.00	5.278		ug/L		106	70 - 130	4	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-202894/4
Matrix: Water
Analysis Batch: 202894

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
Chloroform	5.00	4.926		ug/L		99	70 - 130	6	20
Chloromethane	5.00	5.182		ug/L		104	70 - 130	6	20
cis-1,2-Dichloroethene	5.00	4.813		ug/L		96	70 - 130	6	20
cis-1,3-Dichloropropene	5.00	4.188		ug/L		84	70 - 130	4	20
Dibromomethane	5.00	4.516		ug/L		90	70 - 130	0	20
Dichlorodifluoromethane	5.00	4.463		ug/L		89	70 - 130	4	20
Ethylbenzene	5.00	4.615		ug/L		92	70 - 130	2	20
Hexachlorobutadiene	5.00	4.209		ug/L		84	70 - 130	3	20
Isopropylbenzene	5.00	4.421		ug/L		88	70 - 130	4	20
Methyl tert-butyl ether	5.00	4.002		ug/L		80	70 - 130	8	20
Methylene Chloride	5.00	4.789	J	ug/L		96	70 - 130	2	20
n-Butylbenzene	5.00	4.109		ug/L		82	70 - 130	0	20
N-Propylbenzene	5.00	4.565		ug/L		91	70 - 130	0	20
sec-Butylbenzene	5.00	4.435		ug/L		89	70 - 130	3	20
Styrene	5.00	4.339		ug/L		87	70 - 130	6	20
tert-Butylbenzene	5.00	4.381		ug/L		88	70 - 130	2	20
Tetrachloroethene	5.00	4.530		ug/L		91	70 - 130	5	20
Toluene	5.00	4.555		ug/L		91	70 - 130	5	20
trans-1,2-Dichloroethene	5.00	4.448		ug/L		89	70 - 130	8	20
trans-1,3-Dichloropropene	5.00	3.770		ug/L		75	70 - 130	3	20
Trichloroethene	5.00	4.528		ug/L		91	70 - 130	10	20
Trichlorofluoromethane	5.00	4.733		ug/L		95	70 - 130	10	20
Vinyl chloride	5.00	5.375		ug/L		108	70 - 130	7	20
Xylenes, Total	10.0	8.989		ug/L		90	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-209559/1-A
Matrix: Water
Analysis Batch: 210030

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.0500	0.0193	mg/L		10/23/14 12:22	10/24/14 22:20	1
Manganese	ND		0.00300	0.000400	mg/L		10/23/14 12:22	10/24/14 22:20	1

Lab Sample ID: LCS 480-209559/2-A
Matrix: Water
Analysis Batch: 210030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.443		mg/L		94	85 - 115
Manganese	0.201	0.2008		mg/L		100	85 - 115

Method: 200.7 Rev 4.4 - Metals (ICP) (Continued)

Lab Sample ID: 480-69821-2 MS
Matrix: Water
Analysis Batch: 210030

Client Sample ID: CC-02 (POST SOFTENER)
Prep Type: Total/NA
Prep Batch: 209559

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	ND		10.0	9.500		mg/L		95	70 - 130
Manganese	0.102		0.201	0.3035		mg/L		100	70 - 130

Lab Sample ID: 480-69821-2 MSD
Matrix: Water
Analysis Batch: 210030

Client Sample ID: CC-02 (POST SOFTENER)
Prep Type: Total/NA
Prep Batch: 209559

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	ND		10.0	9.544		mg/L		95	70 - 130	0	20
Manganese	0.102		0.201	0.3031		mg/L		100	70 - 130	0	20

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69821-1

GC/MS VOA

Analysis Batch: 202626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69821-1	CC-02 (RAW)	Total/NA	Water	524.2	
480-69821-3	CC-02 (GAC 1)	Total/NA	Water	524.2	
480-69821-4	CC-02 (GAC 2)	Total/NA	Water	524.2	
480-69821-5	TRIP BLANK	Total/NA	Water	524.2	
LCS 490-202626/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 490-202626/4	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 490-202626/6	Method Blank	Total/NA	Water	524.2	

Analysis Batch: 202894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69821-1 - DL	CC-02 (RAW)	Total/NA	Water	524.2	
LCS 490-202894/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 490-202894/4	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 490-202894/6	Method Blank	Total/NA	Water	524.2	

Metals

Prep Batch: 209559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69821-1	CC-02 (RAW)	Total/NA	Water	200.7	
480-69821-2	CC-02 (POST SOFTENER)	Total/NA	Water	200.7	
480-69821-2 MS	CC-02 (POST SOFTENER)	Total/NA	Water	200.7	
480-69821-2 MSD	CC-02 (POST SOFTENER)	Total/NA	Water	200.7	
LCS 480-209559/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-209559/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 210030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69821-1	CC-02 (RAW)	Total/NA	Water	200.7 Rev 4.4	209559
480-69821-2	CC-02 (POST SOFTENER)	Total/NA	Water	200.7 Rev 4.4	209559
480-69821-2 MS	CC-02 (POST SOFTENER)	Total/NA	Water	200.7 Rev 4.4	209559
480-69821-2 MSD	CC-02 (POST SOFTENER)	Total/NA	Water	200.7 Rev 4.4	209559
LCS 480-209559/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	209559
MB 480-209559/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	209559

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69821-1

Client Sample ID: CC-02 (RAW)

Lab Sample ID: 480-69821-1
Date Collected: 10/21/14 10:30
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 18:30	EML	TAL NSH
Total/NA	Analysis	524.2	DL	5	202894	11/03/14 03:56	EML	TAL NSH
Total/NA	Prep	200.7			209559	10/23/14 12:22	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	210030	10/24/14 23:33	LMH	TAL BUF

Client Sample ID: CC-02 (POST SOFTENER)

Lab Sample ID: 480-69821-2
Date Collected: 10/21/14 10:32
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.7			209559	10/23/14 12:22	SLB	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	210030	10/24/14 23:36	LMH	TAL BUF

Client Sample ID: CC-02 (GAC 1)

Lab Sample ID: 480-69821-3
Date Collected: 10/21/14 10:35
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 18:55	EML	TAL NSH

Client Sample ID: CC-02 (GAC 2)

Lab Sample ID: 480-69821-4
Date Collected: 10/21/14 10:40
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 19:21	EML	TAL NSH

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-69821-5
Date Collected: 10/21/14 00:00
Matrix: Water
Date Received: 10/22/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	202626	11/01/14 13:18	EML	TAL NSH

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69821-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14 *

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	1,2-Dibromo-3-Chloropropane
524.2		Water	1,2-Dibromoethane
524.2		Water	2-Butanone (MEK)
524.2		Water	2-Hexanone
524.2		Water	4-Methyl-2-pentanone (MIBK)
524.2		Water	Acetone
524.2		Water	Carbon disulfide
524.2		Water	Ethyl ether
524.2		Water	Iodomethane
524.2		Water	m-Xylene & p-Xylene
524.2		Water	o-Xylene
524.2		Water	t-Butanol

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Water	Acrylonitrile
524.2		Water	Dichlorofluoromethane
524.2		Water	trans-1,4-Dichloro-2-butene
524.2		Water	Vinyl acetate

* Certification renewal pending - certification considered valid.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69821-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL NSH
200.7 Rev 4.4	Metals (ICP)	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 480-69821-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-69821-1	CC-02 (RAW)	Water	10/21/14 10:30	10/22/14 09:00
480-69821-2	CC-02 (POST SOFTENER)	Water	10/21/14 10:32	10/22/14 09:00
480-69821-3	CC-02 (GAC 1)	Water	10/21/14 10:35	10/22/14 09:00
480-69821-4	CC-02 (GAC 2)	Water	10/21/14 10:40	10/22/14 09:00
480-69821-5	TRIP BLANK	Water	10/21/14 00:00	10/22/14 09:00

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-69821-1

Login Number: 69821
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	LAB TO CHECK

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 480-69821-1

Login Number: 69821
List Number: 2
Creator: McBride, Mike

List Source: TestAmerica Nashville
List Creation: 10/30/14 01:50 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-69821 Chain of Custody

Client Information		
Sampler: T Zeh	Lab PM: Brown, Shali	COC No: 490-24404-8963.1
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@	Page: 1 of 1
Company: ARCADIS U.S., Inc.		Job #: MA000725
Address: 1 Executive Drive Suite 303	Due Date Requested: STD	
City: Chelmsford	TAT Requested (days):	
State, Zip: MA, 01824		
Phone:	PO #:	
Email: chuck.castelluccio@arcadis-us.com	WO #:	
Project Name: FORD Tibbetts Road Site E101274	Project #: 49002494	
Site:	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	624.2_Preserved - Standard Analyte list (Buffalo)	200.7 - Iron/Manganese (Buffalo)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
CC-02 (Raw)	10/21/14	1030	G	W			X	X		
CC-02 (Post Softner)	↓	1032	G	W				X		
CC-02 (GAC1)	↓	1035	G	W			X			
CC-02 (GAC2)	↓	1040	G	W			X			
Trip Blank							X			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	10/21/14 1500	ARCADIS		10/22/14 0900	TA BUF
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #2 3.2

ARCADIS

Appendix **E**

Laboratory Analytical Reports (Additional Residential Water Sampling)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-44842-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Heather Baker

Authorized for release by:
1/28/2014 3:31:04 PM
Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Designee for

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44842-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-44842-1	29R	Water	01/16/14 10:30	01/18/14 09:00

Job ID: 490-44842-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-44842-1

Comments
No additional comments.

Receipt
The sample was received on 1/18/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 524.2: The laboratory control sample duplicate (LCSD) for batch 162509 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

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.
*	LCS or LCSD exceeds the control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44842-1

Client Sample ID: 29R

Date Collected: 01/16/14 10:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44842-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 13:33	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 13:33	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 13:33	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 13:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 13:33	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 13:33	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 13:33	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 13:33	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 13:33	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 13:33	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 13:33	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 13:33	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 13:33	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 13:33	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 13:33	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 13:33	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 13:33	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 13:33	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 13:33	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 13:33	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 13:33	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 13:33	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 13:33	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 13:33	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 13:33	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 13:33	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 13:33	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 13:33	1
Acetone	**1.27**	**J**	2.50	0.537	ug/L			01/21/14 13:33	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 13:33	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 13:33	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 13:33	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 13:33	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 13:33	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 13:33	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 13:33	1
Bromomethane	ND	*	0.500	0.0510	ug/L			01/21/14 13:33	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 13:33	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 13:33	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 13:33	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 13:33	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 13:33	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 13:33	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 13:33	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 13:33	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 13:33	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 13:33	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 13:33	1
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 13:33	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44842-1

Client Sample ID: 29R

Date Collected: 01/16/14 10:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44842-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 13:33	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 13:33	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 13:33	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 13:33	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 13:33	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 13:33	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 13:33	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 13:33	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 13:33	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 13:33	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 13:33	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 13:33	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 13:33	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 13:33	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 13:33	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 13:33	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 13:33	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 13:33	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 13:33	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 13:33	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 13:33	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 13:33	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 13:33	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 13:33	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 13:33	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 13:33	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*01/21/14 13:33*	*1*
1,2-Dichlorobenzene-d4	*103*		*80 - 120*		*01/21/14 13:33*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			01/21/14 11:14	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			01/21/14 11:14	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			01/21/14 11:14	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			01/21/14 11:14	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			01/21/14 11:14	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			01/21/14 11:14	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			01/21/14 11:14	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			01/21/14 11:14	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			01/21/14 11:14	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
2-Hexanone	ND		2.50	0.231	ug/L			01/21/14 11:14	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			01/21/14 11:14	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			01/21/14 11:14	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			01/21/14 11:14	1
Acetone	ND		2.50	0.537	ug/L			01/21/14 11:14	1
Acrylonitrile	ND		10.0	0.227	ug/L			01/21/14 11:14	1
Allyl chloride	ND		0.500	0.0910	ug/L			01/21/14 11:14	1
Benzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromobenzene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromochloromethane	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Bromoform	ND		0.500	0.130	ug/L			01/21/14 11:14	1
Bromomethane	ND		0.500	0.0510	ug/L			01/21/14 11:14	1
Carbon disulfide	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Chlorobenzene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			01/21/14 11:14	1
Chloroethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1
Chloroform	ND		0.500	0.140	ug/L			01/21/14 11:14	1
Chloromethane	ND		0.500	0.0629	ug/L			01/21/14 11:14	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			01/21/14 11:14	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			01/21/14 11:14	1
Dibromomethane	ND		0.500	0.170	ug/L			01/21/14 11:14	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			01/21/14 11:14	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-162509/6
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			01/21/14 11:14	1
Ethylbenzene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			01/21/14 11:14	1
Iodomethane	ND		0.500	0.150	ug/L			01/21/14 11:14	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			01/21/14 11:14	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			01/21/14 11:14	1
Methylene Chloride	ND		0.500	0.250	ug/L			01/21/14 11:14	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			01/21/14 11:14	1
Naphthalene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			01/21/14 11:14	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			01/21/14 11:14	1
o-Xylene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			01/21/14 11:14	1
Styrene	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
t-Butanol	ND		10.0	2.46	ug/L			01/21/14 11:14	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			01/21/14 11:14	1
Toluene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			01/21/14 11:14	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			01/21/14 11:14	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			01/21/14 11:14	1
Trichloroethene	ND		0.500	0.0600	ug/L			01/21/14 11:14	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			01/21/14 11:14	1
Vinyl acetate	ND		2.50	0.172	ug/L			01/21/14 11:14	1
Vinyl chloride	ND		0.500	0.0590	ug/L			01/21/14 11:14	1
Xylenes, Total	ND		1.00	0.200	ug/L			01/21/14 11:14	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			01/21/14 11:14	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			01/21/14 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*01/21/14 11:14*	*1*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*		*01/21/14 11:14*	*1*

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.810		ug/L		95	70 - 130
1,1,1-Trichloroethane	4.00	3.626		ug/L		91	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.730		ug/L		93	70 - 130
1,1,2-Trichloroethane	4.00	3.525		ug/L		88	70 - 130
1,1-Dichloroethane	4.00	3.764		ug/L		94	70 - 130
1,1-Dichloroethene	4.00	3.471		ug/L		87	70 - 130
1,1-Dichloropropene	4.00	3.857		ug/L		96	70 - 130
1,2,3-Trichlorobenzene	4.00	4.118		ug/L		103	70 - 130
1,2,3-Trichloropropane	4.00	3.707		ug/L		93	70 - 130
1,2,4-Trichlorobenzene	4.00	4.107		ug/L		103	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.701		ug/L		93	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	4.011		ug/L		100	70 - 130
1,2-Dibromoethane	4.00	3.597		ug/L		90	70 - 130
1,2-Dichlorobenzene	4.00	3.629		ug/L		91	70 - 130
1,2-Dichloroethane	4.00	3.437		ug/L		86	70 - 130
1,2-Dichloropropane	4.00	3.697		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	4.00	3.757		ug/L		94	70 - 130
1,3-Dichlorobenzene	4.00	3.665		ug/L		92	70 - 130
1,3-Dichloropropane	4.00	3.561		ug/L		89	70 - 130
1,4-Dichlorobenzene	4.00	3.706		ug/L		93	70 - 130
2,2-Dichloropropane	4.00	4.084		ug/L		102	70 - 130
2-Butanone (MEK)	20.0	17.75		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.732		ug/L		93	70 - 130
2-Hexanone	20.0	19.21		ug/L		96	70 - 130
4-Chlorotoluene	4.00	3.667		ug/L		92	70 - 130
4-Isopropyltoluene	4.00	3.750		ug/L		94	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	18.54		ug/L		93	70 - 130
Acetone	20.0	17.52		ug/L		88	70 - 130
Benzene	4.00	3.639		ug/L		91	70 - 130
Bromobenzene	4.00	3.656		ug/L		91	70 - 130
Bromochloromethane	4.00	3.575		ug/L		89	70 - 130
Dichlorobromomethane	4.00	3.597		ug/L		90	70 - 130
Bromoform	4.00	3.544		ug/L		89	70 - 130
Bromomethane	4.00	4.618		ug/L		115	70 - 130
Carbon disulfide	4.00	3.708		ug/L		93	70 - 130
Carbon tetrachloride	4.00	3.651		ug/L		91	70 - 130
Chlorobenzene	4.00	3.574		ug/L		89	70 - 130
Chlorodibromomethane	3.92	3.534		ug/L		90	70 - 130
Chloroethane	4.00	3.774		ug/L		94	70 - 130
Chloroform	4.00	3.509		ug/L		88	70 - 130
Chloromethane	4.00	3.844		ug/L		96	70 - 130
cis-1,2-Dichloroethene	4.00	3.748		ug/L		94	70 - 130
cis-1,3-Dichloropropene	4.00	3.944		ug/L		99	70 - 130
Dibromomethane	4.00	3.580		ug/L		90	70 - 130
Dichlorodifluoromethane	4.00	3.603		ug/L		90	70 - 130
Ethylbenzene	4.00	3.673		ug/L		92	70 - 130
Hexachlorobutadiene	4.00	3.965		ug/L		99	70 - 130
Isopropylbenzene	4.00	3.815		ug/L		95	70 - 130
Methyl tert-butyl ether	4.00	3.956		ug/L		99	70 - 130
Methylene Chloride	4.00	3.676		ug/L		92	70 - 130
Naphthalene	4.00	4.306		ug/L		108	70 - 130
n-Butylbenzene	4.00	3.803		ug/L		95	70 - 130
N-Propylbenzene	4.00	3.698		ug/L		92	70 - 130
sec-Butylbenzene	4.00	3.777		ug/L		94	70 - 130
Styrene	4.00	3.733		ug/L		93	70 - 130
tert-Butylbenzene	4.00	3.751		ug/L		94	70 - 130
Tetrachloroethene	4.00	3.559		ug/L		89	70 - 130
Toluene	4.00	3.780		ug/L		94	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-162509/4
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	3.770		ug/L		94	70 - 130
trans-1,3-Dichloropropene	4.00	4.157		ug/L		104	70 - 130
Trichloroethene	4.00	3.784		ug/L		95	70 - 130
Trichlorofluoromethane	4.00	3.815		ug/L		95	70 - 130
Vinyl chloride	4.00	4.097		ug/L		102	70 - 130
Xylenes, Total	8.00	7.486		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*100*		*80 - 120*

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	4.00	3.990		ug/L		100	70 - 130	5	20
1,1,1-Trichloroethane	4.00	3.917		ug/L		98	70 - 130	8	20
1,1,2,2-Tetrachloroethane	4.00	3.728		ug/L		93	70 - 130	0	20
1,1,2-Trichloroethane	4.00	3.315		ug/L		83	70 - 130	6	20
1,1-Dichloroethane	4.00	3.953		ug/L		99	70 - 130	5	20
1,1-Dichloroethene	4.00	3.595		ug/L		90	70 - 130	4	20
1,1-Dichloropropene	4.00	4.068		ug/L		102	70 - 130	5	20
1,2,3-Trichlorobenzene	4.00	4.098		ug/L		102	70 - 130	0	20
1,2,3-Trichloropropane	4.00	3.666		ug/L		92	70 - 130	1	20
1,2,4-Trichlorobenzene	4.00	4.154		ug/L		104	70 - 130	1	20
1,2,4-Trimethylbenzene	4.00	3.797		ug/L		95	70 - 130	3	20
1,2-Dibromo-3-Chloropropane	4.00	4.235		ug/L		106	70 - 130	5	20
1,2-Dibromoethane	4.00	3.501		ug/L		88	70 - 130	3	20
1,2-Dichlorobenzene	4.00	3.757		ug/L		94	70 - 130	3	20
1,2-Dichloroethane	4.00	3.511		ug/L		88	70 - 130	2	20
1,2-Dichloropropane	4.00	3.735		ug/L		93	70 - 130	1	20
1,3,5-Trimethylbenzene	4.00	3.851		ug/L		96	70 - 130	2	20
1,3-Dichlorobenzene	4.00	3.701		ug/L		93	70 - 130	1	20
1,3-Dichloropropane	4.00	3.513		ug/L		88	70 - 130	1	20
1,4-Dichlorobenzene	4.00	3.760		ug/L		94	70 - 130	1	20
2,2-Dichloropropane	4.00	4.481		ug/L		112	70 - 130	9	20
2-Butanone (MEK)	20.0	17.69		ug/L		88	70 - 130	0	20
2-Chlorotoluene	4.00	3.769		ug/L		94	70 - 130	1	20
2-Hexanone	20.0	20.44		ug/L		102	70 - 130	6	20
4-Chlorotoluene	4.00	3.698		ug/L		92	70 - 130	1	20
4-Isopropyltoluene	4.00	3.898		ug/L		97	70 - 130	4	20
4-Methyl-2-pentanone (MIBK)	20.0	18.93		ug/L		95	70 - 130	2	20
Acetone	20.0	16.79		ug/L		84	70 - 130	4	20
Benzene	4.00	3.764		ug/L		94	70 - 130	3	20
Bromobenzene	4.00	3.665		ug/L		92	70 - 130	0	20
Bromochloromethane	4.00	3.674		ug/L		92	70 - 130	3	20
Dichlorobromomethane	4.00	3.566		ug/L		89	70 - 130	1	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-162509/5
Matrix: Water
Analysis Batch: 162509

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
Bromoform	4.00	3.518		ug/L		88	70 - 130	1	20
Bromomethane	4.00	5.462	*	ug/L		137	70 - 130	17	20
Carbon disulfide	4.00	3.987		ug/L		100	70 - 130	7	20
Carbon tetrachloride	4.00	3.915		ug/L		98	70 - 130	7	20
Chlorobenzene	4.00	3.682		ug/L		92	70 - 130	3	20
Chlorodibromomethane	3.92	3.464		ug/L		88	70 - 130	2	20
Chloroethane	4.00	3.736		ug/L		93	70 - 130	1	20
Chloroform	4.00	3.670		ug/L		92	70 - 130	4	20
Chloromethane	4.00	3.902		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	4.00	3.893		ug/L		97	70 - 130	4	20
cis-1,3-Dichloropropene	4.00	3.766		ug/L		94	70 - 130	5	20
Dibromomethane	4.00	3.644		ug/L		91	70 - 130	2	20
Dichlorodifluoromethane	4.00	3.861		ug/L		97	70 - 130	7	20
Ethylbenzene	4.00	3.864		ug/L		97	70 - 130	5	20
Hexachlorobutadiene	4.00	4.195		ug/L		105	70 - 130	6	20
Isopropylbenzene	4.00	4.032		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	4.00	4.039		ug/L		101	70 - 130	2	20
Methylene Chloride	4.00	3.816		ug/L		95	70 - 130	4	20
Naphthalene	4.00	4.377		ug/L		109	70 - 130	2	20
n-Butylbenzene	4.00	3.911		ug/L		98	70 - 130	3	20
N-Propylbenzene	4.00	3.798		ug/L		95	70 - 130	3	20
sec-Butylbenzene	4.00	3.927		ug/L		98	70 - 130	4	20
Styrene	4.00	3.861		ug/L		97	70 - 130	3	20
tert-Butylbenzene	4.00	3.942		ug/L		99	70 - 130	5	20
Tetrachloroethene	4.00	3.719		ug/L		93	70 - 130	4	20
Toluene	4.00	3.764		ug/L		94	70 - 130	0	20
trans-1,2-Dichloroethene	4.00	3.978		ug/L		99	70 - 130	5	20
trans-1,3-Dichloropropene	4.00	3.954		ug/L		99	70 - 130	5	20
Trichloroethene	4.00	3.800		ug/L		95	70 - 130	0	20
Trichlorofluoromethane	4.00	4.126		ug/L		103	70 - 130	8	20
Vinyl chloride	4.00	4.389		ug/L		110	70 - 130	7	20
Xylenes, Total	8.00	7.758		ug/L		97	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
1,2-Dichlorobenzene-d4	*102*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44842-1

GC/MS VOA

Analysis Batch: 162509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-44842-1	29R	Total/NA	Water	524.2	
LCS 480-162509/4	Lab Control Sample	Total/NA	Water	524.2	
LCSD 480-162509/5	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 480-162509/6	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44842-1

Client Sample ID: 29R

Date Collected: 01/16/14 10:30
Date Received: 01/18/14 09:00

Lab Sample ID: 490-44842-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	25 mL	25 mL	162509	01/21/14 13:33	TRB	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44842-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-44842-1

Laboratory: TestAmerica Nashville

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	ISO/IEC 17025		0453.07	12-31-15
Alaska (UST)	State Program	10	UST-087	07-24-14
Arizona	State Program	9	AZ0473	05-05-14
Arizona	State Program	9	AZ0473	05-05-14 *
Arkansas DEQ	State Program	6	88-0737	04-25-14
California	NELAP	9	1168CA	10-31-14
Canadian Assoc Lab Accred (CALA)	Canada		3744	03-08-14
Connecticut	State Program	1	PH-0220	12-31-15
Florida	NELAP	4	E87358	06-30-14
Illinois	NELAP	5	200010	12-09-14
Iowa	State Program	7	131	05-01-14
Kansas	NELAP	7	E-10229	10-31-14
Kentucky (UST)	State Program	4	19	06-30-14
Louisiana	NELAP	6	30613	06-30-14
Maryland	State Program	3	316	03-31-14
Massachusetts	State Program	1	M-TN032	06-30-14
Minnesota	NELAP	5	047-999-345	12-31-14
Mississippi	State Program	4	N/A	06-30-14
Montana (UST)	State Program	8	NA	01-01-20
Nevada	State Program	9	TN00032	07-31-14
New Hampshire	NELAP	1	2963	10-10-14
New Jersey	NELAP	2	TN965	06-30-14
New York	NELAP	2	11342	04-01-14
North Carolina DENR	State Program	4	387	12-31-14
North Dakota	State Program	8	R-146	06-30-14
Ohio VAP	State Program	5	CL0033	10-16-15
Oklahoma	State Program	6	9412	08-31-14
Oregon	NELAP	10	TN200001	04-29-14
Pennsylvania	NELAP	3	68-00585	06-30-14
Rhode Island	State Program	1	LAO00268	12-30-14
South Carolina	State Program	4	84009 (001)	02-28-14
Tennessee	State Program	4	2008	02-23-14
Texas	NELAP	6	T104704077-09-TX	08-31-14
USDA	Federal		S-48469	10-30-16
Utah	NELAP	8	TN00032	07-31-14
Virginia	NELAP	3	460152	06-14-14
Washington	State Program	10	C789	07-19-14
West Virginia DEP	State Program	3	219	02-28-14
Wisconsin	State Program	5	998020430	08-31-14
Wyoming (UST)	A2LA	8	453.07	12-31-15

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

* Expired certification is currently pending renewal and is considered valid.

Laboratory: TestAmerica Buffalo (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
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	12-31-13 *
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

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: T Zakarian	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No:
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #: MA000725 0008
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): STD			
State, Zip: MA, 01824				
Phone	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #			
Project Name: Tibbetts Road Site E101274	Project #: 49002494			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved - Standard Analyte list	200.7 - 200.7 Fe and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
29R	1/16/14	1030	G	W			K		3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment		
Relinquished by	Date/Time	Company	Received by: Chuck Kau	Date/Time: 1/18/14 0900	Company: TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.

Cooler Temperature(s) °C and Other Remarks: 3.6 #2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44842-1

Login Number: 44842
List Number: 1
Creator: Gambill, Jennifer

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.		
The cooler's custody seal, if present, is intact.		
Sample custody seals, if present, are intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the containers received and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified.		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Residual Chlorine Checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-44842-1

Login Number: 44842
List Number: 1
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 01/21/14 08:51 AM

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	3.6 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	LAB TO CHECK

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-62364-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
10/2/2014 1:50:42 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62364-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-62364-1	26R	Drinking Water	09/25/14 10:15	09/26/14 09:00

Job ID: 490-62364-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-62364-1

Comments
No additional comments.

Receipt
The sample was received on 9/26/2014 9:00 AM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 0.1º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62364-1

Client Sample ID: 26R

Date Collected: 09/25/14 10:15
Date Received: 09/26/14 09:00

Lab Sample ID: 490-62364-1

Matrix: Drinking Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			10/02/14 05:40	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			10/02/14 05:40	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			10/02/14 05:40	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			10/02/14 05:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			10/02/14 05:40	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			10/02/14 05:40	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			10/02/14 05:40	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			10/02/14 05:40	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			10/02/14 05:40	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			10/02/14 05:40	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			10/02/14 05:40	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			10/02/14 05:40	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			10/02/14 05:40	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			10/02/14 05:40	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			10/02/14 05:40	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			10/02/14 05:40	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			10/02/14 05:40	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			10/02/14 05:40	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			10/02/14 05:40	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			10/02/14 05:40	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			10/02/14 05:40	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			10/02/14 05:40	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			10/02/14 05:40	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			10/02/14 05:40	1
2-Hexanone	ND		2.50	0.231	ug/L			10/02/14 05:40	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			10/02/14 05:40	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			10/02/14 05:40	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			10/02/14 05:40	1
Acetone	**1.68**	**J**	2.50	0.537	ug/L			10/02/14 05:40	1
Acrylonitrile	ND		10.0	0.476	ug/L			10/02/14 05:40	1
Allyl chloride	ND		0.500	0.0910	ug/L			10/02/14 05:40	1
Benzene	**0.472**	**J**	0.500	0.130	ug/L			10/02/14 05:40	1
Bromobenzene	ND		0.500	0.130	ug/L			10/02/14 05:40	1
Bromochloromethane	ND		0.500	0.110	ug/L			10/02/14 05:40	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			10/02/14 05:40	1
Bromoform	ND		0.500	0.130	ug/L			10/02/14 05:40	1
Bromomethane	ND		0.500	0.0510	ug/L			10/02/14 05:40	1
Carbon disulfide	ND		0.500	0.150	ug/L			10/02/14 05:40	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			10/02/14 05:40	1
Chlorobenzene	ND		0.500	0.120	ug/L			10/02/14 05:40	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			10/02/14 05:40	1
Chloroethane	ND		0.500	0.0700	ug/L			10/02/14 05:40	1
Chloroform	ND		0.500	0.140	ug/L			10/02/14 05:40	1
Chloromethane	ND		0.500	0.0629	ug/L			10/02/14 05:40	1
cis-1,2-Dichloroethene	**1.75**		0.500	0.120	ug/L			10/02/14 05:40	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			10/02/14 05:40	1
Dibromomethane	ND		0.500	0.170	ug/L			10/02/14 05:40	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			10/02/14 05:40	1
Ethyl ether	ND		0.500	0.115	ug/L			10/02/14 05:40	1

Client Sample ID: 26R

Date Collected: 09/25/14 10:15
Date Received: 09/26/14 09:00

Lab Sample ID: 490-62364-1

Matrix: Drinking Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		0.500	0.110	ug/L			10/02/14 05:40	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			10/02/14 05:40	1
Iodomethane	ND		0.500	0.150	ug/L			10/02/14 05:40	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			10/02/14 05:40	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			10/02/14 05:40	1
Methylene Chloride	ND		0.500	0.250	ug/L			10/02/14 05:40	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			10/02/14 05:40	1
Naphthalene	ND		0.500	0.0600	ug/L			10/02/14 05:40	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			10/02/14 05:40	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			10/02/14 05:40	1
o-Xylene	ND		0.500	0.0440	ug/L			10/02/14 05:40	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			10/02/14 05:40	1
Styrene	ND		0.500	0.0440	ug/L			10/02/14 05:40	1
t-Butanol	ND		10.0	2.46	ug/L			10/02/14 05:40	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			10/02/14 05:40	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			10/02/14 05:40	1
Toluene	ND		0.500	0.100	ug/L			10/02/14 05:40	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			10/02/14 05:40	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			10/02/14 05:40	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			10/02/14 05:40	1
Trichloroethene	**0.312**	**J**	0.500	0.0600	ug/L			10/02/14 05:40	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			10/02/14 05:40	1
Vinyl acetate	ND		2.50	0.172	ug/L			10/02/14 05:40	1
Vinyl chloride	ND		0.500	0.0590	ug/L			10/02/14 05:40	1
Xylenes, Total	ND		1.00	0.200	ug/L			10/02/14 05:40	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			10/02/14 05:40	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			10/02/14 05:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*10/02/14 05:40*	*1*
1,2-Dichlorobenzene-d4	*105*		*80 - 120*		*10/02/14 05:40*	*1*

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-205534/5
Matrix: Water
Analysis Batch: 205534

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		0.500	0.140	ug/L			10/01/14 22:07	1
1,1,1-Trichloroethane	ND		0.500	0.0630	ug/L			10/01/14 22:07	1
1,1,2,2-Tetrachloroethane	ND		0.500	0.0700	ug/L			10/01/14 22:07	1
1,1,2-Trichloroethane	ND		0.500	0.170	ug/L			10/01/14 22:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.500	0.170	ug/L			10/01/14 22:07	1
1,1-Dichloroethane	ND		0.500	0.0740	ug/L			10/01/14 22:07	1
1,1-Dichloroethene	ND		0.500	0.0590	ug/L			10/01/14 22:07	1
1,1-Dichloropropene	ND		0.500	0.0630	ug/L			10/01/14 22:07	1
1,2,3-Trichlorobenzene	ND		0.500	0.0570	ug/L			10/01/14 22:07	1
1,2,3-Trichloropropane	ND		0.500	0.122	ug/L			10/01/14 22:07	1
1,2,4-Trichlorobenzene	ND		0.500	0.127	ug/L			10/01/14 22:07	1
1,2,4-Trimethylbenzene	ND		0.500	0.0900	ug/L			10/01/14 22:07	1
1,2-Dibromo-3-Chloropropane	ND		0.500	0.210	ug/L			10/01/14 22:07	1
1,2-Dibromoethane	ND		0.500	0.140	ug/L			10/01/14 22:07	1
1,2-Dichlorobenzene	ND		0.500	0.160	ug/L			10/01/14 22:07	1
1,2-Dichloroethane	ND		0.500	0.140	ug/L			10/01/14 22:07	1
1,2-Dichloropropane	ND		0.500	0.110	ug/L			10/01/14 22:07	1
1,3,5-Trimethylbenzene	ND		0.500	0.0430	ug/L			10/01/14 22:07	1
1,3-Dichlorobenzene	ND		0.500	0.130	ug/L			10/01/14 22:07	1
1,3-Dichloropropane	ND		0.500	0.150	ug/L			10/01/14 22:07	1
1,4-Dichlorobenzene	ND		0.500	0.130	ug/L			10/01/14 22:07	1
2,2-Dichloropropane	ND		0.500	0.0480	ug/L			10/01/14 22:07	1
2-Butanone (MEK)	ND		2.50	0.249	ug/L			10/01/14 22:07	1
2-Chlorotoluene	ND		0.500	0.0500	ug/L			10/01/14 22:07	1
2-Hexanone	ND		2.50	0.231	ug/L			10/01/14 22:07	1
4-Chlorotoluene	ND		0.500	0.0500	ug/L			10/01/14 22:07	1
4-Isopropyltoluene	ND		0.500	0.0630	ug/L			10/01/14 22:07	1
4-Methyl-2-pentanone (MIBK)	ND		2.50	0.262	ug/L			10/01/14 22:07	1
Acetone	ND		2.50	0.537	ug/L			10/01/14 22:07	1
Acrylonitrile	ND		10.0	0.476	ug/L			10/01/14 22:07	1
Allyl chloride	ND		0.500	0.0910	ug/L			10/01/14 22:07	1
Benzene	ND		0.500	0.130	ug/L			10/01/14 22:07	1
Bromobenzene	ND		0.500	0.130	ug/L			10/01/14 22:07	1
Bromochloromethane	ND		0.500	0.110	ug/L			10/01/14 22:07	1
Dichlorobromomethane	ND		0.500	0.140	ug/L			10/01/14 22:07	1
Bromoform	ND		0.500	0.130	ug/L			10/01/14 22:07	1
Bromomethane	ND		0.500	0.0510	ug/L			10/01/14 22:07	1
Carbon disulfide	ND		0.500	0.150	ug/L			10/01/14 22:07	1
Carbon tetrachloride	ND		0.500	0.0530	ug/L			10/01/14 22:07	1
Chlorobenzene	ND		0.500	0.120	ug/L			10/01/14 22:07	1
Chlorodibromomethane	ND		0.500	0.160	ug/L			10/01/14 22:07	1
Chloroethane	ND		0.500	0.0700	ug/L			10/01/14 22:07	1
Chloroform	ND		0.500	0.140	ug/L			10/01/14 22:07	1
Chloromethane	ND		0.500	0.0629	ug/L			10/01/14 22:07	1
cis-1,2-Dichloroethene	ND		0.500	0.120	ug/L			10/01/14 22:07	1
cis-1,3-Dichloropropene	ND		0.500	0.0800	ug/L			10/01/14 22:07	1
Dibromomethane	ND		0.500	0.170	ug/L			10/01/14 22:07	1
Dichlorodifluoromethane	ND		0.500	0.0700	ug/L			10/01/14 22:07	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-205534/5
Matrix: Water
Analysis Batch: 205534

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		0.500	0.115	ug/L			10/01/14 22:07	1
Ethylbenzene	ND		0.500	0.110	ug/L			10/01/14 22:07	1
Hexachlorobutadiene	ND		0.500	0.110	ug/L			10/01/14 22:07	1
Iodomethane	ND		0.500	0.150	ug/L			10/01/14 22:07	1
Isopropylbenzene	ND		0.500	0.0530	ug/L			10/01/14 22:07	1
Methyl tert-butyl ether	ND		0.500	0.120	ug/L			10/01/14 22:07	1
Methylene Chloride	ND		0.500	0.250	ug/L			10/01/14 22:07	1
m-Xylene & p-Xylene	ND		1.00	0.0870	ug/L			10/01/14 22:07	1
Naphthalene	ND		0.500	0.0600	ug/L			10/01/14 22:07	1
n-Butylbenzene	ND		0.500	0.0810	ug/L			10/01/14 22:07	1
N-Propylbenzene	ND		0.500	0.0570	ug/L			10/01/14 22:07	1
o-Xylene	ND		0.500	0.0440	ug/L			10/01/14 22:07	1
sec-Butylbenzene	ND		0.500	0.0680	ug/L			10/01/14 22:07	1
Styrene	ND		0.500	0.0440	ug/L			10/01/14 22:07	1
t-Butanol	ND		10.0	2.46	ug/L			10/01/14 22:07	1
tert-Butylbenzene	ND		0.500	0.0600	ug/L			10/01/14 22:07	1
Tetrachloroethene	ND		0.500	0.0670	ug/L			10/01/14 22:07	1
Toluene	ND		0.500	0.100	ug/L			10/01/14 22:07	1
trans-1,2-Dichloroethene	ND		0.500	0.130	ug/L			10/01/14 22:07	1
trans-1,3-Dichloropropene	ND		0.500	0.100	ug/L			10/01/14 22:07	1
trans-1,4-Dichloro-2-butene	ND		2.50	1.25	ug/L			10/01/14 22:07	1
Trichloroethene	ND		0.500	0.0600	ug/L			10/01/14 22:07	1
Trichlorofluoromethane	ND		0.500	0.0440	ug/L			10/01/14 22:07	1
Vinyl acetate	ND		2.50	0.172	ug/L			10/01/14 22:07	1
Vinyl chloride	ND		0.500	0.0590	ug/L			10/01/14 22:07	1
Xylenes, Total	ND		1.00	0.200	ug/L			10/01/14 22:07	1
Trihalomethanes, Total	ND		2.00	1.00	ug/L			10/01/14 22:07	1
Dichlorofluoromethane	ND		0.500	0.134	ug/L			10/01/14 22:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*10/01/14 22:07*	*1*
1,2-Dichlorobenzene-d4	*101*		*80 - 120*		*10/01/14 22:07*	*1*

Lab Sample ID: LCS 480-205534/4
Matrix: Water
Analysis Batch: 205534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	4.00	3.714		ug/L		93	70 - 130
1,1,1-Trichloroethane	4.00	4.364		ug/L		109	70 - 130
1,1,2,2-Tetrachloroethane	4.00	3.638		ug/L		91	70 - 130
1,1,2-Trichloroethane	4.00	3.833		ug/L		96	70 - 130
1,1-Dichloroethane	4.00	4.492		ug/L		112	70 - 130
1,1-Dichloroethene	4.00	4.354		ug/L		109	70 - 130
1,1-Dichloropropene	4.00	4.380		ug/L		109	70 - 130
1,2,3-Trichlorobenzene	4.00	3.899		ug/L		97	70 - 130
1,2,3-Trichloropropane	4.00	3.698		ug/L		92	70 - 130
1,2,4-Trichlorobenzene	4.00	3.806		ug/L		95	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-205534/4
Matrix: Water
Analysis Batch: 205534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	4.00	3.693		ug/L		92	70 - 130
1,2-Dibromo-3-Chloropropane	4.00	3.192		ug/L		80	70 - 130
1,2-Dibromoethane	4.00	3.644		ug/L		91	70 - 130
1,2-Dichlorobenzene	4.00	3.920		ug/L		98	70 - 130
1,2-Dichloroethane	4.00	4.145		ug/L		104	70 - 130
1,2-Dichloropropane	4.00	3.989		ug/L		100	70 - 130
1,3,5-Trimethylbenzene	4.00	3.708		ug/L		93	70 - 130
1,3-Dichlorobenzene	4.00	3.878		ug/L		97	70 - 130
1,3-Dichloropropane	4.00	3.726		ug/L		93	70 - 130
1,4-Dichlorobenzene	4.00	3.903		ug/L		98	70 - 130
2,2-Dichloropropane	4.00	4.494		ug/L		112	70 - 130
2-Butanone (MEK)	20.0	17.85		ug/L		89	70 - 130
2-Chlorotoluene	4.00	3.807		ug/L		95	70 - 130
2-Hexanone	20.0	17.10		ug/L		86	70 - 130
4-Chlorotoluene	4.00	3.820		ug/L		95	70 - 130
4-Isopropyltoluene	4.00	3.671		ug/L		92	70 - 130
4-Methyl-2-pentanone (MIBK)	20.0	17.29		ug/L		86	70 - 130
Acetone	20.0	20.19		ug/L		101	70 - 130
Benzene	4.00	3.940		ug/L		98	70 - 130
Bromobenzene	4.00	3.878		ug/L		97	70 - 130
Bromochloromethane	4.00	4.468		ug/L		112	70 - 130
Dichlorobromomethane	4.00	3.913		ug/L		98	70 - 130
Bromoform	4.00	3.166		ug/L		79	70 - 130
Bromomethane	4.00	4.770		ug/L		119	70 - 130
Carbon disulfide	4.00	4.130		ug/L		103	70 - 130
Carbon tetrachloride	4.00	4.284		ug/L		107	70 - 130
Chlorobenzene	4.00	3.940		ug/L		98	70 - 130
Chlorodibromomethane	4.00	3.644		ug/L		91	70 - 130
Chloroethane	4.00	4.187		ug/L		105	70 - 130
Chloroform	4.00	4.249		ug/L		106	70 - 130
Chloromethane	4.00	3.437		ug/L		86	70 - 130
cis-1,2-Dichloroethene	4.00	4.254		ug/L		106	70 - 130
cis-1,3-Dichloropropene	4.00	4.011		ug/L		100	70 - 130
Dibromomethane	4.00	4.174		ug/L		104	70 - 130
Dichlorodifluoromethane	4.00	3.193		ug/L		80	70 - 130
Ethylbenzene	4.00	3.845		ug/L		96	70 - 130
Hexachlorobutadiene	4.00	3.771		ug/L		94	70 - 130
Isopropylbenzene	4.00	3.847		ug/L		96	70 - 130
Methyl tert-butyl ether	4.00	4.097		ug/L		102	70 - 130
Methylene Chloride	4.00	4.271		ug/L		107	70 - 130
Naphthalene	4.00	3.603		ug/L		90	70 - 130
n-Butylbenzene	4.00	3.651		ug/L		91	70 - 130
N-Propylbenzene	4.00	3.773		ug/L		94	70 - 130
sec-Butylbenzene	4.00	3.805		ug/L		95	70 - 130
Styrene	4.00	3.570		ug/L		89	70 - 130
tert-Butylbenzene	4.00	3.747		ug/L		94	70 - 130
Tetrachloroethene	4.00	4.031		ug/L		101	70 - 130
Toluene	4.00	4.034		ug/L		101	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-205534/4
Matrix: Water
Analysis Batch: 205534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	4.00	4.414		ug/L		110	70 - 130
trans-1,3-Dichloropropene	4.00	4.227		ug/L		106	70 - 130
Trichloroethene	4.00	3.962		ug/L		99	70 - 130
Trichlorofluoromethane	4.00	4.204		ug/L		105	70 - 130
Vinyl chloride	4.00	3.675		ug/L		92	70 - 130
Xylenes, Total	8.00	7.628		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
1,2-Dichlorobenzene-d4	*97*		*80 - 120*

Lab Sample ID: 480-67985-G-1 MS
Matrix: Water
Analysis Batch: 205534

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		4.00	4.382		ug/L		110	70 - 130
1,1,1-Trichloroethane	ND		4.00	4.879		ug/L		122	70 - 130
1,1,2,2-Tetrachloroethane	ND		4.00	4.056		ug/L		101	70 - 130
1,1,2-Trichloroethane	ND		4.00	4.389		ug/L		110	70 - 130
1,1-Dichloroethane	ND		4.00	5.323	F1	ug/L		133	70 - 130
1,1-Dichloroethene	ND		4.00	4.939		ug/L		123	70 - 130
1,1-Dichloropropene	ND		4.00	4.877		ug/L		122	70 - 130
1,2,3-Trichlorobenzene	ND		4.00	4.309		ug/L		108	70 - 130
1,2,3-Trichloropropane	ND		4.00	3.995		ug/L		100	70 - 130
1,2,4-Trichlorobenzene	ND		4.00	4.148		ug/L		104	70 - 130
1,2,4-Trimethylbenzene	ND		4.00	3.688		ug/L		92	70 - 130
1,2-Dibromo-3-Chloropropane	ND		4.00	3.277		ug/L		82	70 - 130
1,2-Dibromoethane	ND		4.00	4.263		ug/L		107	70 - 130
1,2-Dichlorobenzene	ND		4.00	4.461		ug/L		112	70 - 130
1,2-Dichloroethane	ND		4.00	4.891		ug/L		122	70 - 130
1,2-Dichloropropane	ND		4.00	4.607		ug/L		115	70 - 130
1,3,5-Trimethylbenzene	ND		4.00	3.993		ug/L		100	70 - 130
1,3-Dichlorobenzene	ND		4.00	4.402		ug/L		110	70 - 130
1,3-Dichloropropane	ND		4.00	4.239		ug/L		106	70 - 130
1,4-Dichlorobenzene	ND		4.00	4.388		ug/L		110	70 - 130
2,2-Dichloropropane	ND		4.00	4.647		ug/L		116	70 - 130
2-Butanone (MEK)	ND		20.0	16.90		ug/L		85	70 - 130
2-Chlorotoluene	ND		4.00	4.236		ug/L		106	70 - 130
2-Hexanone	ND		20.0	17.71		ug/L		89	70 - 130
4-Chlorotoluene	ND		4.00	4.199		ug/L		105	70 - 130
4-Isopropyltoluene	ND		4.00	4.029		ug/L		101	70 - 130
4-Methyl-2-pentanone (MIBK)	ND		20.0	18.22		ug/L		91	70 - 130
Acetone	ND		20.0	18.01		ug/L		90	70 - 130
Benzene	ND		4.00	4.577		ug/L		114	70 - 130
Bromobenzene	ND		4.00	4.448		ug/L		111	70 - 130
Bromochloromethane	ND		4.00	5.065		ug/L		127	70 - 130
Dichlorobromomethane	ND		4.00	4.341		ug/L		109	70 - 130

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-67985-G-1 MS
Matrix: Water
Analysis Batch: 205534

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromoform	ND		4.00	3.151		ug/L		79	70 - 130
Bromomethane	ND		4.00	5.623	F1	ug/L		141	70 - 130
Carbon tetrachloride	ND		4.00	4.775		ug/L		119	70 - 130
Chlorobenzene	ND		4.00	4.618		ug/L		115	70 - 130
Chlorodibromomethane	ND		4.00	3.795		ug/L		95	70 - 130
Chloroethane	ND		4.00	4.516		ug/L		113	70 - 130
Chloroform	ND		4.00	4.862		ug/L		122	70 - 130
Chloromethane	ND		4.00	3.907		ug/L		98	70 - 130
cis-1,2-Dichloroethene	ND		4.00	4.964		ug/L		124	70 - 130
cis-1,3-Dichloropropene	ND		4.00	4.446		ug/L		111	70 - 130
Dibromomethane	ND		4.00	4.763		ug/L		119	70 - 130
Ethylbenzene	ND		4.00	4.325		ug/L		108	70 - 130
Hexachlorobutadiene	ND		4.00	4.247		ug/L		106	70 - 130
Isopropylbenzene	ND		4.00	4.273		ug/L		107	70 - 130
Methyl tert-butyl ether	ND		4.00	4.598		ug/L		115	70 - 130
Methylene Chloride	ND		4.00	4.786		ug/L		120	70 - 130
Naphthalene	ND		4.00	3.788		ug/L		95	70 - 130
n-Butylbenzene	ND		4.00	3.887		ug/L		97	70 - 130
N-Propylbenzene	ND		4.00	4.073		ug/L		102	70 - 130
sec-Butylbenzene	ND		4.00	4.129		ug/L		103	70 - 130
Styrene	ND		4.00	3.630		ug/L		91	70 - 130
tert-Butylbenzene	ND		4.00	4.085		ug/L		102	70 - 130
Tetrachloroethene	ND		4.00	4.548		ug/L		114	70 - 130
Toluene	ND		4.00	4.526		ug/L		113	70 - 130
trans-1,2-Dichloroethene	ND		4.00	5.000		ug/L		125	70 - 130
trans-1,3-Dichloropropene	ND		4.00	4.381		ug/L		110	70 - 130
Trichloroethene	ND		4.00	4.505		ug/L		113	70 - 130
Trichlorofluoromethane	ND		4.00	4.290		ug/L		107	70 - 130
Vinyl chloride	ND		4.00	4.038		ug/L		101	70 - 130
Xylenes, Total	ND		8.00	8.667		ug/L		108	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
1,2-Dichlorobenzene-d4	*98*		*80 - 120*

Lab Sample ID: 480-67985-H-1 MSD
Matrix: Water
Analysis Batch: 205534

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		4.00	4.156		ug/L		104	70 - 130	5	20
1,1,1-Trichloroethane	ND		4.00	4.739		ug/L		118	70 - 130	3	20
1,1,2,2-Tetrachloroethane	ND		4.00	3.818		ug/L		95	70 - 130	6	20
1,1,2-Trichloroethane	ND		4.00	4.192		ug/L		105	70 - 130	5	20
1,1-Dichloroethane	ND		4.00	4.919		ug/L		123	70 - 130	8	20
1,1-Dichloroethene	ND		4.00	4.733		ug/L		118	70 - 130	4	20
1,1-Dichloropropene	ND		4.00	4.653		ug/L		116	70 - 130	5	20
1,2,3-Trichlorobenzene	ND		4.00	4.138		ug/L		103	70 - 130	4	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-67985-H-1 MSD
Matrix: Water
Analysis Batch: 205534

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		4.00	3.828		ug/L		96	70 - 130	4	20
1,2,4-Trichlorobenzene	ND		4.00	4.002		ug/L		100	70 - 130	4	20
1,2,4-Trimethylbenzene	ND		4.00	3.557		ug/L		89	70 - 130	4	20
1,2-Dibromo-3-Chloropropane	ND		4.00	3.140		ug/L		79	70 - 130	4	20
1,2-Dibromoethane	ND		4.00	4.029		ug/L		101	70 - 130	6	20
1,2-Dichlorobenzene	ND		4.00	4.272		ug/L		107	70 - 130	4	20
1,2-Dichloroethane	ND		4.00	4.601		ug/L		115	70 - 130	6	20
1,2-Dichloropropane	ND		4.00	4.419		ug/L		110	70 - 130	4	20
1,3,5-Trimethylbenzene	ND		4.00	3.762		ug/L		94	70 - 130	6	20
1,3-Dichlorobenzene	ND		4.00	4.211		ug/L		105	70 - 130	4	20
1,3-Dichloropropane	ND		4.00	4.186		ug/L		105	70 - 130	1	20
1,4-Dichlorobenzene	ND		4.00	4.174		ug/L		104	70 - 130	5	20
2,2-Dichloropropane	ND		4.00	4.071		ug/L		102	70 - 130	13	20
2-Butanone (MEK)	ND		20.0	16.76		ug/L		84	70 - 130	1	20
2-Chlorotoluene	ND		4.00	4.035		ug/L		101	70 - 130	5	20
2-Hexanone	ND		20.0	16.60		ug/L		83	70 - 130	6	20
4-Chlorotoluene	ND		4.00	4.084		ug/L		102	70 - 130	3	20
4-Isopropyltoluene	ND		4.00	3.834		ug/L		96	70 - 130	5	20
4-Methyl-2-pentanone (MIBK)	ND		20.0	17.21		ug/L		86	70 - 130	6	20
Acetone	ND		20.0	17.26		ug/L		86	70 - 130	4	20
Benzene	ND		4.00	4.482		ug/L		112	70 - 130	2	20
Bromobenzene	ND		4.00	4.179		ug/L		104	70 - 130	6	20
Bromochloromethane	ND		4.00	4.777		ug/L		119	70 - 130	6	20
Dichlorobromomethane	ND		4.00	4.066		ug/L		102	70 - 130	7	20
Bromoform	ND		4.00	2.913		ug/L		73	70 - 130	8	20
Bromomethane	ND		4.00	5.980	F1	ug/L		149	70 - 130	6	20
Carbon tetrachloride	ND		4.00	4.489		ug/L		112	70 - 130	6	20
Chlorobenzene	ND		4.00	4.355		ug/L		109	70 - 130	6	20
Chlorodibromomethane	ND		4.00	3.614		ug/L		90	70 - 130	5	20
Chloroethane	ND		4.00	4.611		ug/L		115	70 - 130	2	20
Chloroform	ND		4.00	4.682		ug/L		117	70 - 130	4	20
Chloromethane	ND		4.00	3.936		ug/L		98	70 - 130	1	20
cis-1,2-Dichloroethene	ND		4.00	4.629		ug/L		116	70 - 130	7	20
cis-1,3-Dichloropropene	ND		4.00	4.109		ug/L		103	70 - 130	8	20
Dibromomethane	ND		4.00	4.523		ug/L		113	70 - 130	5	20
Ethylbenzene	ND		4.00	4.118		ug/L		103	70 - 130	5	20
Hexachlorobutadiene	ND		4.00	4.014		ug/L		100	70 - 130	6	20
Isopropylbenzene	ND		4.00	4.028		ug/L		101	70 - 130	6	20
Methyl tert-butyl ether	ND		4.00	4.442		ug/L		111	70 - 130	3	20
Methylene Chloride	ND		4.00	4.530		ug/L		113	70 - 130	6	20
Naphthalene	ND		4.00	3.571		ug/L		89	70 - 130	6	20
n-Butylbenzene	ND		4.00	3.673		ug/L		92	70 - 130	6	20
N-Propylbenzene	ND		4.00	3.888		ug/L		97	70 - 130	5	20
sec-Butylbenzene	ND		4.00	3.890		ug/L		97	70 - 130	6	20
Styrene	ND		4.00	3.479		ug/L		87	70 - 130	4	20
tert-Butylbenzene	ND		4.00	3.886		ug/L		97	70 - 130	5	20
Tetrachloroethene	ND		4.00	4.219		ug/L		105	70 - 130	7	20
Toluene	ND		4.00	4.272		ug/L		107	70 - 130	6	20

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-67985-H-1 MSD
Matrix: Water
Analysis Batch: 205534

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	ND		4.00	4.861		ug/L		122	70 - 130	3	20
trans-1,3-Dichloropropene	ND		4.00	3.989		ug/L		100	70 - 130	9	20
Trichloroethene	ND		4.00	4.340		ug/L		108	70 - 130	4	20
Trichlorofluoromethane	ND		4.00	4.338		ug/L		108	70 - 130	1	20
Vinyl chloride	ND		4.00	4.220		ug/L		105	70 - 130	4	20
Xylenes, Total	ND		8.00	8.188		ug/L		102	70 - 130	6	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
1,2-Dichlorobenzene-d4	*97*		*80 - 120*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62364-1

GC/MS VOA

Analysis Batch: 205534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-67985-G-1 MS	Matrix Spike	Total/NA	Water	524.2	
480-67985-H-1 MSD	Matrix Spike Duplicate	Total/NA	Water	524.2	
490-62364-1	26R	Total/NA	Drinking Water	524.2	
LCS 480-205534/4	Lab Control Sample	Total/NA	Water	524.2	
MB 480-205534/5	Method Blank	Total/NA	Water	524.2	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62364-1

Client Sample ID: 26R

Date Collected: 09/25/14 10:15
Date Received: 09/26/14 09:00

Lab Sample ID: 490-62364-1

Matrix: Drinking Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	5 mL	5 mL	205534	10/02/14 05:40	RAS	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62364-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL BUF

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

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: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62364-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14 *

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2337	11-17-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
524.2		Drinking Water	1,1,2-Trichloro-1,2,2-trifluoroethane
524.2		Drinking Water	1,2,3-Trichloropropane
524.2		Drinking Water	1,2-Dibromo-3-Chloropropane
524.2		Drinking Water	1,2-Dibromoethane
524.2		Drinking Water	2-Butanone (MEK)
524.2		Drinking Water	2-Hexanone
524.2		Drinking Water	4-Methyl-2-pentanone (MIBK)
524.2		Drinking Water	Acetone
524.2		Drinking Water	Acrylonitrile
524.2		Drinking Water	Allyl chloride
524.2		Drinking Water	Carbon disulfide
524.2		Drinking Water	Dichlorofluoromethane
524.2		Drinking Water	Ethyl ether
524.2		Drinking Water	Iodomethane
524.2		Drinking Water	m-Xylene & p-Xylene
524.2		Drinking Water	Naphthalene
524.2		Drinking Water	o-Xylene
524.2		Drinking Water	t-Butanol
524.2		Drinking Water	trans-1,4-Dichloro-2-butene
524.2		Drinking Water	Vinyl acetate

* Certification renewal pending - certification considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-62364 Chain of Custody

Cooler Received/Opened On : 9/26/2014 @ 0900

1. Tracking # 6668 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 18290455

2. Temperature of rep. sample or temp blank when opened: 0.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: (Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and intact YES NO NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) MDM

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) MDM

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) MDM

I certify that I attached a label with the unique LIMS number to each container (intial) MDM

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
62364

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

10/2/2014

Client Information	Sampler: Ian Mantz	Lab PM: Brown, Shali	Carr	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 781 213 4962	E-Mail: shali.brown@testamericainc.com		Page:
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested: ~~5-day~~ 10/2/14			
City: Chelmsford	TAT Requested (days): 5-day			
State, Zip: MA, 01824				
Phone: 781 213 4962	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #: MA000725.2014.00107			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	524.2 - VOCs (drinking water)	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A			
26R	9/25/14	1015	G	W				✓		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 9/25/14 @ 1400	Company	Received by:	Date/Time: 9-26-14 @ 0900	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 0.1c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-62364-1

Login Number: 62364
List Number: 1
Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-62364-1

Login Number: 62364
List Number: 2
Creator: Robison, Zachary J

List Source: TestAmerica Buffalo
List Creation: 09/30/14 03:31 PM

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	2.9 C
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

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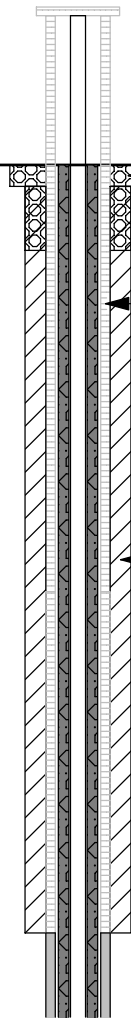
Appendix **F**

Well Installation Logs and Borehole Geophysical Logs

Date Start/Finish:	May 14-27, 2014	**Northing:**	249047.19	**Boring ID:**	MW-307D
Drilling Company:	Geosearch, Inc.	**Easting:**	1153552.22	**Client:**	Ford Motor Company
Driller's Name:	S. Preston, J. Bedard	**Elevation:**	306.39 ft amsl	**Location:**	Tibbetts Road Site 23 Tibbetts Road Barrington, NH
Drilling Equipment:	Versa-Drill V-100NG	**Stick-Up Height:**	3.5 ft ags		
Sample Method:	HQ coring	**Total Depth:**	232 feet bgs		
Size/Type of Bit:	9" / 6" air hammer bit	**Depth to Water:**	20 ft bgs	**Geologist:**	Ian Martz Tom Zakarian
Borehole Diameter:	9" / 6"				
Permit Number:	NA				

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description
-4					
-3					
-2					
-1					
0					
1	1	NA	NA		Sand/silt/till. Limited overburden lithology available due to drilling method (air hammer).
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12	5	NA	NA		Weathered bedrock (granofels/quartzite). Some moist/muddy cuttings.
13					
14					Competent bedrock (granofels/quartzite).
15					
16					
17	5	NA	NA		
18					
19					
20					

Boring Construction



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Remarks: Air hammer bit (9-inch) used from 0 to 18 ft bgs.
Air hammer bit (6-inch) used from 18 to 163 ft bgs.
HQ diamond core bit used from 163 to 232 ft bgs.
ags - above ground surface; amsl - above mean sea level
bgs - below ground surface; NA/NR - not available/not recorded

Client: Ford Motor Company

Boring ID: MW-307D

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 232 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
20–30	2.5	NA	NA		Granofels/quartzite. Fracture observed at 34 ft bgs. No water production.	
40–48					Granofels/quartzite. Fractures observed at 46 and 57 ft bgs. No water production.	

Remarks: Air hammer bit (9-inch) used from 0 to 18 ft bgs.
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Client: Ford Motor Company

Boring ID: MW-307D

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 232 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
48						
49						
50	2.5	NA	NA			
51						
52						
53						
54						
55						
56						
57						
58						
59						
60					Granofels/quartzite. Fracture observed at 75 ft bgs. No water production.	
61						
62						
63						
64						
65						
66						
67						
68						
69						
70	3	NA	NA			
71						
72						
73						
74						
75						
76						

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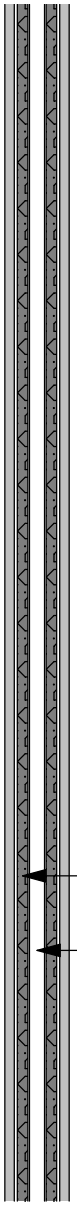
Client: Ford Motor Company

Boring ID: MW-307D

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 232 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
76						
77						
78						
79						
80					Granofels/quartzite. Fractures observed at 84 and 100 ft bgs. No water production.	
81						
82						
83						
84						
85						
86						
87						
88						
89						
90	3	NA	NA			
91						
92						
93						
94						
95						
96						
97						
98						
99						
100					Granofels/quartzite. Fracture observed at 126 ft bgs. Minimal amount of water production (< 0.25 gpm).	
101						
102						
103						
104						



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Client: Ford Motor Company

Boring ID: MW-307D

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 232 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
104						
105						
106						
107						
108						
109						
110	2.5	NA	NA			
111						
112						
113						
114						
115						
116						
117						
118						
119						
120					Granofels/quartzite. No fractures observed. No significant water production.	
121						
122						
123						
124						
125						
126						
127						
128						
129						
130	2.7	NA	NA			
131						
132						

Remarks: Air hammer bit (9-inch) used from 0 to 18 ft bgs.
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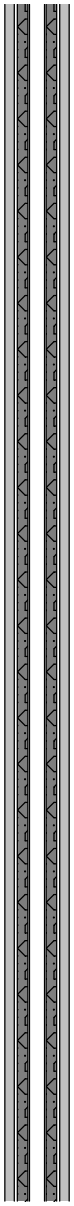
Client: Ford Motor Company

Boring ID: MW-307D

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 232 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
132						
133						
134						
135						
136						
137						
138						
139						
140						
141					Granofels/quartzite. No fractures observed. No visible water production.	
142						
143						
144						
145						
146						
147						
148						
149						
150	3	NA	NA			
151						
152						
153						
154						
155						
156						
157						
158						
159						
160						



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Client: Ford Motor Company

Boring ID: MW-307D

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 232 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
160						
161	NA	NA	NA		Temporary 4-inch casing set to 163', no drilling conducted.	
162						
163						
164	3	83	83		Fine-grained granofels/quartzite; hard; good RQD; no natural fractures; high felsic (quartz) content; little to no mafic content.	
165	3					
166	4					
167	4					
168	3	94	94		Fine-grained granofels/quartzite; hard; excellent RQD; no natural fractures; high felsic/low mafic content; trace pyrite.	
169	2					
170	3					
171	4					
172	7					
173	7	96	96		Fine-grained granofels/quartzite; very hard; excellent RQD; no natural fractures; high felsic/low mafic content; some muscovite occurrences.	
174	11					
175	18					
176	18					
177	16					
178	10	64	64		Fine-grained granofels/quartzite; very hard; fair RQD; large fracture zone from 177.2 to 178.5 ft bgs; high felsic/low mafic content; trace pyrite.	
179	11					
180	8					
181	7					
182	6					
183	15	42	42		Fine to coarse-grained granofels/quartzite; hard; poor RQD; significant fractures present with infilling and weathering.	
184	18					
185	3					
186	2					
187	3					
188	2				Fine (187-190.6 ft bgs) and coarse (190.6-182 ft bgs) granofels/quartzite; several fractures with high weathering and some infilling; trace mafic content in coarse-grained areas (high	

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ARCADIS
Infrastructure · Water · Environment · Buildings

Client: Ford Motor Company

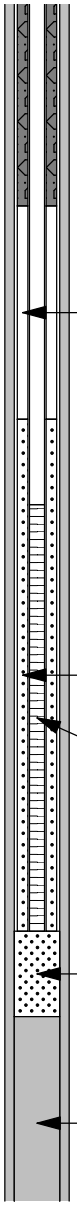
Boring ID: MW-307D

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 232 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description
189	1				quartz/feldspar); hard; fair RQD.
190	1	70	70		
191	2				
192	6				
193	3				Very coarse (192-192.9 ft bgs) and fine-grained granofels/quartzite; some natural fractures; very hard; good RQD; high mafic (quartz/feldspar) in coarse zones with garnet occurrences.
194	4				
195	3	88	88		
196	5				
197	8				
198	3				Fine-grained granofels/quartzite; some coarse-grained from 200.8-202 ft bgs; hard; excellent RQD; two natural fractures; some mafic content (biotite).
199	4				
200	5	94	94		
201	8				
202	17				
203	29				Fine-grained granofels/quartzite; some coarse-grained from 202.8-203.2 ft bgs; very hard; good RQD; two natural fractures; trace weathering/infilling; mix of felsic and mafic content.
204	43				
205	23	84	84		
206	6				
207	7				
208	7				Fine and coarse-grained granofels/quartzite; excellent RQD; very hard; some very coarse felsic-rich areas (quartz/feldspar); no natural fractures; some occurrences of pyrite, muscovite, and pyrite.
209	9				
210	15	96	96		
211	22				
212	27				
213	41				Fine-grained granofels/quartzite; trace coarse material; good RQD; very hard; no natural fractures; mix of felsic and mafic content; trace pyrite.
214	33				
215	32	86	86		
216	30				

Boring Construction



ARCADIS
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Client: Ford Motor Company

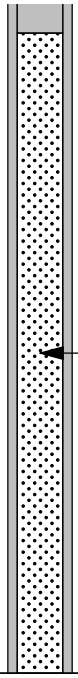
Boring ID: MW-307D

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 232 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description
217	27				
218	25				Fine-grained granofels/quartzite; coarse-grained from 218.4 to 219 ft bgs and 221.2 to 222.3 ft bgs; good RQD; very hard; no natural fractures; high felsic content in coarse areas; trace garnet occurrences.
219	16				
220	18	82	82		
221	26				
222	29				
223	36				Coarse-grained (222 to 223 ft bgs and 224.8 to 227 ft bgs) and fine-grained granofels/quartzite; fair RQD; very hard; no natural fractures; occurrences of pyrite/garnet;biotite.
224	18				
225	20	52	52		
226	32				
227	25				
228	47				Quartzite with some areas of granofels/quartzite; very hard; very poor RQD; no natural fractures; felsic-rich wih small areas of mafic content; trace pyrite/mica/biotite.
229	23				
230	41	0	0		
231	45				
232	80				

Boring Construction



Remarks: Air hammer bit (9-inch) used from 0 to 18 ft bgs.
Air hammer bit (6-inch) used from 18 to 163 ft bgs.
HQ diamond core bit used from 163 to 232 ft bgs.
ags - above ground surface; amsl - above mean sea level
bgs - below ground surface; NA/NR - not available/not recorded

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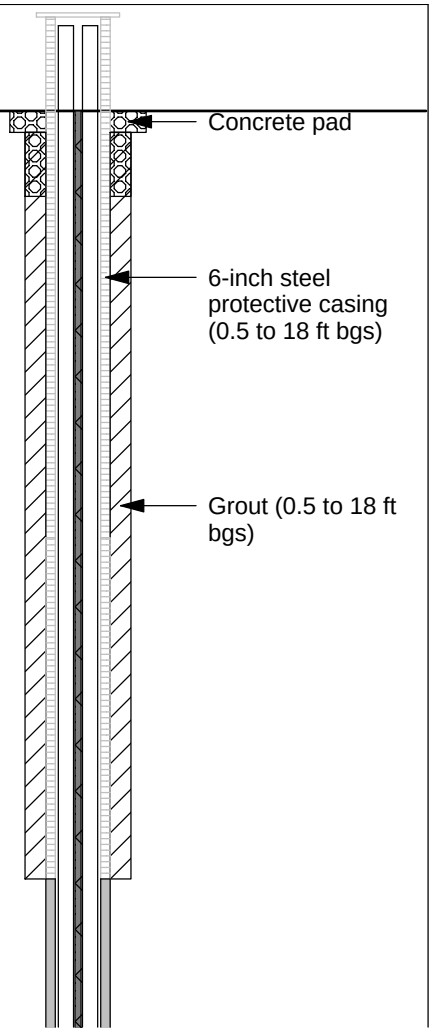
Date Start/Finish:	May 8-13, 2014	**Northing:**	249040.55	**Boring ID:**	MW-307S
Drilling Company:	Geosearch, Inc.	**Easting:**	1153560.91	**Client:**	Ford Motor Company
Driller's Name:	J. Bedard, S. Preston	**Elevation:**	304.42 feet amsl	**Location:**	Tibbetts Road Site 23 Tibbetts Road Barrington, NH
Drilling Equipment:	Versa-Drill V-100NG	**Stick-Up Height:**	2 ft ags		
Sample Method:	HQ coring	**Total Depth:**	187 feet bgs		
Size/Type of Bit:	9" / 6" air hammer bit	**Depth to Water:**	20 ft bgs	**Geologist:**	Tom Zakarian
Borehole Diameter:	9" / 6"				
Permit Number:	NA				

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description
-2					
-1					
0					
1	1	NA	NA		Sand/silt/till. Limited overburden lithology available due to drilling method (air hammer).
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12	15	NA	NA		Weathered bedrock (granofels/quartzite). No moisture present.
13					
14					Competent bedrock (granofels/quartzite).
15					
16					
17	15	NA	NA		
18					
19					
20					
21					Granofels/quartzite. Fracture observed at 30 ft bgs. No water production.

Boring Construction



ARCADIS
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Remarks: Air hammer bit (9-inch) used from 0 to 18 ft bgs.
Air hammer bit (6-inch) used from 18 to 187 ft bgs.
ags - above ground surface
amsl - above mean sea level
bgs - below ground surface
NA/NR - not available/not recorded

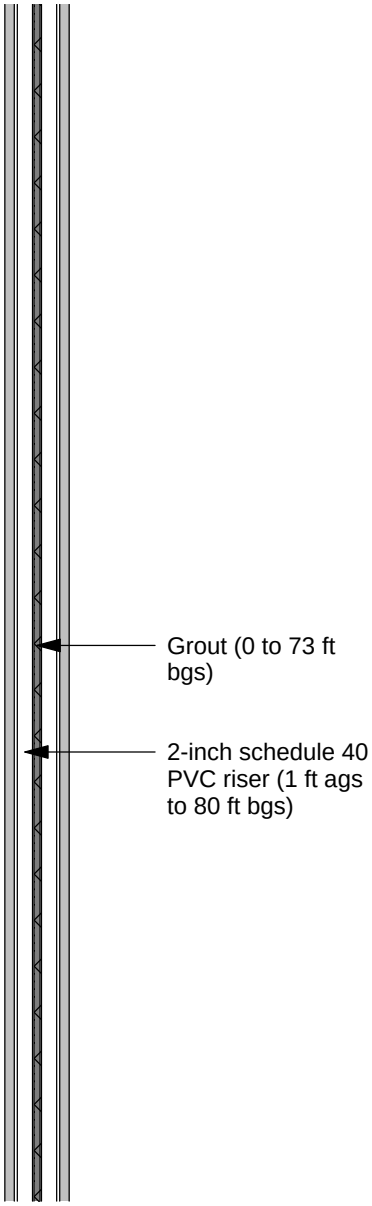
Client: Ford Motor Company

Boring ID: MW-307S

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 187 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
22						
23						
24						
25						
26						
27						
28						
29						
30	1.75	NA	NA			
31						
32						
33						
34						
35						
36						
37						
38						
39						
40					Granofels/quartzite. Fractures observed at 40, 46, and 54 ft bgs. No water production.	
41						
42						
43						
44						
45						
46						
47						
48						
49						



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Remarks: Air hammer bit (9-inch) used from 0 to 18 ft bgs.
Air hammer bit (6-inch) used from 18 to 187 ft bgs.
ags - above ground surface
amsl - above mean sea level
bgs - below ground surface
NA/NR - not available/not recorded

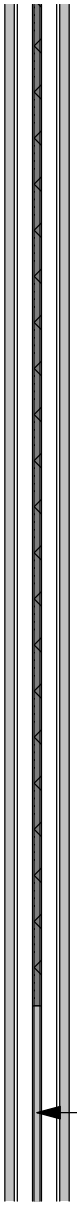
Client: Ford Motor Company

Boring ID: MW-307S

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 187 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
50	2	NA	NA			
51						
52						
53						
54						
55						
56						
57						
58						
59						
60					Granofels/quartzite. Fracture observed at 75 ft bgs. No water production.	
61						
62						
63						
64						
65						
66						
67						
68						
69						
70	2.5	NA	NA			
71						
72						
73						
74						
75						
76						Bentonite (73 to 78 ft bgs)
77						



Remarks: Air hammer bit (9-inch) used from 0 to 18 ft bgs.
Air hammer bit (6-inch) used from 18 to 187 ft bgs.
ags - above ground surface
amsl - above mean sea level
bgs - below ground surface
NA/NR - not available/not recorded

Client: Ford Motor Company

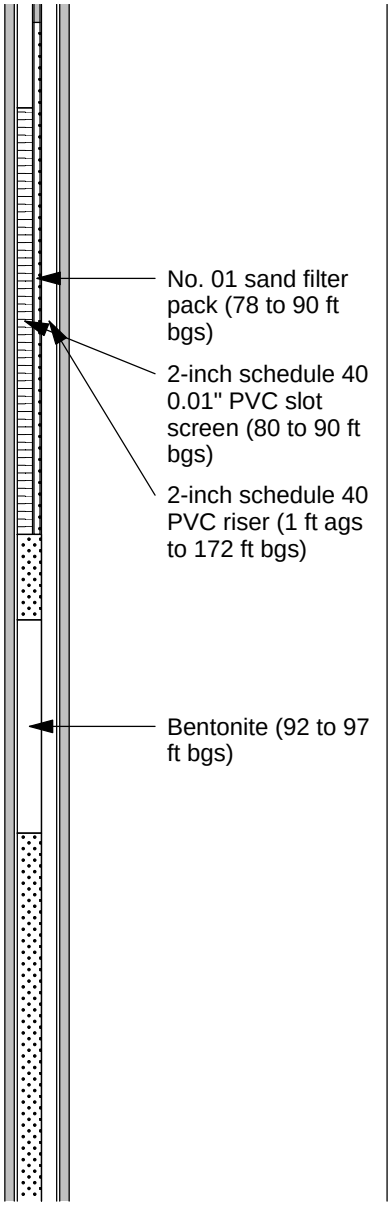
Boring ID: MW-307S

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 187 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description
78					
79					
80					Granofels/quartzite. Fractures observed at 82, 86, and 95 ft bgs. No water production.
81					
82					
83					
84					
85					
86					
87					
88					
89					
90	2	NA	NA		
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					Granofels/quartzite. Fracture observed at 100 ft bgs. No water production.
101					
102					
103					
104					
105					

Boring Construction



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Remarks: Air hammer bit (9-inch) used from 0 to 18 ft bgs.
Air hammer bit (6-inch) used from 18 to 187 ft bgs.
ags - above ground surface
amsl - above mean sea level
bgs - below ground surface
NA/NR - not available/not recorded

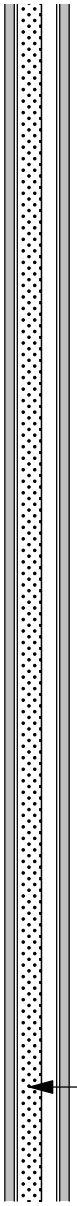
Client: Ford Motor Company

Boring ID: MW-307S

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 187 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
106						
107						
108						
109						
110	2	NA	NA			
111						
112						
113						
114						
115						
116						
117						
118						
119						
120					Granofels/quartzite. No fractures observed.	
121						
122						
123						
124						
125						
126						
127						
128						
129						
130	1.7	NA	NA			
131						Sand Fill (97 to 165 ft bgs)
132						
133						



ARCADIS
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Remarks: Air hammer bit (9-inch) used from 0 to 18 ft bgs.
Air hammer bit (6-inch) used from 18 to 187 ft bgs.
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amsl - above mean sea level
bgs - below ground surface
NA/NR - not available/not recorded

Client: Ford Motor Company

Boring ID: MW-307S

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 187 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
134						
135						
136						
137						
138						
139						
140					Granofels/quartzite. No fractures observed.	
141						
142						
143						
144						
145						
146						
147						
148						
149						
150	1.2	NA	NA			
151						
152						
153						
154						
155						
156						
157						
158						
159						
160					Granofels/quartzite. Water-bearing fractures at 176' and 178'. Extremely high water production (>100 gpm).	
161						

Remarks: Air hammer bit (9-inch) used from 0 to 18 ft bgs.
Air hammer bit (6-inch) used from 18 to 187 ft bgs.
ags - above ground surface
amsl - above mean sea level
bgs - below ground surface
NA/NR - not available/not recorded

ARCADIS
Infrastructure · Water · Environment · Buildings

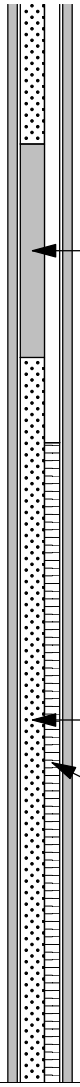
Client: Ford Motor Company

Boring ID: MW-307S

Site Location: Tibbetts Road Site
23 Tibbetts Road
Barrington, NH

Boring Depth: 187 ft bgs

DEPTH	Approx ROP (min/ft)	RQD (%)	Hardness (1-6)	Geologic Column	Stratigraphic Description	Boring Construction
162						
163						
164						
165						
166						
167						
168						
169						
170	2.8	NA	NA			
171						
172						
173						
174						
175						
176						
177						
178						
179						
180					Granofels/quartzite. Consistent production and lithology.	
181						
182						
183						
184	2.8	NA	NA			
185						
186						
187						



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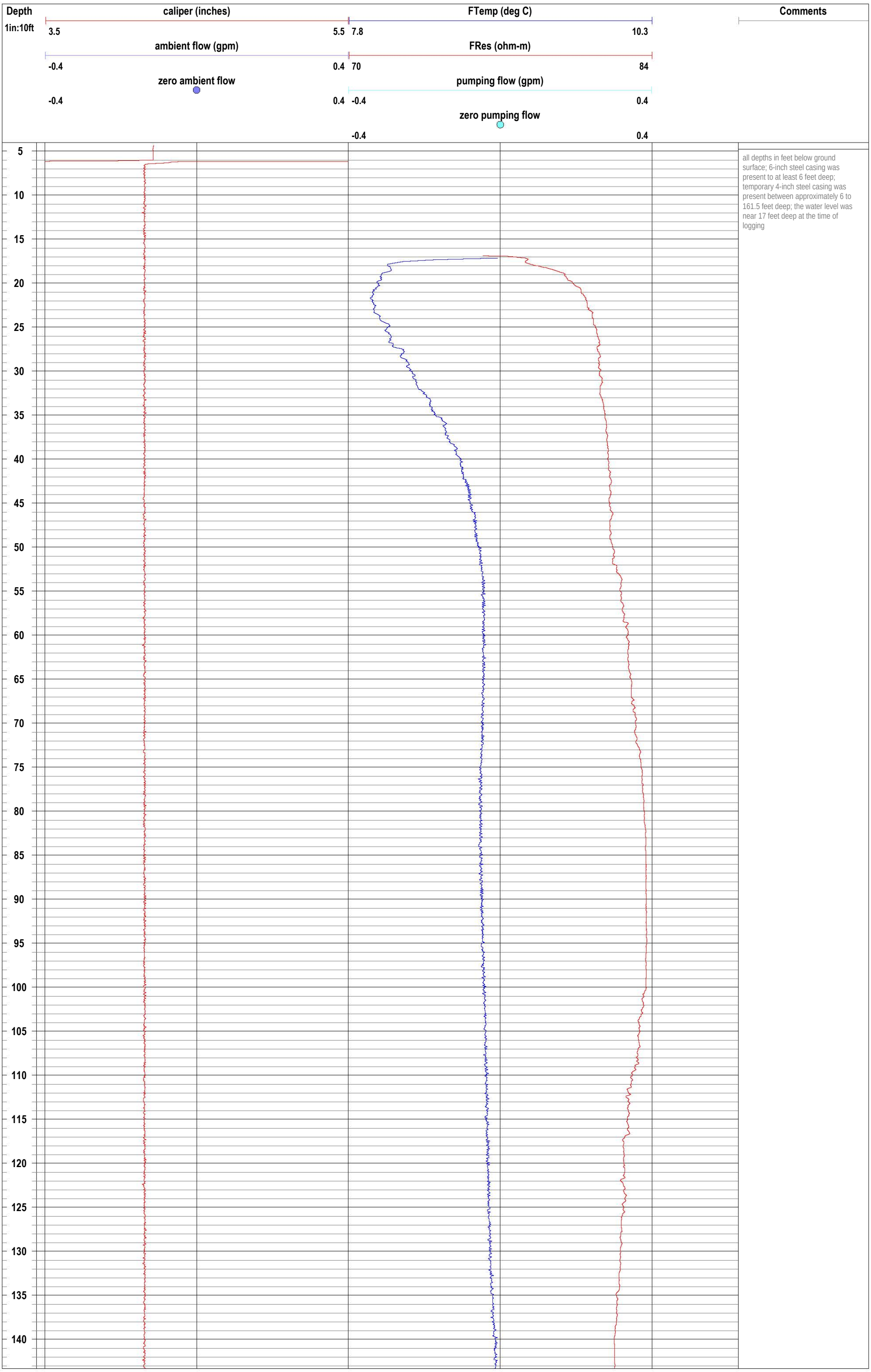
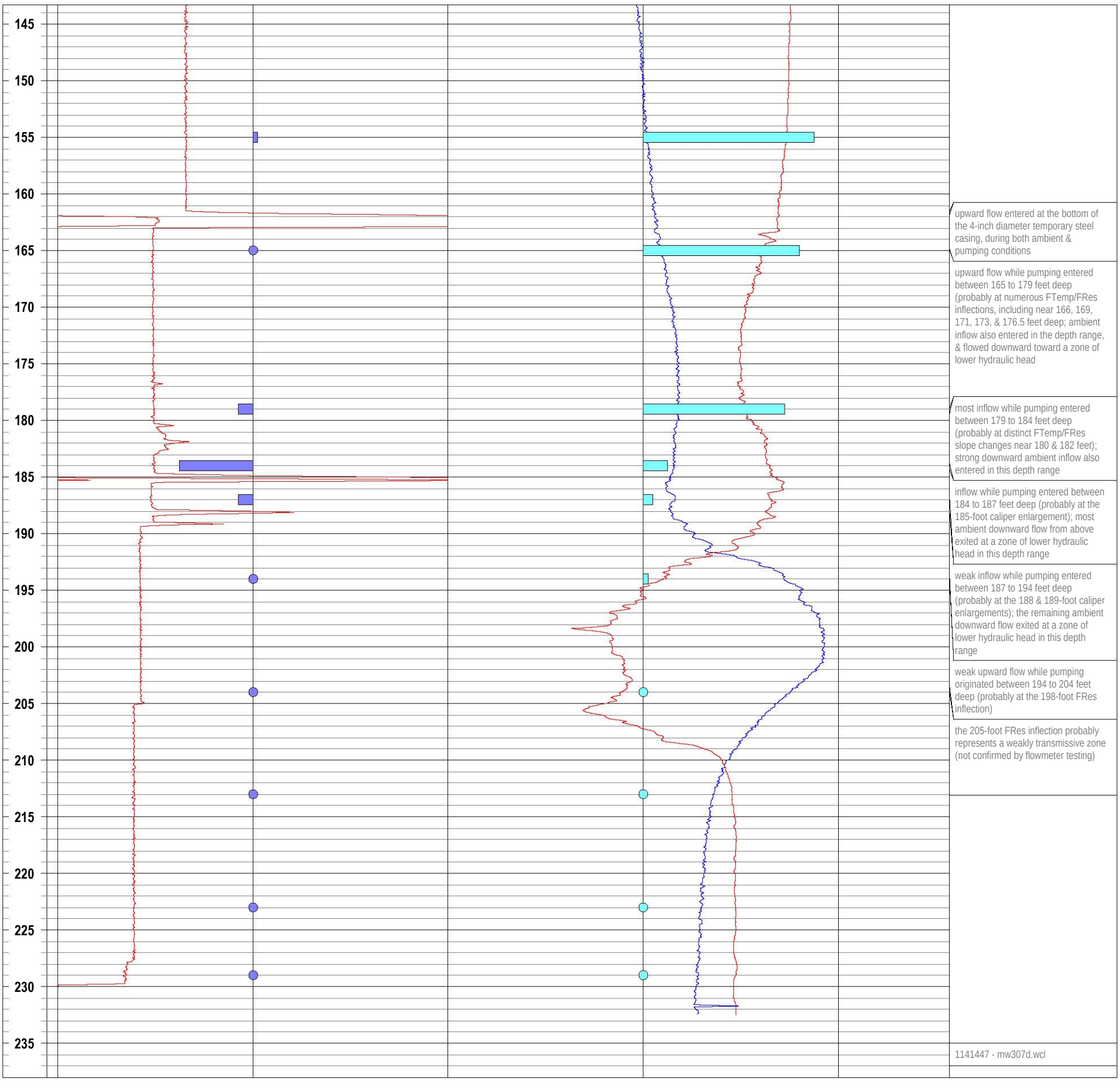
Air hammer bit (6-inch) used from 18 to 187 ft bgs.
ags - above ground surface
amsl - above mean sea level
bgs - below ground surface
NA/NR - not available/not recorded

ARCADIS / Barrington, NH - MW-307D conventional log plot

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200
205
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225
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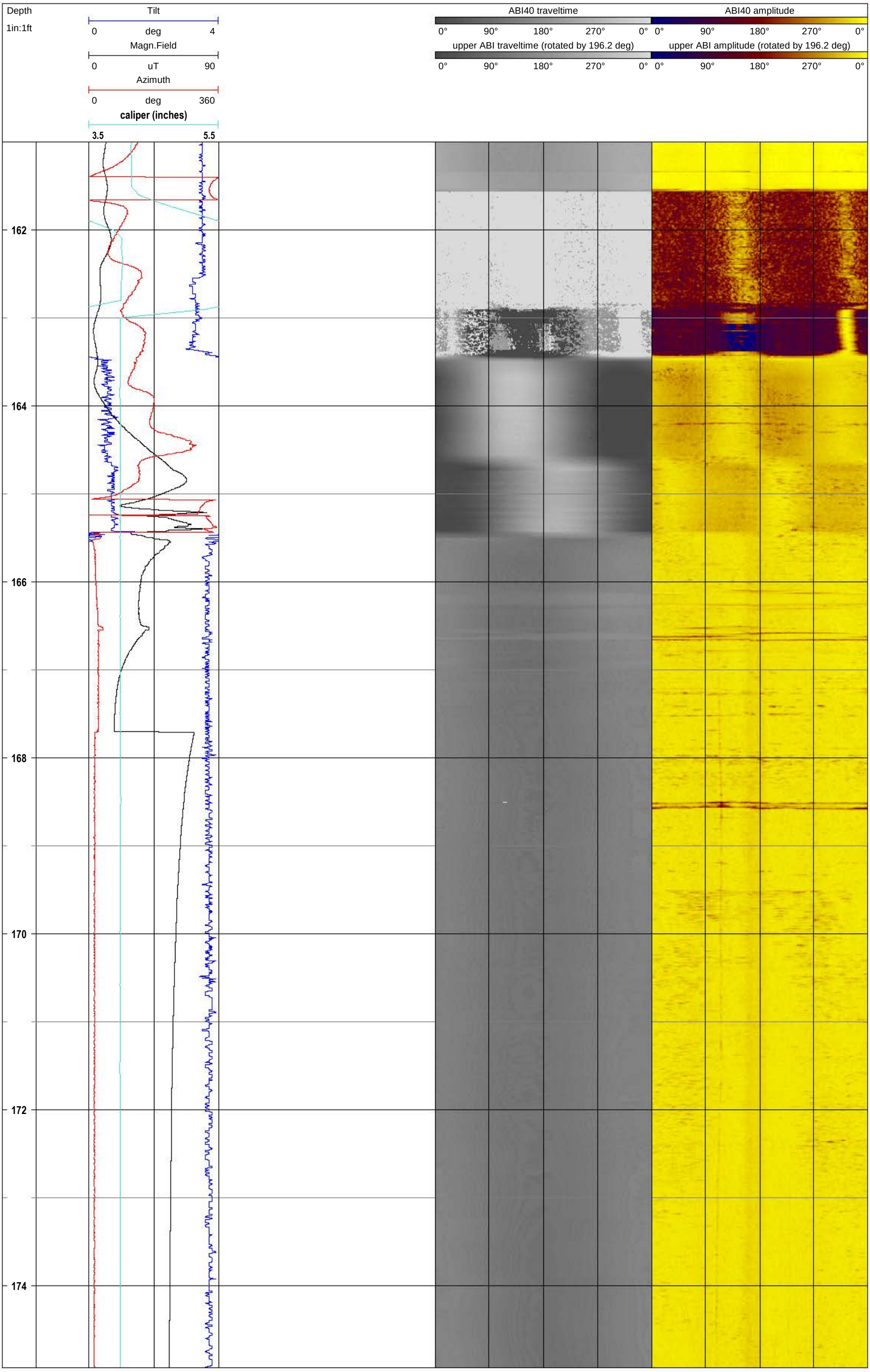
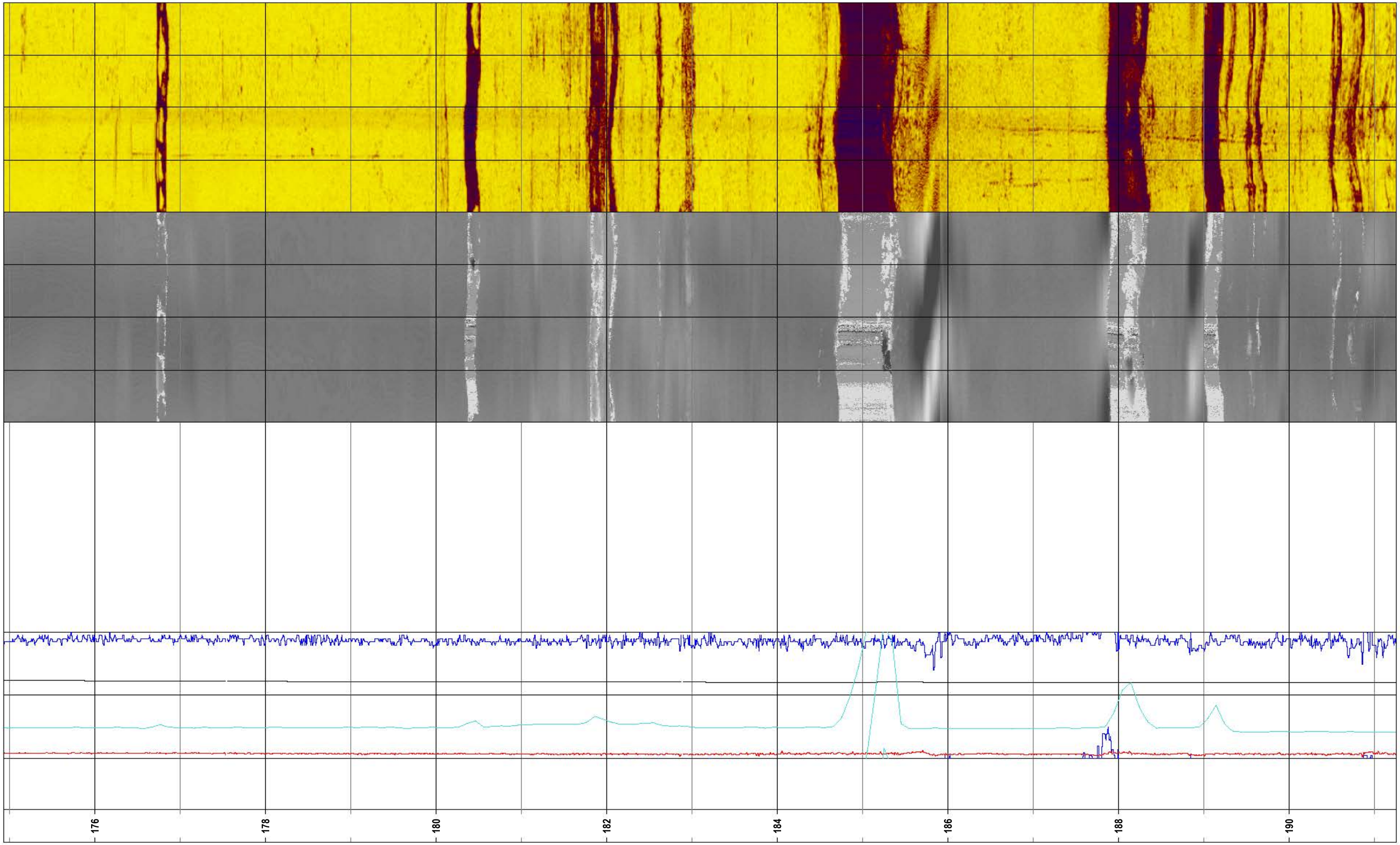
235
upward flow entered at the bottom of the 4-inch diameter temporary steel casing, during both ambient & pumping conditions
upward flow while pumping entered between 165 to 179 feet deep (probably at numerous FTemp/FRes inflections, including near 166, 169, 171, 173, & 176.5 feet deep; ambient inflow also entered in the depth range, & flowed downward toward a zone of lower hydraulic head
most inflow while pumping entered between 179 to 184 feet deep (probably at distinct FTemp/FRes slope changes near 180 & 182 feet); strong downward ambient inflow also entered in this depth range
inflow while pumping entered between 184 to 187 feet deep (probably at the 185-foot caliper enlargement); most ambient downward flow from above exited at a zone of lower hydraulic head in this depth range
weak inflow while pumping entered between 187 to 194 feet deep (probably at the 188 & 189-foot caliper enlargements); the remaining ambient downward flow exited at a zone of lower hydraulic head in this depth range
weak upward flow while pumping originated between 194 to 204 feet deep (probably at the 198-foot FRes inflection)
the 205-foot FRes inflection probably represents a weakly transmissive zone (not confirmed by flowmeter testing)
1141447 - mw307d.wcl

ARCADIS / Barrington, NH - MW-307D acoustic televiewer log plot

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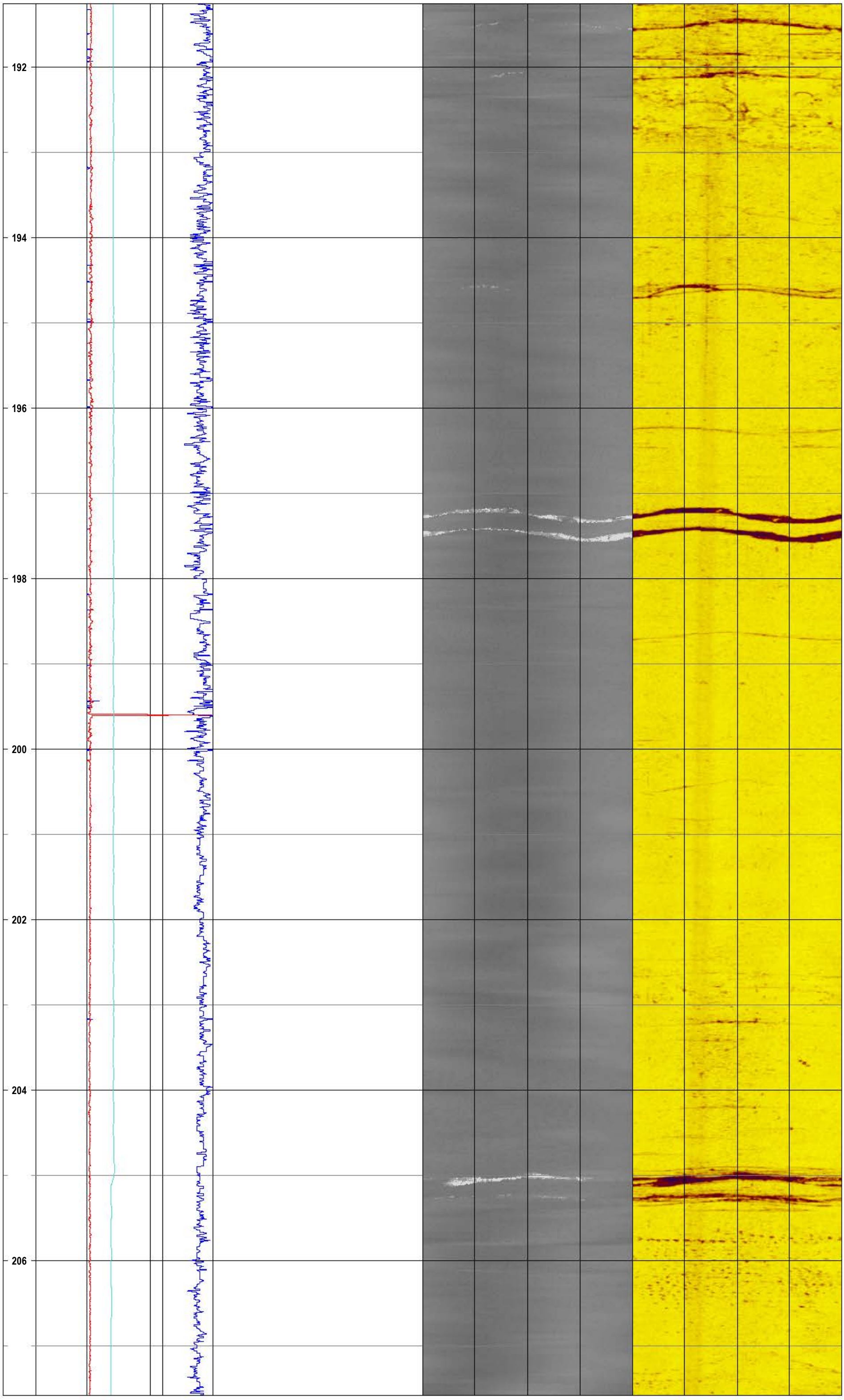
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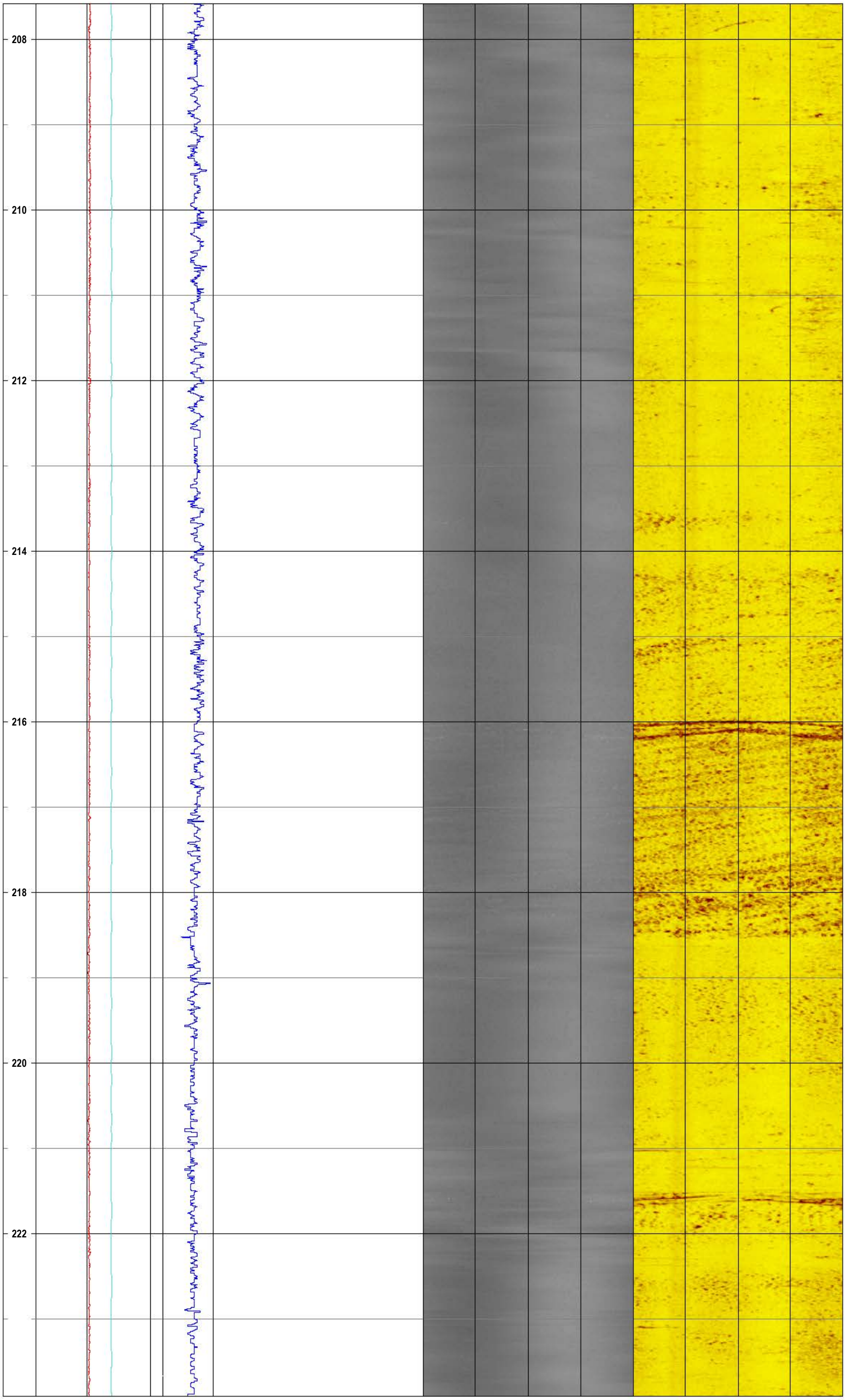
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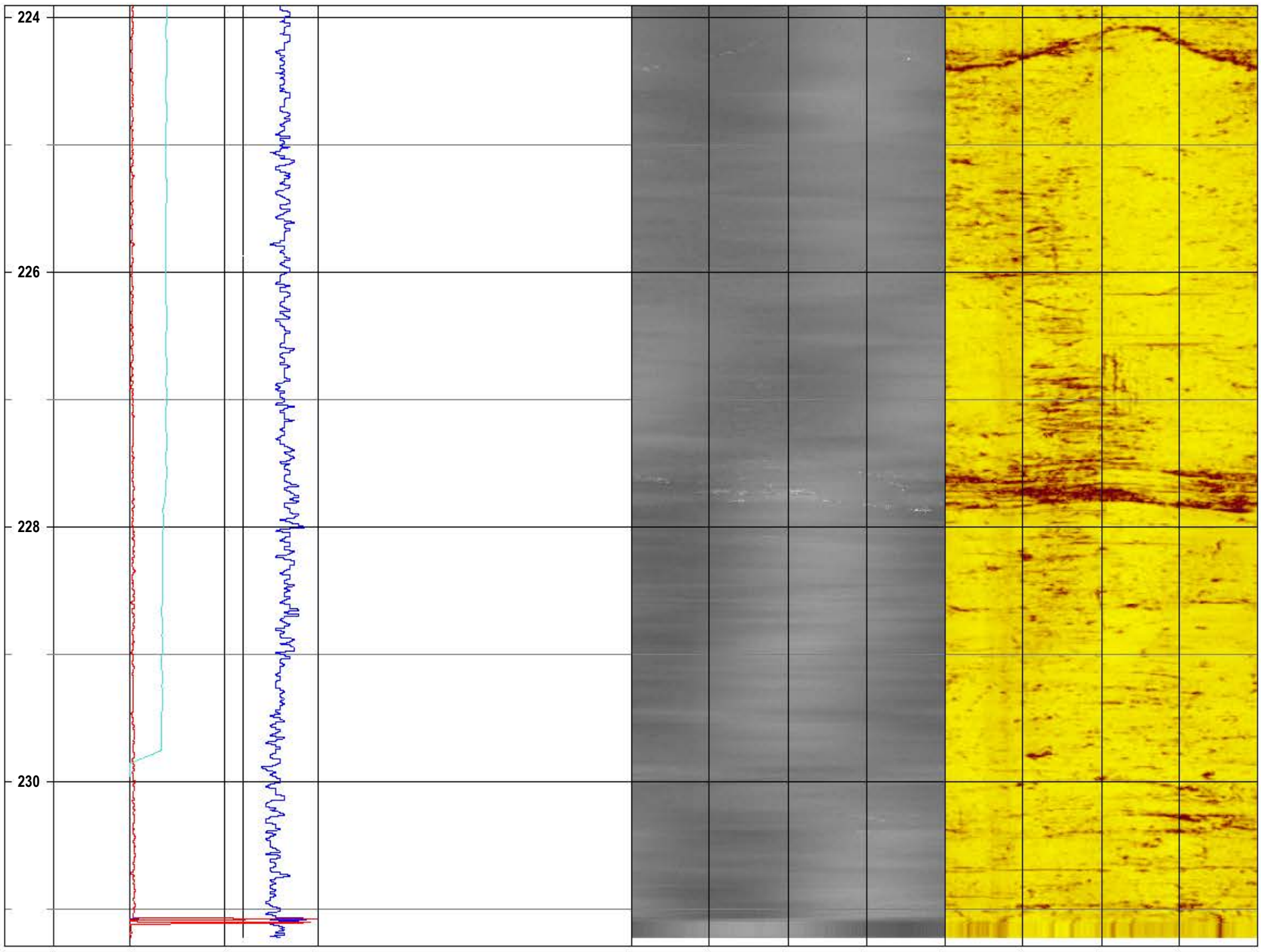
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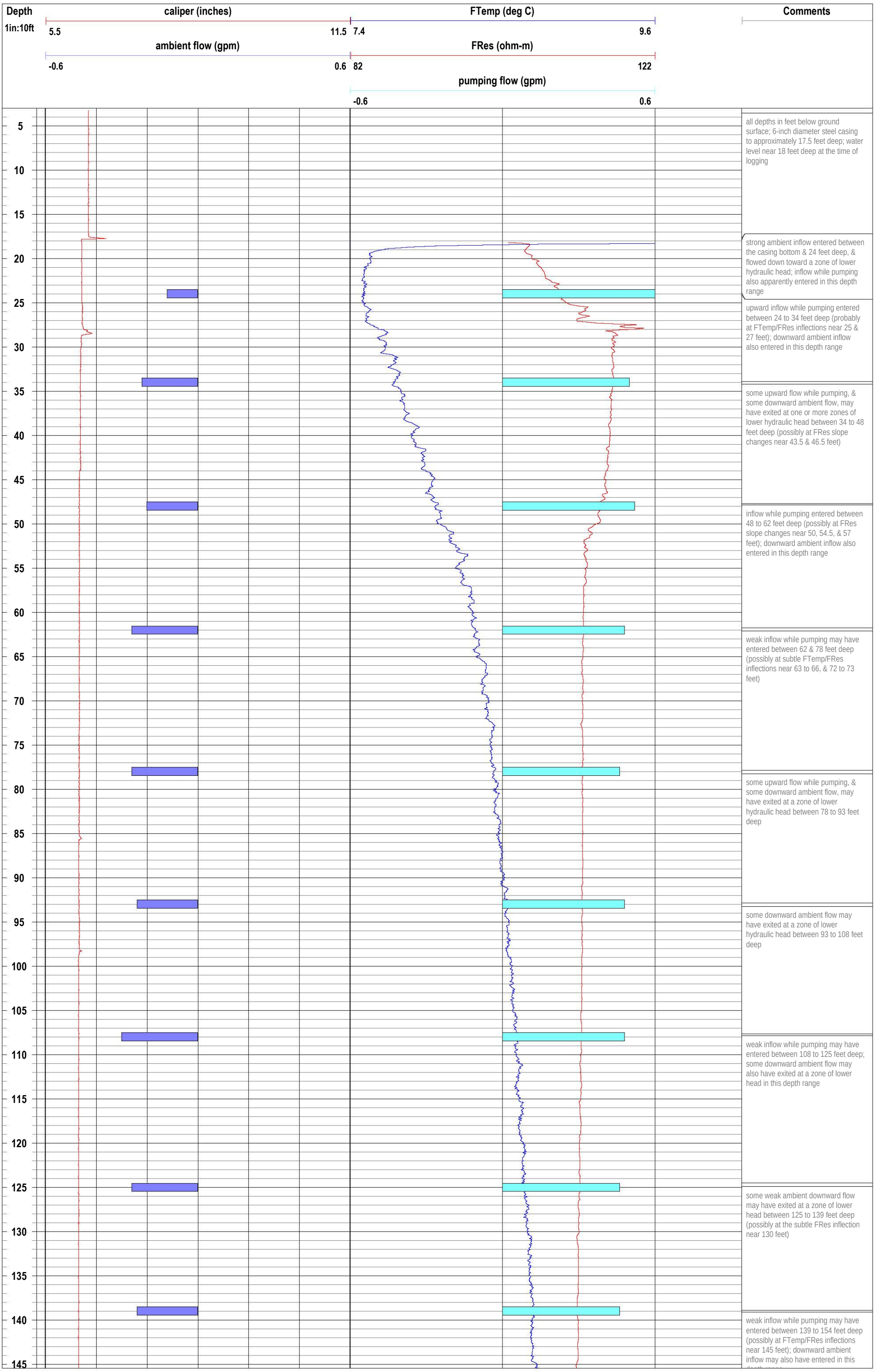
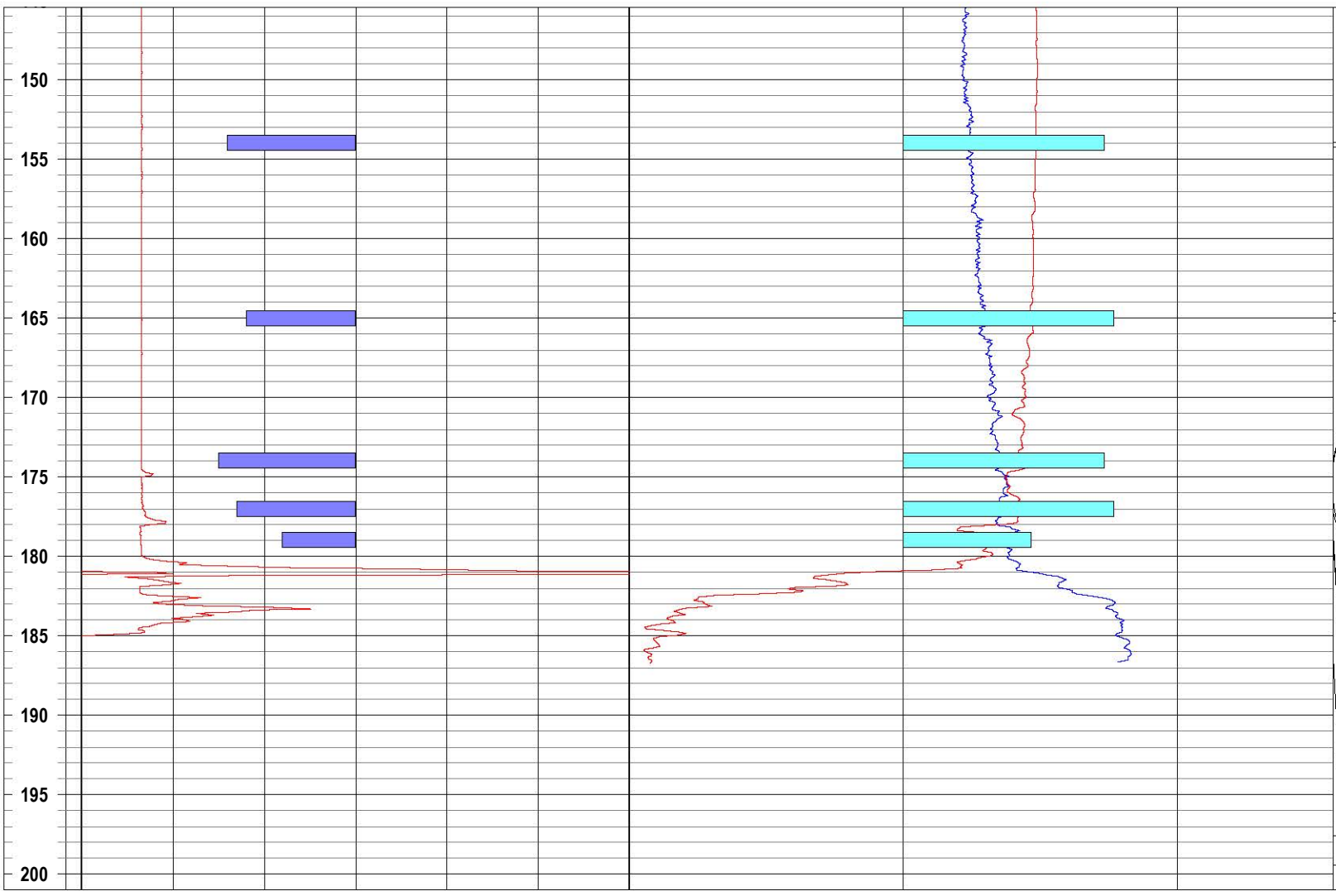
ARCADIS / Barrington, NH - MW-307S conventional log plot





depth range

some upward flow while pumping, & some downward ambient flow, exited at a zone of lower hydraulic head between 154 to 165 feet deep (possibly at the FTemp/FRes inflections near 157 to 159 feet)

some upward flow while pumping, & some downward ambient inflow, entered between 165 to 174 feet deep (possibly at FTemp/FRes inflections near 166 & 170 to 172 feet)

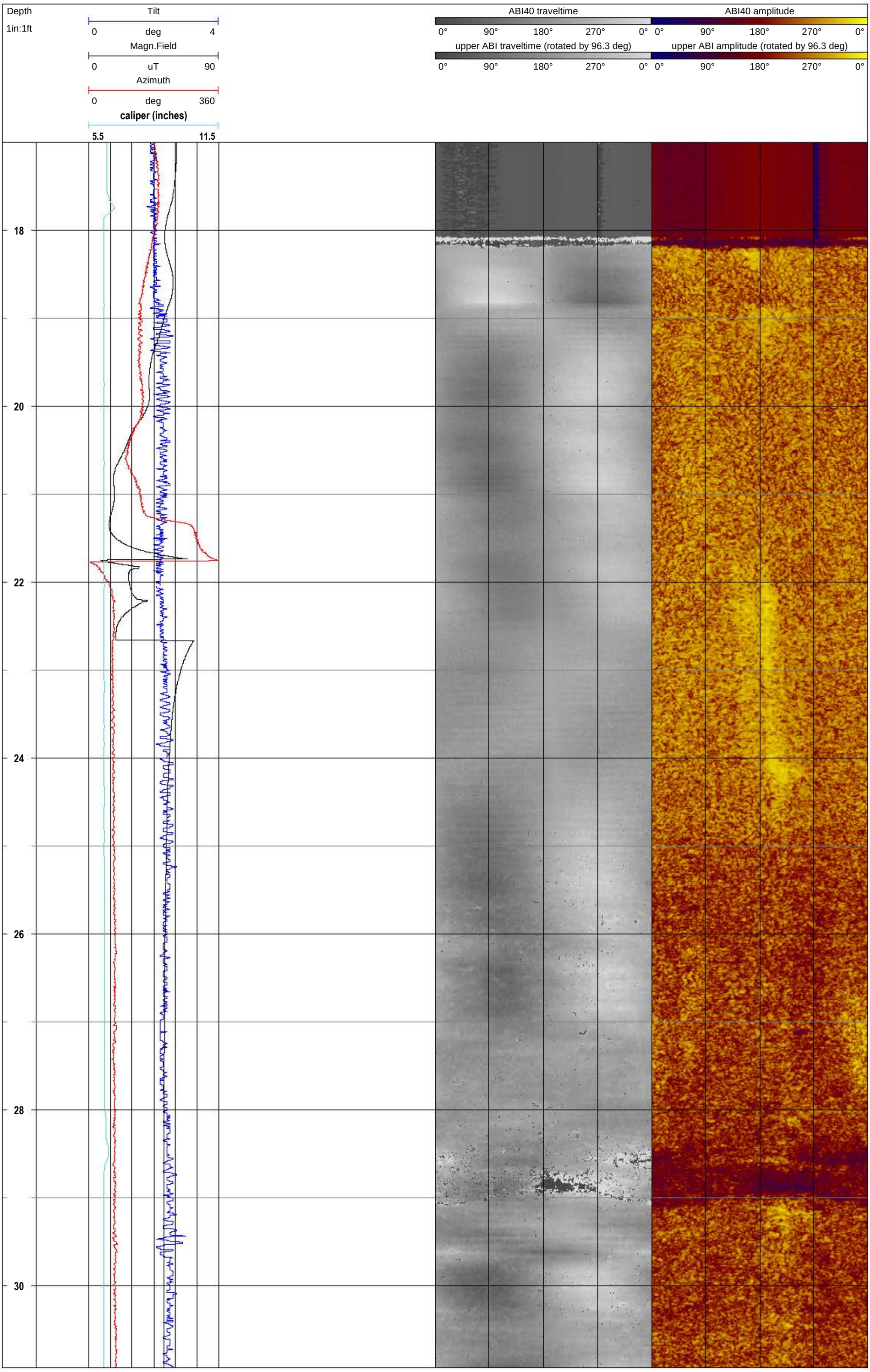
some upward flow while pumping, & some downward ambient flow, exited at a zone of lower head between 174 to 177 feet deep (probably at the 175-foot caliper enlargement)

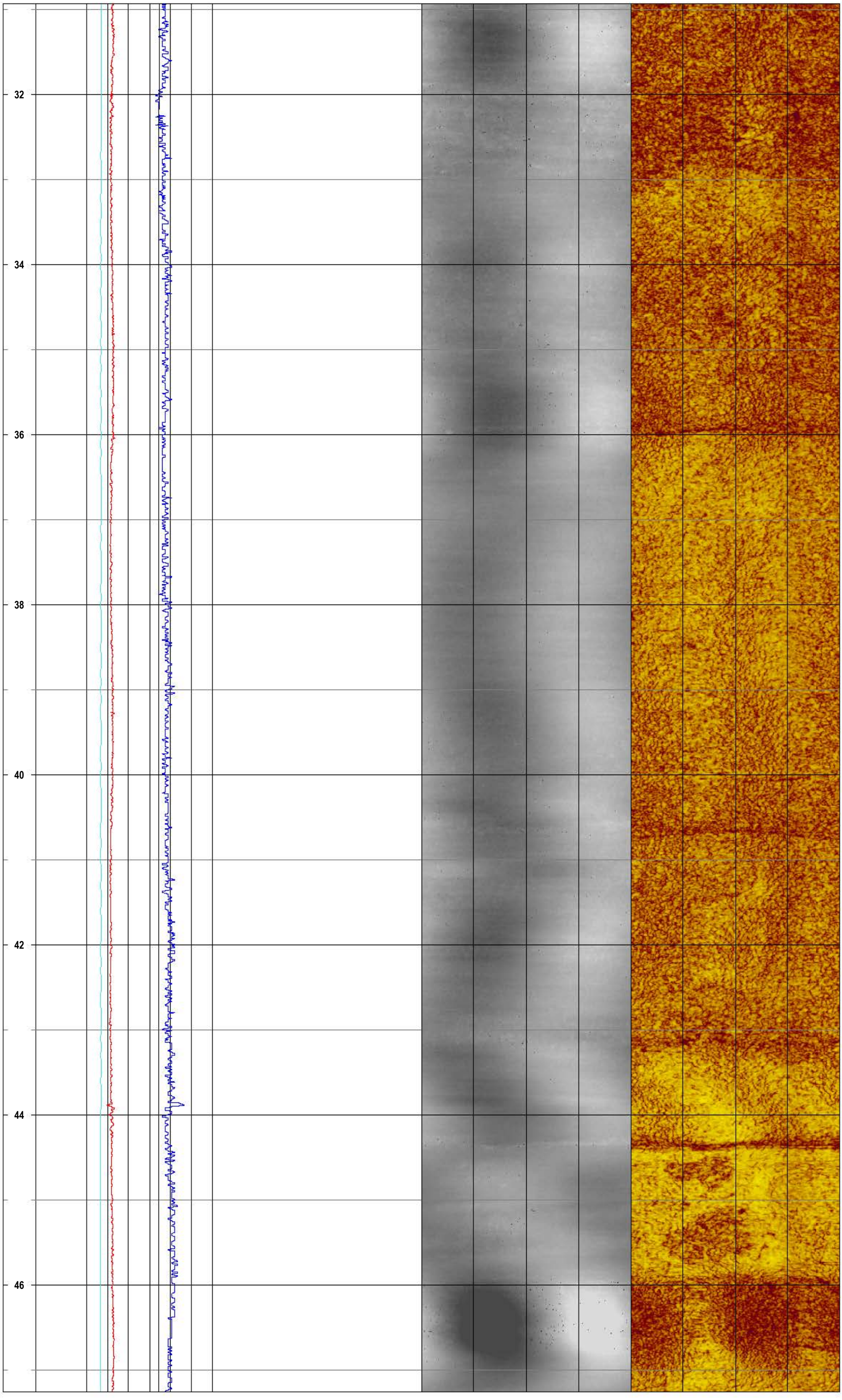
inflow while pumping entered at the 178-foot caliper enlargement; some downward ambient flow also exited at a zone of lower head at that open fracture

upward flow while pumping originated greater than 179 feet deep (probably at the caliper enlargements between 180 to 185 feet); the remaining downward ambient flow also exited at a zone of lower head greater than 179 feet deep

1141447 - mw307s.wcl

ARCADIS / Barrington, NH - MW-307S acoustic televiewer log plot

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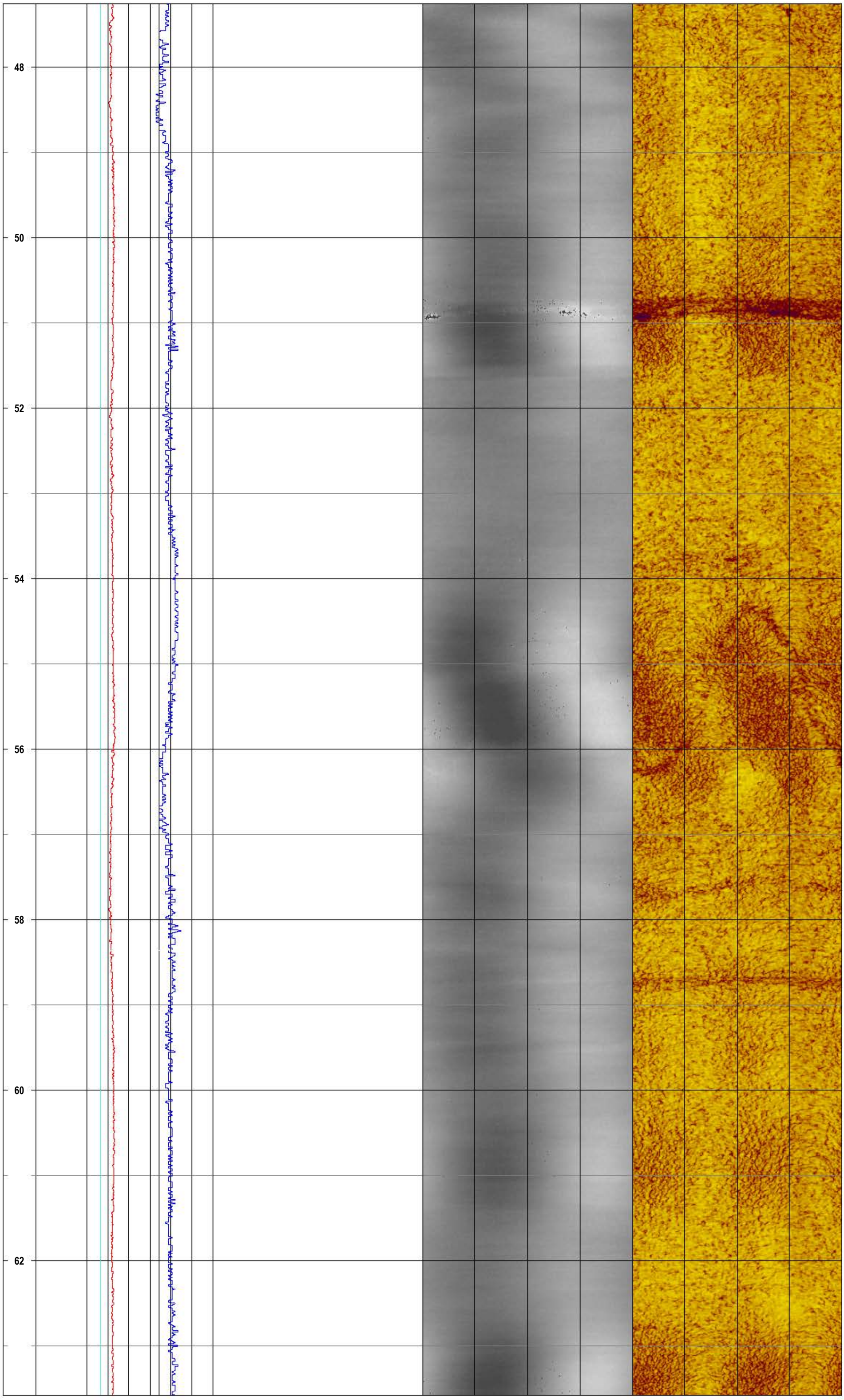
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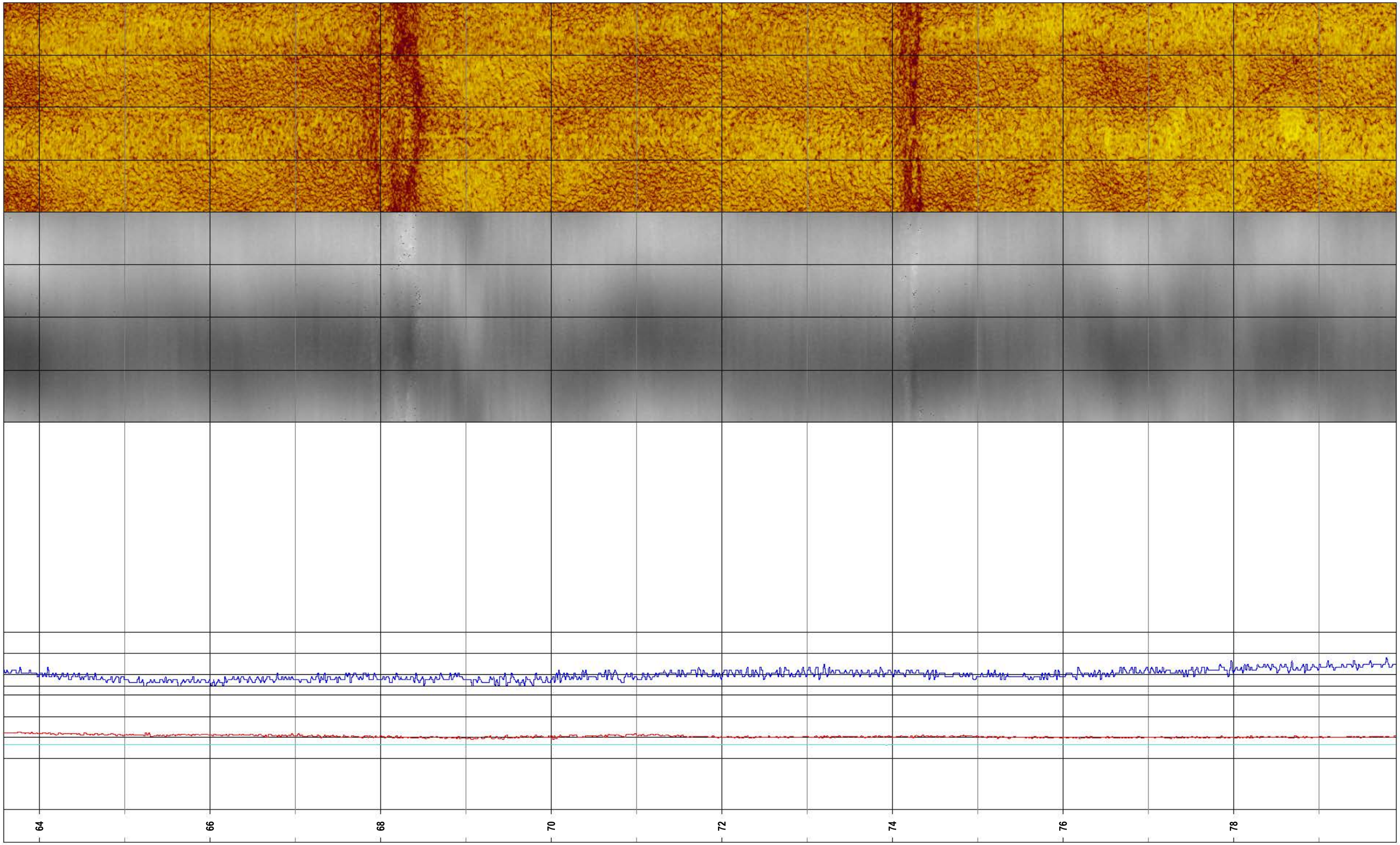
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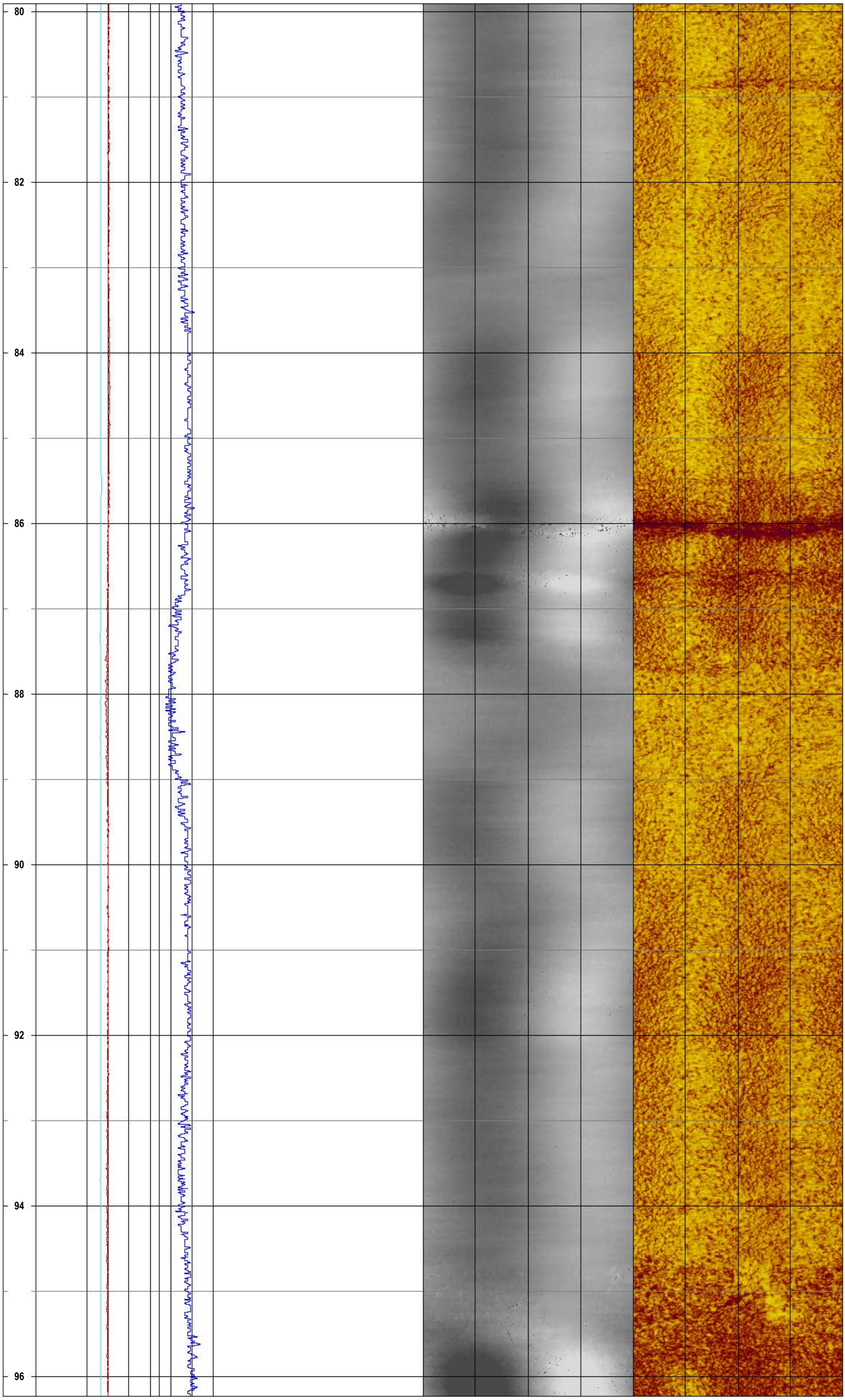
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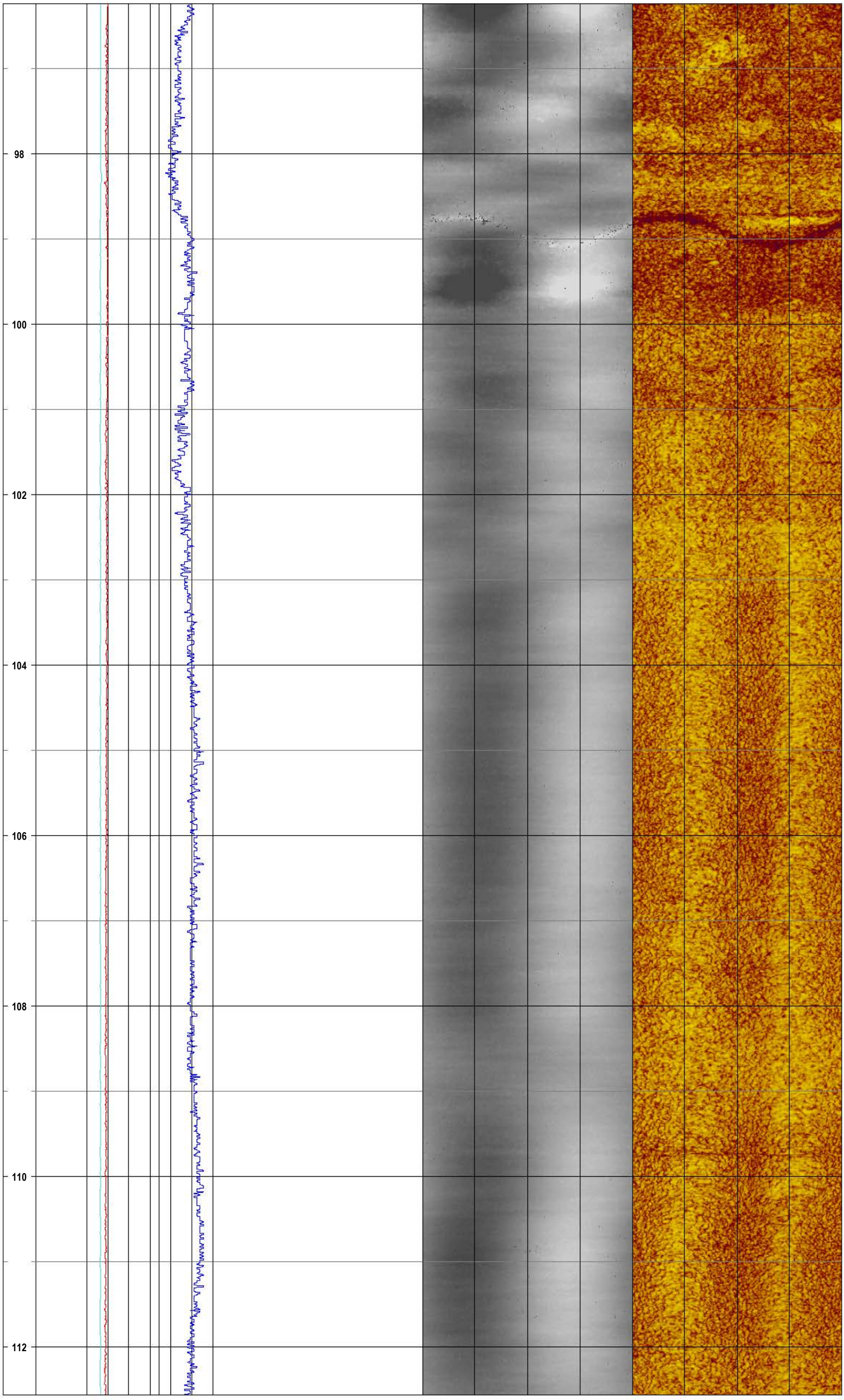
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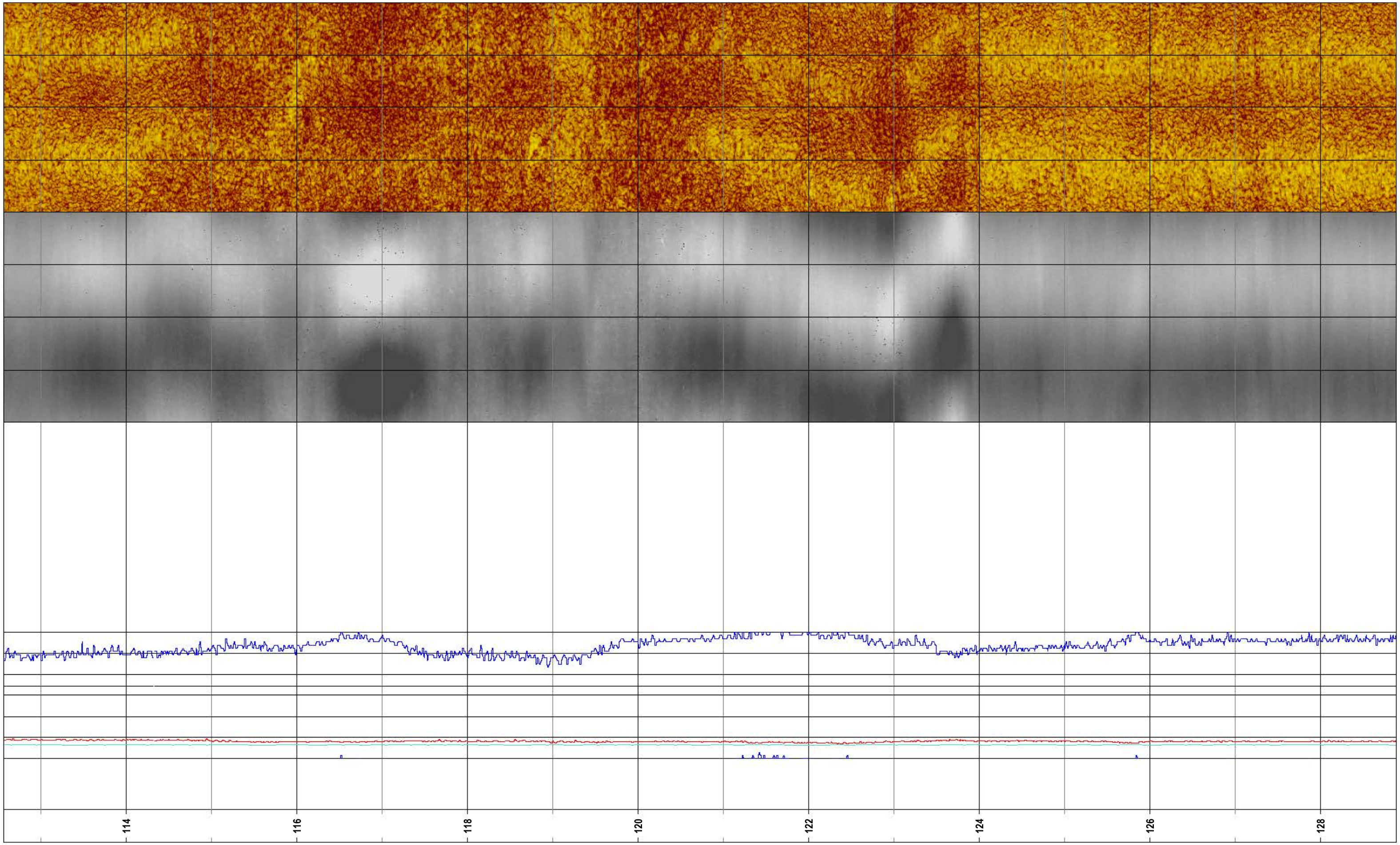
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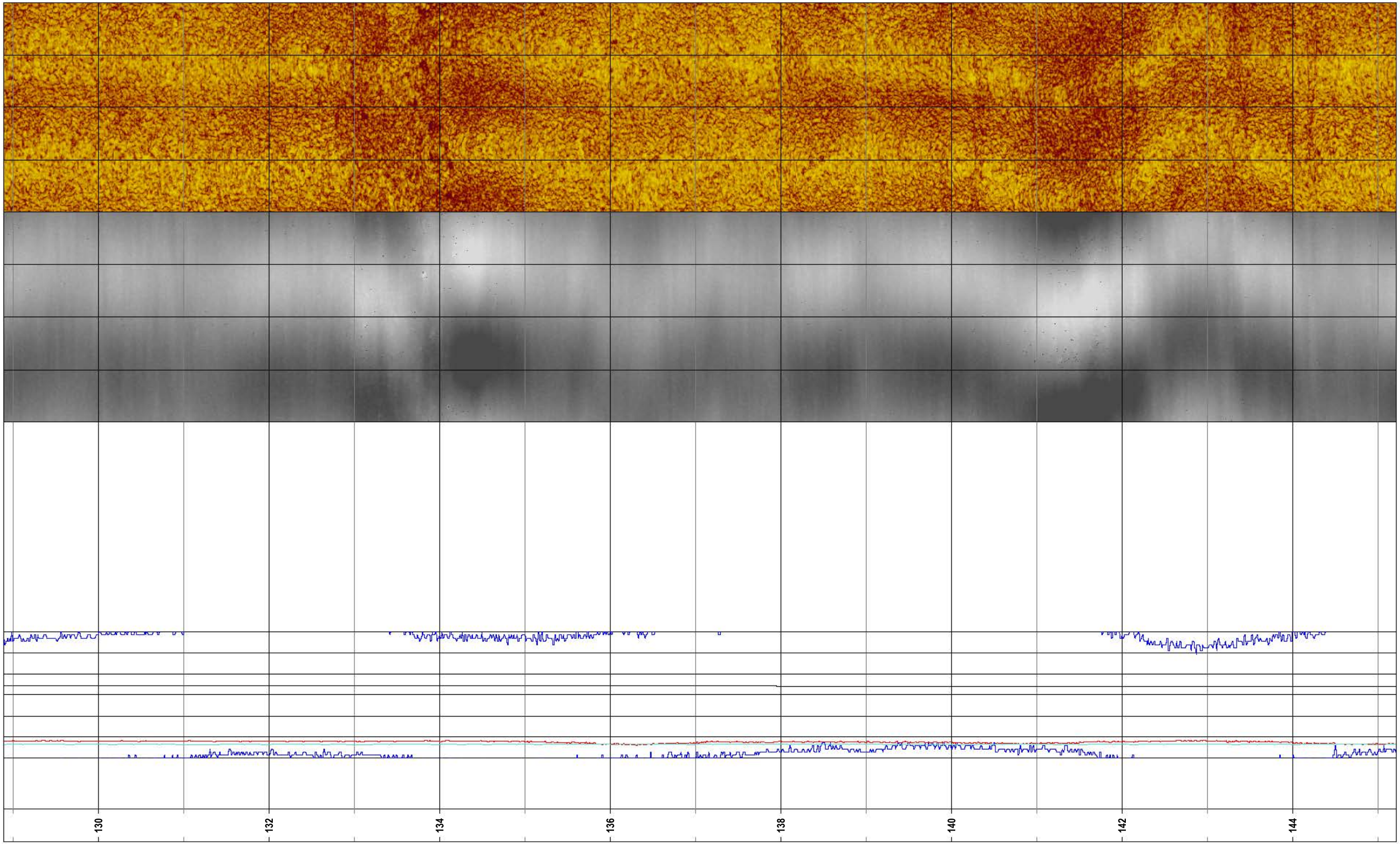
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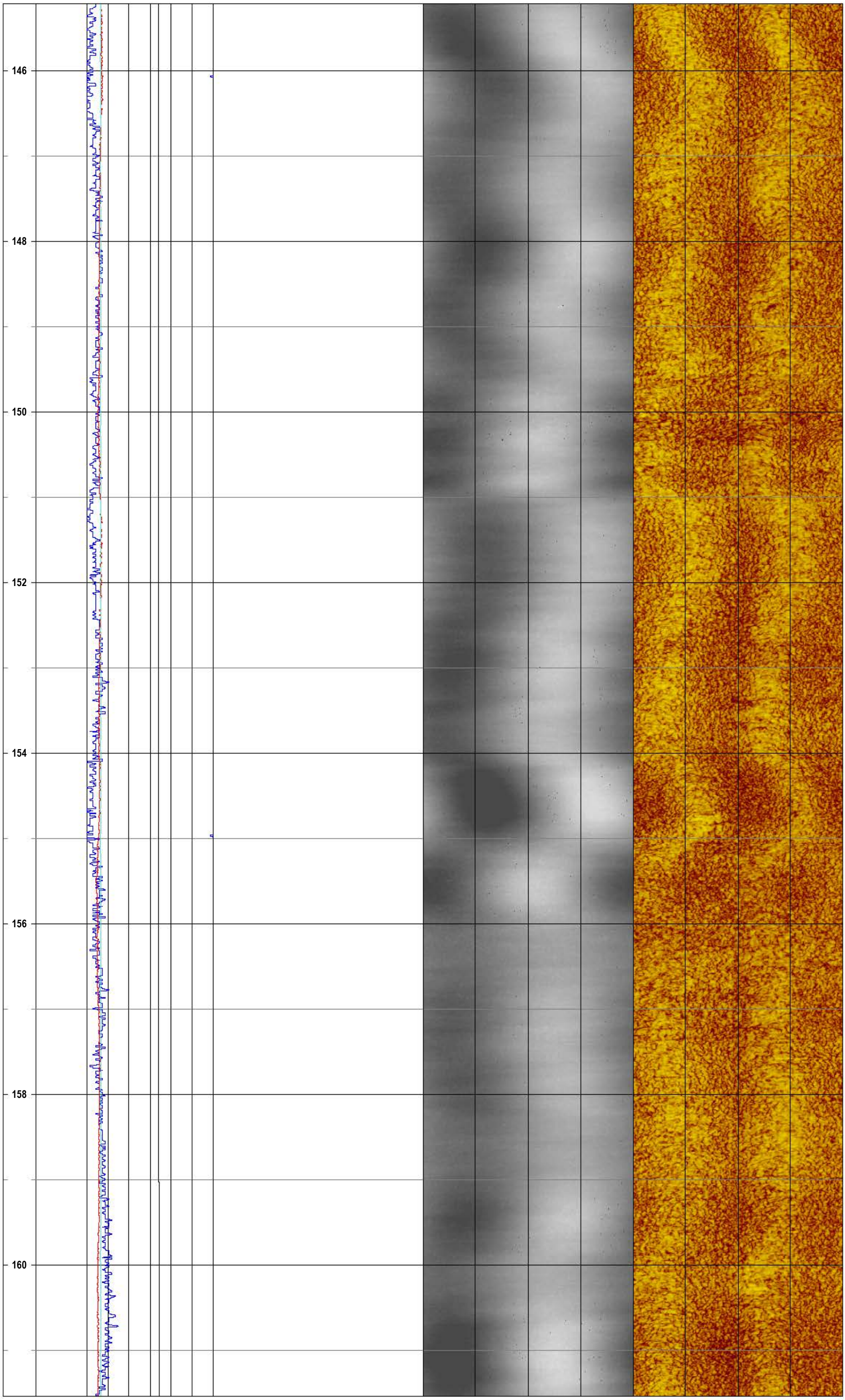
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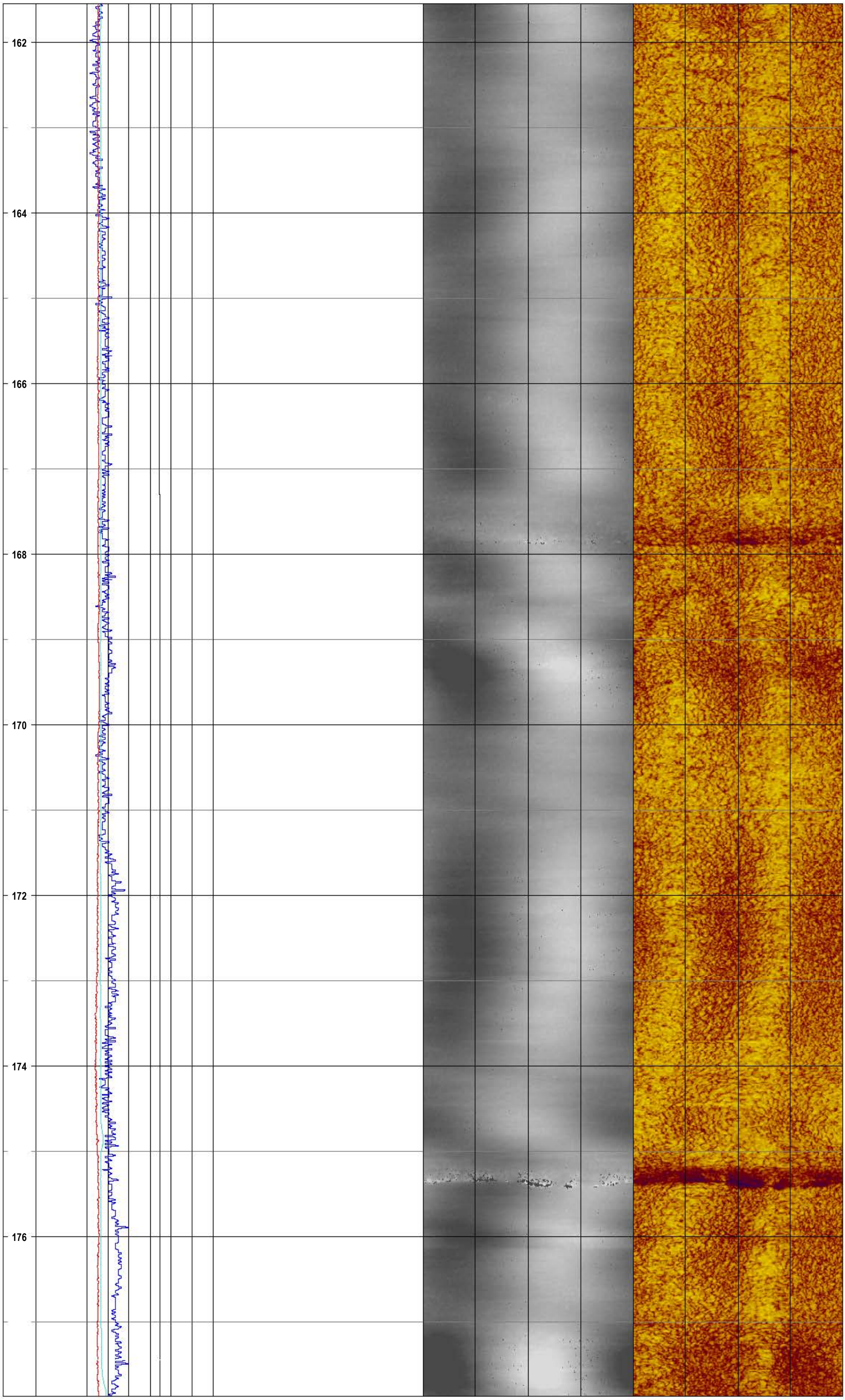
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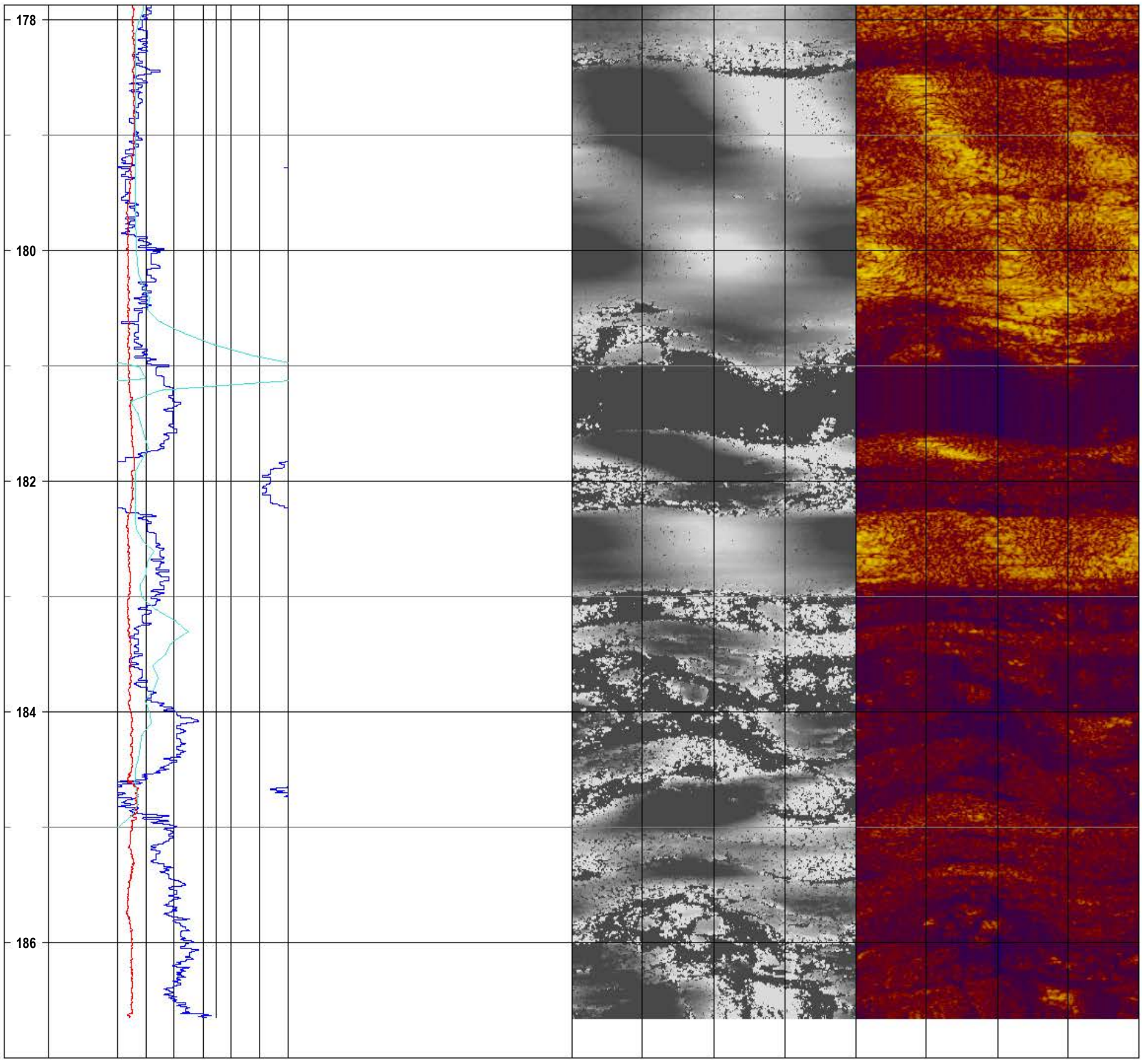
178
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ARCADIS

Appendix **G**

Laboratory Analytical Reports (DGR System)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-59212-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
8/21/2014 9:02:16 AM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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QC Association 15
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Method Summary 17
Certification Summary 18
Chain of Custody 19
Receipt Checklists 21

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59212-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-59212-1	IW-100	Water	08/11/14 14:10	08/12/14 08:30
490-59212-2	IW-103	Water	08/11/14 14:10	08/12/14 08:30
490-59212-3	GAC Outlet 2-3	Water	08/11/14 14:40	08/12/14 08:30
490-59212-4	Effluent	Water	08/11/14 14:35	08/12/14 08:30
490-59212-5	Trip Blank	Water	08/11/14 00:01	08/12/14 08:30

Job ID: 490-59212-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-59212-1

Comments
No additional comments.

Receipt
The samples were received on 8/12/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 2.7º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59212-1

Client Sample ID: IW-100

Date Collected: 08/11/14 14:10
Date Received: 08/12/14 08:30

Lab Sample ID: 490-59212-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/13/14 15:31	1
Benzene	**17.1**		0.500	0.200	ug/L			08/13/14 15:31	1
Bromoform	ND		0.500	0.290	ug/L			08/13/14 15:31	1
Bromomethane	ND		0.500	0.350	ug/L			08/13/14 15:31	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/13/14 15:31	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/13/14 15:31	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/13/14 15:31	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/13/14 15:31	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/13/14 15:31	1
Chloroethane	ND		0.500	0.360	ug/L			08/13/14 15:31	1
Chloroform	ND		0.500	0.230	ug/L			08/13/14 15:31	1
Chloromethane	ND		0.500	0.360	ug/L			08/13/14 15:31	1
cis-1,2-Dichloroethene	**20.7**		0.500	0.210	ug/L			08/13/14 15:31	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 15:31	1
Dibromomethane	ND		0.500	0.450	ug/L			08/13/14 15:31	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/13/14 15:31	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/13/14 15:31	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/13/14 15:31	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/13/14 15:31	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/13/14 15:31	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/13/14 15:31	1
Ethylbenzene	**2.06**		0.500	0.190	ug/L			08/13/14 15:31	1
2-Hexanone	ND		5.00	1.28	ug/L			08/13/14 15:31	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/13/14 15:31	1
4-Methyl-2-pentanone (MIBK)	**2.36**	**J**	5.00	0.810	ug/L			08/13/14 15:31	1
m-Xylene & p-Xylene	**1.25**		0.500	0.380	ug/L			08/13/14 15:31	1
o-Xylene	**0.207**	**J**	0.500	0.200	ug/L			08/13/14 15:31	1
Styrene	ND		0.500	0.280	ug/L			08/13/14 15:31	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/13/14 15:31	1
Tetrachloroethene	**0.163**	**J**	0.500	0.140	ug/L			08/13/14 15:31	1
Toluene	ND		0.500	0.170	ug/L			08/13/14 15:31	1
trans-1,2-Dichloroethene	**1.81**		0.500	0.230	ug/L			08/13/14 15:31	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 15:31	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/13/14 15:31	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 15:31	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 15:31	1
Trichloroethene	**2.02**		0.500	0.200	ug/L			08/13/14 15:31	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/13/14 15:31	1
Xylenes, Total	**1.46**	**J**	1.50	0.580	ug/L			08/13/14 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/13/14 15:31*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/13/14 15:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/13/14 15:31*	*1*
Toluene-d8 (Surr)	*116*		*70 - 130*		*08/13/14 15:31*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59212-1

Client Sample ID: IW-103

Date Collected: 08/11/14 14:10
Date Received: 08/12/14 08:30

Lab Sample ID: 490-59212-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/13/14 15:04	1
Benzene	**55.2**		0.500	0.200	ug/L			08/13/14 15:04	1
Bromoform	ND		0.500	0.290	ug/L			08/13/14 15:04	1
Bromomethane	ND		0.500	0.350	ug/L			08/13/14 15:04	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/13/14 15:04	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/13/14 15:04	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/13/14 15:04	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/13/14 15:04	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/13/14 15:04	1
Chloroethane	ND		0.500	0.360	ug/L			08/13/14 15:04	1
Chloroform	ND		0.500	0.230	ug/L			08/13/14 15:04	1
Chloromethane	ND		0.500	0.360	ug/L			08/13/14 15:04	1
cis-1,2-Dichloroethene	**47.5**		0.500	0.210	ug/L			08/13/14 15:04	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 15:04	1
Dibromomethane	ND		0.500	0.450	ug/L			08/13/14 15:04	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/13/14 15:04	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/13/14 15:04	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/13/14 15:04	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/13/14 15:04	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/13/14 15:04	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/13/14 15:04	1
Ethylbenzene	**16.5**		0.500	0.190	ug/L			08/13/14 15:04	1
2-Hexanone	ND		5.00	1.28	ug/L			08/13/14 15:04	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/13/14 15:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/13/14 15:04	1
m-Xylene & p-Xylene	**12.6**		0.500	0.380	ug/L			08/13/14 15:04	1
o-Xylene	**0.220**	**J**	0.500	0.200	ug/L			08/13/14 15:04	1
Styrene	ND		0.500	0.280	ug/L			08/13/14 15:04	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/13/14 15:04	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/13/14 15:04	1
Toluene	ND		0.500	0.170	ug/L			08/13/14 15:04	1
trans-1,2-Dichloroethene	**0.466**	**J**	0.500	0.230	ug/L			08/13/14 15:04	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 15:04	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/13/14 15:04	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 15:04	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 15:04	1
Trichloroethene	**0.838**		0.500	0.200	ug/L			08/13/14 15:04	1
Vinyl chloride	**0.209**	**J**	0.500	0.180	ug/L			08/13/14 15:04	1
Xylenes, Total	**12.8**		1.50	0.580	ug/L			08/13/14 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/13/14 15:04*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/13/14 15:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/13/14 15:04*	*1*
Toluene-d8 (Surr)	*117*		*70 - 130*		*08/13/14 15:04*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59212-1

Client Sample ID: GAC Outlet 2-3

Lab Sample ID: 490-59212-3

Date Collected: 08/11/14 14:40

Matrix: Water

Date Received: 08/12/14 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/13/14 14:38	1
Benzene	ND		0.500	0.200	ug/L			08/13/14 14:38	1
Bromoform	ND		0.500	0.290	ug/L			08/13/14 14:38	1
Bromomethane	ND		0.500	0.350	ug/L			08/13/14 14:38	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/13/14 14:38	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/13/14 14:38	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/13/14 14:38	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/13/14 14:38	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/13/14 14:38	1
Chloroethane	ND		0.500	0.360	ug/L			08/13/14 14:38	1
Chloroform	ND		0.500	0.230	ug/L			08/13/14 14:38	1
Chloromethane	ND		0.500	0.360	ug/L			08/13/14 14:38	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/13/14 14:38	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 14:38	1
Dibromomethane	ND		0.500	0.450	ug/L			08/13/14 14:38	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/13/14 14:38	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/13/14 14:38	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/13/14 14:38	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/13/14 14:38	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/13/14 14:38	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/13/14 14:38	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/13/14 14:38	1
2-Hexanone	ND		5.00	1.28	ug/L			08/13/14 14:38	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/13/14 14:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/13/14 14:38	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/13/14 14:38	1
o-Xylene	ND		0.500	0.200	ug/L			08/13/14 14:38	1
Styrene	ND		0.500	0.280	ug/L			08/13/14 14:38	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/13/14 14:38	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/13/14 14:38	1
Toluene	ND		0.500	0.170	ug/L			08/13/14 14:38	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/13/14 14:38	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 14:38	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/13/14 14:38	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 14:38	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 14:38	1
Trichloroethene	ND		0.500	0.200	ug/L			08/13/14 14:38	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/13/14 14:38	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/13/14 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*08/13/14 14:38*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/13/14 14:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/13/14 14:38*	*1*
Toluene-d8 (Surr)	*116*		*70 - 130*		*08/13/14 14:38*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59212-1

Client Sample ID: Effluent

Lab Sample ID: 490-59212-4

Date Collected: 08/11/14 14:35
Date Received: 08/12/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**8.89**		5.00	2.66	ug/L			08/13/14 14:11	1
Benzene	ND		0.500	0.200	ug/L			08/13/14 14:11	1
Bromoform	ND		0.500	0.290	ug/L			08/13/14 14:11	1
Bromomethane	ND		0.500	0.350	ug/L			08/13/14 14:11	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/13/14 14:11	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/13/14 14:11	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/13/14 14:11	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/13/14 14:11	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/13/14 14:11	1
Chloroethane	ND		0.500	0.360	ug/L			08/13/14 14:11	1
Chloroform	ND		0.500	0.230	ug/L			08/13/14 14:11	1
Chloromethane	ND		0.500	0.360	ug/L			08/13/14 14:11	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/13/14 14:11	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 14:11	1
Dibromomethane	ND		0.500	0.450	ug/L			08/13/14 14:11	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/13/14 14:11	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/13/14 14:11	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/13/14 14:11	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/13/14 14:11	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/13/14 14:11	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/13/14 14:11	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/13/14 14:11	1
2-Hexanone	ND		5.00	1.28	ug/L			08/13/14 14:11	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/13/14 14:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/13/14 14:11	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/13/14 14:11	1
o-Xylene	ND		0.500	0.200	ug/L			08/13/14 14:11	1
Styrene	ND		0.500	0.280	ug/L			08/13/14 14:11	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/13/14 14:11	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/13/14 14:11	1
Toluene	ND		0.500	0.170	ug/L			08/13/14 14:11	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/13/14 14:11	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 14:11	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/13/14 14:11	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 14:11	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 14:11	1
Trichloroethene	ND		0.500	0.200	ug/L			08/13/14 14:11	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/13/14 14:11	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/13/14 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/13/14 14:11*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/13/14 14:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/13/14 14:11*	*1*
Toluene-d8 (Surr)	*118*		*70 - 130*		*08/13/14 14:11*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59212-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-59212-5

Date Collected: 08/11/14 00:01
Date Received: 08/12/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/13/14 13:45	1
Benzene	ND		0.500	0.200	ug/L			08/13/14 13:45	1
Bromoform	ND		0.500	0.290	ug/L			08/13/14 13:45	1
Bromomethane	ND		0.500	0.350	ug/L			08/13/14 13:45	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/13/14 13:45	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/13/14 13:45	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/13/14 13:45	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/13/14 13:45	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/13/14 13:45	1
Chloroethane	ND		0.500	0.360	ug/L			08/13/14 13:45	1
Chloroform	ND		0.500	0.230	ug/L			08/13/14 13:45	1
Chloromethane	ND		0.500	0.360	ug/L			08/13/14 13:45	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/13/14 13:45	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 13:45	1
Dibromomethane	ND		0.500	0.450	ug/L			08/13/14 13:45	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/13/14 13:45	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/13/14 13:45	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/13/14 13:45	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/13/14 13:45	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/13/14 13:45	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/13/14 13:45	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/13/14 13:45	1
2-Hexanone	ND		5.00	1.28	ug/L			08/13/14 13:45	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/13/14 13:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/13/14 13:45	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/13/14 13:45	1
o-Xylene	ND		0.500	0.200	ug/L			08/13/14 13:45	1
Styrene	ND		0.500	0.280	ug/L			08/13/14 13:45	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/13/14 13:45	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/13/14 13:45	1
Toluene	ND		0.500	0.170	ug/L			08/13/14 13:45	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/13/14 13:45	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 13:45	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/13/14 13:45	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 13:45	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 13:45	1
Trichloroethene	ND		0.500	0.200	ug/L			08/13/14 13:45	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/13/14 13:45	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/13/14 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/13/14 13:45*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/13/14 13:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/13/14 13:45*	*1*
Toluene-d8 (Surr)	*117*		*70 - 130*		*08/13/14 13:45*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-183382/8
Matrix: Water
Analysis Batch: 183382

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/13/14 12:51	1
Benzene	ND		0.500	0.200	ug/L			08/13/14 12:51	1
Bromoform	ND		0.500	0.290	ug/L			08/13/14 12:51	1
Bromomethane	ND		0.500	0.350	ug/L			08/13/14 12:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/13/14 12:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/13/14 12:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/13/14 12:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/13/14 12:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/13/14 12:51	1
Chloroethane	ND		0.500	0.360	ug/L			08/13/14 12:51	1
Chloroform	ND		0.500	0.230	ug/L			08/13/14 12:51	1
Chloromethane	ND		0.500	0.360	ug/L			08/13/14 12:51	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/13/14 12:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 12:51	1
Dibromomethane	ND		0.500	0.450	ug/L			08/13/14 12:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/13/14 12:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/13/14 12:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/13/14 12:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/13/14 12:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/13/14 12:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/13/14 12:51	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/13/14 12:51	1
2-Hexanone	ND		5.00	1.28	ug/L			08/13/14 12:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/13/14 12:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/13/14 12:51	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/13/14 12:51	1
o-Xylene	ND		0.500	0.200	ug/L			08/13/14 12:51	1
Styrene	ND		0.500	0.280	ug/L			08/13/14 12:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/13/14 12:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/13/14 12:51	1
Toluene	ND		0.500	0.170	ug/L			08/13/14 12:51	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/13/14 12:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/13/14 12:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/13/14 12:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 12:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/13/14 12:51	1
Trichloroethene	ND		0.500	0.200	ug/L			08/13/14 12:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/13/14 12:51	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/13/14 12:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*08/13/14 12:51*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/13/14 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/13/14 12:51*	*1*
Toluene-d8 (Surr)	*114*		*70 - 130*		*08/13/14 12:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-183382/4
Matrix: Water
Analysis Batch: 183382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	238.4		ug/L		95	54 - 145
Benzene	50.0	50.25		ug/L		100	80 - 121
Bromoform	50.0	57.92		ug/L		116	46 - 145
Bromomethane	50.0	41.44		ug/L		83	41 - 150
2-Butanone (MEK)	250	248.2		ug/L		99	62 - 133
Carbon disulfide	50.0	54.35		ug/L		109	77 - 126
Carbon tetrachloride	50.0	54.40		ug/L		109	64 - 147
Chlorobenzene	50.0	52.90		ug/L		106	80 - 120
Chlorodibromomethane	50.0	56.98		ug/L		114	69 - 133
Chloroethane	50.0	51.66		ug/L		103	72 - 120
Chloroform	50.0	50.15		ug/L		100	73 - 129
Chloromethane	50.0	48.66		ug/L		97	12 - 150
cis-1,2-Dichloroethene	50.0	50.53		ug/L		101	76 - 125
cis-1,3-Dichloropropene	50.0	56.74		ug/L		113	74 - 140
Dibromomethane	50.0	49.06		ug/L		98	71 - 125
Dichlorobromomethane	50.0	51.82		ug/L		104	75 - 129
1,1-Dichloroethane	50.0	49.65		ug/L		99	78 - 125
1,2-Dichloroethane	50.0	47.37		ug/L		95	77 - 121
1,1-Dichloroethene	50.0	51.80		ug/L		104	79 - 124
1,2-Dichloropropane	50.0	49.58		ug/L		99	75 - 120
1,1-Dichloropropene	50.0	51.82		ug/L		104	80 - 122
Ethylbenzene	50.0	54.89		ug/L		110	80 - 130
2-Hexanone	250	270.7		ug/L		108	60 - 142
Methylene Chloride	50.0	51.17		ug/L		102	79 - 123
4-Methyl-2-pentanone (MIBK)	250	251.3		ug/L		101	60 - 137
m-Xylene & p-Xylene	50.0	54.96		ug/L		110	80 - 141
o-Xylene	50.0	55.68		ug/L		111	80 - 127
Styrene	50.0	53.53		ug/L		107	80 - 127
1,1,1,2-Tetrachloroethane	50.0	55.04		ug/L		110	74 - 135
Tetrachloroethene	50.0	56.68		ug/L		113	80 - 126
Toluene	50.0	53.88		ug/L		108	80 - 126
trans-1,2-Dichloroethene	50.0	50.14		ug/L		100	79 - 126
trans-1,3-Dichloropropene	50.0	56.24		ug/L		112	63 - 134
1,3,5-Trichlorobenzene	50.0	55.62		ug/L		111	70 - 130
1,1,1-Trichloroethane	50.0	51.91		ug/L		104	78 - 135
1,1,2-Trichloroethane	50.0	50.24		ug/L		100	80 - 124
Trichloroethene	50.0	52.93		ug/L		106	80 - 123
Vinyl chloride	50.0	54.88		ug/L		110	68 - 120
Xylenes, Total	100	110.6		ug/L		111	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*108*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-59212-4 MS
Matrix: Water
Analysis Batch: 183382

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	8.89		250	217.6		ug/L		83	45 - 141
Benzene	ND		50.0	49.82		ug/L		100	75 - 133
Bromoform	ND		50.0	58.20		ug/L		116	42 - 147
Bromomethane	ND		50.0	29.35		ug/L		59	16 - 163
2-Butanone (MEK)	ND		250	234.3		ug/L		94	50 - 138
Carbon disulfide	ND		50.0	49.62		ug/L		99	48 - 152
Carbon tetrachloride	ND		50.0	54.71		ug/L		109	62 - 164
Chlorobenzene	ND		50.0	52.04		ug/L		104	80 - 129
Chlorodibromomethane	ND		50.0	56.69		ug/L		113	66 - 140
Chloroethane	ND		50.0	51.78		ug/L		104	58 - 137
Chloroform	ND		50.0	49.39		ug/L		99	66 - 138
Chloromethane	ND		50.0	46.14		ug/L		92	10 - 169
cis-1,2-Dichloroethene	ND		50.0	50.08		ug/L		100	68 - 138
cis-1,3-Dichloropropene	ND		50.0	54.81		ug/L		110	71 - 141
Dibromomethane	ND		50.0	48.29		ug/L		97	58 - 140
Dichlorobromomethane	ND		50.0	50.82		ug/L		102	70 - 140
1,1-Dichloroethane	ND		50.0	48.84		ug/L		98	71 - 139
1,2-Dichloroethane	ND		50.0	47.14		ug/L		94	64 - 136
1,1-Dichloroethene	ND		50.0	52.14		ug/L		104	70 - 142
1,2-Dichloropropane	ND		50.0	48.83		ug/L		98	67 - 131
1,1-Dichloropropene	ND		50.0	51.30		ug/L		103	76 - 139
Ethylbenzene	ND		50.0	53.75		ug/L		107	79 - 139
2-Hexanone	ND		250	263.7		ug/L		105	50 - 150
Methylene Chloride	ND		50.0	49.86		ug/L		100	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	241.5		ug/L		97	50 - 147
m-Xylene & p-Xylene	ND		50.0	54.29		ug/L		109	80 - 153
o-Xylene	ND		50.0	54.72		ug/L		109	74 - 138
Styrene	ND		50.0	52.39		ug/L		105	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	54.79		ug/L		110	73 - 141
Tetrachloroethene	ND		50.0	55.88		ug/L		112	72 - 145
Toluene	ND		50.0	52.78		ug/L		106	75 - 136
trans-1,2-Dichloroethene	ND		50.0	48.36		ug/L		97	66 - 143
trans-1,3-Dichloropropene	ND		50.0	55.12		ug/L		110	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	55.19		ug/L		110	60 - 140
1,1,1-Trichloroethane	ND		50.0	53.15		ug/L		106	76 - 149
1,1,2-Trichloroethane	ND		50.0	50.00		ug/L		100	74 - 134
Trichloroethene	ND		50.0	52.07		ug/L		104	73 - 144
Vinyl chloride	ND		50.0	55.44		ug/L		111	56 - 129
Xylenes, Total	ND		100	109.0		ug/L		109	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-59212-4 MSD
Matrix: Water
Analysis Batch: 183382

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	8.89		250	220.2		ug/L		85	45 - 141	1	21
Benzene	ND		50.0	48.63		ug/L		97	75 - 133	2	17
Bromoform	ND		50.0	57.89		ug/L		116	42 - 147	1	16
Bromomethane	ND		50.0	35.36		ug/L		71	16 - 163	19	50
2-Butanone (MEK)	ND		250	248.3		ug/L		99	50 - 138	6	19
Carbon disulfide	ND		50.0	48.38		ug/L		97	48 - 152	3	21
Carbon tetrachloride	ND		50.0	55.59		ug/L		111	62 - 164	2	19
Chlorobenzene	ND		50.0	51.67		ug/L		103	80 - 129	1	14
Chlorodibromomethane	ND		50.0	55.81		ug/L		112	66 - 140	2	15
Chloroethane	ND		50.0	51.04		ug/L		102	58 - 137	1	20
Chloroform	ND		50.0	49.09		ug/L		98	66 - 138	1	18
Chloromethane	ND		50.0	44.87		ug/L		90	10 - 169	3	31
cis-1,2-Dichloroethene	ND		50.0	49.70		ug/L		99	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	53.74		ug/L		107	71 - 141	2	15
Dibromomethane	ND		50.0	48.51		ug/L		97	58 - 140	0	16
Dichlorobromomethane	ND		50.0	51.71		ug/L		103	70 - 140	2	18
1,1-Dichloroethane	ND		50.0	48.68		ug/L		97	71 - 139	0	17
1,2-Dichloroethane	ND		50.0	46.57		ug/L		93	64 - 136	1	17
1,1-Dichloroethene	ND		50.0	51.84		ug/L		104	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	48.84		ug/L		98	67 - 131	0	17
1,1-Dichloropropene	ND		50.0	51.16		ug/L		102	76 - 139	0	17
Ethylbenzene	ND		50.0	54.06		ug/L		108	79 - 139	1	15
2-Hexanone	ND		250	263.3		ug/L		105	50 - 150	0	15
Methylene Chloride	ND		50.0	50.50		ug/L		101	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	244.1		ug/L		98	50 - 147	1	17
m-Xylene & p-Xylene	ND		50.0	53.63		ug/L		107	80 - 153	1	16
o-Xylene	ND		50.0	53.65		ug/L		107	74 - 138	2	14
Styrene	ND		50.0	51.74		ug/L		103	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	55.08		ug/L		110	73 - 141	1	16
Tetrachloroethene	ND		50.0	55.38		ug/L		111	72 - 145	1	16
Toluene	ND		50.0	51.96		ug/L		104	75 - 136	2	15
trans-1,2-Dichloroethene	ND		50.0	49.12		ug/L		98	66 - 143	2	16
trans-1,3-Dichloropropene	ND		50.0	55.10		ug/L		110	59 - 135	0	14
1,3,5-Trichlorobenzene	ND		50.0	55.65		ug/L		111	60 - 140	1	30
1,1,1-Trichloroethane	ND		50.0	52.77		ug/L		106	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	50.61		ug/L		101	74 - 134	1	15
Trichloroethene	ND		50.0	52.08		ug/L		104	73 - 144	0	17
Vinyl chloride	ND		50.0	53.99		ug/L		108	56 - 129	3	17
Xylenes, Total	ND		100	107.3		ug/L		107	74 - 141	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59212-1

GC/MS VOA

Analysis Batch: 183382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-59212-1	IW-100	Total/NA	Water	8260B	
490-59212-2	IW-103	Total/NA	Water	8260B	
490-59212-3	GAC Outlet 2-3	Total/NA	Water	8260B	
490-59212-4	Effluent	Total/NA	Water	8260B	
490-59212-4 MS	Effluent	Total/NA	Water	8260B	
490-59212-4 MSD	Effluent	Total/NA	Water	8260B	
490-59212-5	Trip Blank	Total/NA	Water	8260B	
LCS 490-183382/4	Lab Control Sample	Total/NA	Water	8260B	
MB 490-183382/8	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59212-1

Client Sample ID: IW-100 — Lab Sample ID: 490-59212-1

Date Collected: 08/11/14 14:10 — **Matrix: Water**
Date Received: 08/12/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	183382	08/13/14 15:31	EML	TAL NSH

Client Sample ID: IW-103 — Lab Sample ID: 490-59212-2

Date Collected: 08/11/14 14:10 — **Matrix: Water**
Date Received: 08/12/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	183382	08/13/14 15:04	EML	TAL NSH

Client Sample ID: GAC Outlet 2-3 — Lab Sample ID: 490-59212-3

Date Collected: 08/11/14 14:40 — **Matrix: Water**
Date Received: 08/12/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	183382	08/13/14 14:38	EML	TAL NSH

Client Sample ID: Effluent — Lab Sample ID: 490-59212-4

Date Collected: 08/11/14 14:35 — **Matrix: Water**
Date Received: 08/12/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	183382	08/13/14 14:11	EML	TAL NSH

Client Sample ID: Trip Blank — Lab Sample ID: 490-59212-5

Date Collected: 08/11/14 00:01 — **Matrix: Water**
Date Received: 08/12/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	183382	08/13/14 13:45	EML	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59212-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59212-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-59212 Chain of Custody

Cooler Received/Opened On 8/12/2014@ 0830

1. Tracking # 3207 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID Raynger

2. Temperature of rep. sample or temp blank when opened: 2.7 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES..NO...NA

   If yes, how many and where: one front

5. Were the seals intact, signed, and dated correctly? YES..NO...NA

6. Were custody papers inside cooler? YES..NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) DA

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES..NO...NA

12. Did all container labels and tags agree with custody papers? YES..NO...NA

13a. Were VOA vials received? YES..NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO..NA

14. Was there a Trip Blank in this cooler? YES..NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) mdm

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

   b. Did the bottle labels indicate that the correct preservatives were used YES..NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mdm

17. Were custody papers properly filled out (ink, signed, etc)? YES..NO...NA

18. Did you sign the custody papers in the appropriate place? YES..NO...NA

19. Were correct containers used for the analysis requested? YES..NO...NA

20. Was sufficient amount of sample sent in each container? YES..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mdm

I certify that I attached a label with the unique LIMS number to each container (intial) mdm

21. Were there Non-Conformance issues at login? YES..NO Was a NCM generated? YES..NO..#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
59212

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8/21/2014

Client Information	Sampler: DC / BL	Lab PM: Brown, Shali	Carrier:	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 978-505-1120	E-Mail: shali.brown@testamericainc.com		Page: 1 of 1
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Std			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
IW-100	8/11/14	1410	G	W		N	3			-1
IW-103	↓	1410	G	W		↓	3			2
GAC outlet 2-3	↓	1440	G	W		↓	3			3
Effluent	↓	1435	G	W		↓	3			4
Trip Blank	—	—	—	W		↓	2			5

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature] 8/11/14	8/11/14 1700	Arcadis	[signature]	8-12-14 @ 0830	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.7c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-59212-1

Login Number: 59212

List Number: 1

Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-59409-1
Client Project/Site: FORD Tibbetts Road Site E101274
Revision: 1

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
8/22/2014 1:03:57 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59409-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-59409-1	IW-100	Water	08/13/14 12:00	08/14/14 08:30
490-59409-2	IW-103	Water	08/13/14 12:05	08/14/14 08:30
490-59409-3	GAC Outlet 2-3	Water	08/13/14 12:10	08/14/14 08:30
490-59409-4	Effluent	Water	08/13/14 12:15	08/14/14 08:30
490-59409-5	Trip Blank	Water	08/13/14 00:01	08/14/14 08:30

Job ID: 490-59409-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-59409-1

Comments
082214 Revised Report to change the "1" in the sample ID's to "I" at client request. This report replaces the report previously generated on 082114.

Receipt
The samples were received on 8/14/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59409-1

Client Sample ID: IW-100

Date Collected: 08/13/14 12:00
Date Received: 08/14/14 08:30

Lab Sample ID: 490-59409-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/14/14 17:18	1
Benzene	**16.6**		0.500	0.200	ug/L			08/14/14 17:18	1
Bromoform	ND		0.500	0.290	ug/L			08/14/14 17:18	1
Bromomethane	ND		0.500	0.350	ug/L			08/14/14 17:18	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/14/14 17:18	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/14/14 17:18	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/14/14 17:18	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/14/14 17:18	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/14/14 17:18	1
Chloroethane	ND		0.500	0.360	ug/L			08/14/14 17:18	1
Chloroform	ND		0.500	0.230	ug/L			08/14/14 17:18	1
Chloromethane	ND		0.500	0.360	ug/L			08/14/14 17:18	1
cis-1,2-Dichloroethene	**22.0**		0.500	0.210	ug/L			08/14/14 17:18	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 17:18	1
Dibromomethane	ND		0.500	0.450	ug/L			08/14/14 17:18	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/14/14 17:18	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/14/14 17:18	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/14/14 17:18	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/14/14 17:18	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/14/14 17:18	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/14/14 17:18	1
Ethylbenzene	**2.50**		0.500	0.190	ug/L			08/14/14 17:18	1
2-Hexanone	ND		5.00	1.28	ug/L			08/14/14 17:18	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/14/14 17:18	1
4-Methyl-2-pentanone (MIBK)	**4.01**	**J**	5.00	0.810	ug/L			08/14/14 17:18	1
m-Xylene & p-Xylene	**1.62**		0.500	0.380	ug/L			08/14/14 17:18	1
o-Xylene	**0.296**	**J**	0.500	0.200	ug/L			08/14/14 17:18	1
Styrene	ND		0.500	0.280	ug/L			08/14/14 17:18	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/14/14 17:18	1
Tetrachloroethene	**0.192**	**J**	0.500	0.140	ug/L			08/14/14 17:18	1
Toluene	ND		0.500	0.170	ug/L			08/14/14 17:18	1
trans-1,2-Dichloroethene	**2.36**		0.500	0.230	ug/L			08/14/14 17:18	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 17:18	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/14/14 17:18	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 17:18	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 17:18	1
Trichloroethene	**2.57**		0.500	0.200	ug/L			08/14/14 17:18	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/14/14 17:18	1
Xylenes, Total	**1.91**		1.50	0.580	ug/L			08/14/14 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/14/14 17:18*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/14/14 17:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*08/14/14 17:18*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*08/14/14 17:18*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59409-1

Client Sample ID: IW-103

Date Collected: 08/13/14 12:05
Date Received: 08/14/14 08:30

Lab Sample ID: 490-59409-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/14/14 17:45	1
Benzene	**33.0**		0.500	0.200	ug/L			08/14/14 17:45	1
Bromoform	ND		0.500	0.290	ug/L			08/14/14 17:45	1
Bromomethane	ND		0.500	0.350	ug/L			08/14/14 17:45	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/14/14 17:45	1
Carbon disulfide	**0.450**	**J**	0.500	0.220	ug/L			08/14/14 17:45	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/14/14 17:45	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/14/14 17:45	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/14/14 17:45	1
Chloroethane	ND		0.500	0.360	ug/L			08/14/14 17:45	1
Chloroform	ND		0.500	0.230	ug/L			08/14/14 17:45	1
Chloromethane	ND		0.500	0.360	ug/L			08/14/14 17:45	1
cis-1,2-Dichloroethene	**29.4**		0.500	0.210	ug/L			08/14/14 17:45	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 17:45	1
Dibromomethane	ND		0.500	0.450	ug/L			08/14/14 17:45	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/14/14 17:45	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/14/14 17:45	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/14/14 17:45	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/14/14 17:45	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/14/14 17:45	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/14/14 17:45	1
Ethylbenzene	**11.4**		0.500	0.190	ug/L			08/14/14 17:45	1
2-Hexanone	ND		5.00	1.28	ug/L			08/14/14 17:45	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/14/14 17:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/14/14 17:45	1
m-Xylene & p-Xylene	**9.65**		0.500	0.380	ug/L			08/14/14 17:45	1
o-Xylene	ND		0.500	0.200	ug/L			08/14/14 17:45	1
Styrene	ND		0.500	0.280	ug/L			08/14/14 17:45	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/14/14 17:45	1
Tetrachloroethene	**0.142**	**J**	0.500	0.140	ug/L			08/14/14 17:45	1
Toluene	ND		0.500	0.170	ug/L			08/14/14 17:45	1
trans-1,2-Dichloroethene	**0.284**	**J**	0.500	0.230	ug/L			08/14/14 17:45	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 17:45	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/14/14 17:45	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 17:45	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 17:45	1
Trichloroethene	**0.626**		0.500	0.200	ug/L			08/14/14 17:45	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/14/14 17:45	1
Xylenes, Total	**9.80**		1.50	0.580	ug/L			08/14/14 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/14/14 17:45*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/14/14 17:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/14/14 17:45*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*08/14/14 17:45*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59409-1

Client Sample ID: GAC Outlet 2-3

Lab Sample ID: 490-59409-3

Date Collected: 08/13/14 12:10
Date Received: 08/14/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/14/14 18:12	1
Benzene	ND		0.500	0.200	ug/L			08/14/14 18:12	1
Bromoform	ND		0.500	0.290	ug/L			08/14/14 18:12	1
Bromomethane	ND		0.500	0.350	ug/L			08/14/14 18:12	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/14/14 18:12	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/14/14 18:12	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/14/14 18:12	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/14/14 18:12	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/14/14 18:12	1
Chloroethane	ND		0.500	0.360	ug/L			08/14/14 18:12	1
Chloroform	ND		0.500	0.230	ug/L			08/14/14 18:12	1
Chloromethane	ND		0.500	0.360	ug/L			08/14/14 18:12	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/14/14 18:12	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 18:12	1
Dibromomethane	ND		0.500	0.450	ug/L			08/14/14 18:12	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/14/14 18:12	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/14/14 18:12	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/14/14 18:12	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/14/14 18:12	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/14/14 18:12	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/14/14 18:12	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/14/14 18:12	1
2-Hexanone	ND		5.00	1.28	ug/L			08/14/14 18:12	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/14/14 18:12	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/14/14 18:12	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/14/14 18:12	1
o-Xylene	ND		0.500	0.200	ug/L			08/14/14 18:12	1
Styrene	ND		0.500	0.280	ug/L			08/14/14 18:12	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/14/14 18:12	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/14/14 18:12	1
Toluene	ND		0.500	0.170	ug/L			08/14/14 18:12	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/14/14 18:12	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 18:12	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/14/14 18:12	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 18:12	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 18:12	1
Trichloroethene	ND		0.500	0.200	ug/L			08/14/14 18:12	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/14/14 18:12	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/14/14 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/14/14 18:12*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/14/14 18:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/14/14 18:12*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*08/14/14 18:12*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59409-1

Client Sample ID: Effluent

Lab Sample ID: 490-59409-4

Date Collected: 08/13/14 12:15
Date Received: 08/14/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/14/14 18:39	1
Benzene	ND		0.500	0.200	ug/L			08/14/14 18:39	1
Bromoform	ND		0.500	0.290	ug/L			08/14/14 18:39	1
Bromomethane	ND		0.500	0.350	ug/L			08/14/14 18:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/14/14 18:39	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/14/14 18:39	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/14/14 18:39	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/14/14 18:39	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/14/14 18:39	1
Chloroethane	ND		0.500	0.360	ug/L			08/14/14 18:39	1
Chloroform	ND		0.500	0.230	ug/L			08/14/14 18:39	1
Chloromethane	ND		0.500	0.360	ug/L			08/14/14 18:39	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/14/14 18:39	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 18:39	1
Dibromomethane	ND		0.500	0.450	ug/L			08/14/14 18:39	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/14/14 18:39	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/14/14 18:39	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/14/14 18:39	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/14/14 18:39	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/14/14 18:39	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/14/14 18:39	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/14/14 18:39	1
2-Hexanone	ND		5.00	1.28	ug/L			08/14/14 18:39	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/14/14 18:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/14/14 18:39	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/14/14 18:39	1
o-Xylene	ND		0.500	0.200	ug/L			08/14/14 18:39	1
Styrene	ND		0.500	0.280	ug/L			08/14/14 18:39	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/14/14 18:39	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/14/14 18:39	1
Toluene	ND		0.500	0.170	ug/L			08/14/14 18:39	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/14/14 18:39	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 18:39	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/14/14 18:39	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 18:39	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 18:39	1
Trichloroethene	ND		0.500	0.200	ug/L			08/14/14 18:39	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/14/14 18:39	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/14/14 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/14/14 18:39*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/14/14 18:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/14/14 18:39*	*1*
Toluene-d8 (Surr)	*111*		*70 - 130*		*08/14/14 18:39*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59409-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-59409-5

Date Collected: 08/13/14 00:01
Date Received: 08/14/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/14/14 15:57	1
Benzene	ND		0.500	0.200	ug/L			08/14/14 15:57	1
Bromoform	ND		0.500	0.290	ug/L			08/14/14 15:57	1
Bromomethane	ND		0.500	0.350	ug/L			08/14/14 15:57	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/14/14 15:57	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/14/14 15:57	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/14/14 15:57	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/14/14 15:57	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/14/14 15:57	1
Chloroethane	ND		0.500	0.360	ug/L			08/14/14 15:57	1
Chloroform	ND		0.500	0.230	ug/L			08/14/14 15:57	1
Chloromethane	ND		0.500	0.360	ug/L			08/14/14 15:57	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/14/14 15:57	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 15:57	1
Dibromomethane	ND		0.500	0.450	ug/L			08/14/14 15:57	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/14/14 15:57	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/14/14 15:57	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/14/14 15:57	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/14/14 15:57	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/14/14 15:57	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/14/14 15:57	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/14/14 15:57	1
2-Hexanone	ND		5.00	1.28	ug/L			08/14/14 15:57	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/14/14 15:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/14/14 15:57	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/14/14 15:57	1
o-Xylene	ND		0.500	0.200	ug/L			08/14/14 15:57	1
Styrene	ND		0.500	0.280	ug/L			08/14/14 15:57	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/14/14 15:57	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/14/14 15:57	1
Toluene	ND		0.500	0.170	ug/L			08/14/14 15:57	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/14/14 15:57	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 15:57	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/14/14 15:57	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 15:57	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 15:57	1
Trichloroethene	ND		0.500	0.200	ug/L			08/14/14 15:57	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/14/14 15:57	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/14/14 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/14/14 15:57*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*08/14/14 15:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/14/14 15:57*	*1*
Toluene-d8 (Surr)	*110*		*70 - 130*		*08/14/14 15:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-183700/7
Matrix: Water
Analysis Batch: 183700

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/14/14 12:51	1
Benzene	ND		0.500	0.200	ug/L			08/14/14 12:51	1
Bromoform	ND		0.500	0.290	ug/L			08/14/14 12:51	1
Bromomethane	ND		0.500	0.350	ug/L			08/14/14 12:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/14/14 12:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/14/14 12:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/14/14 12:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/14/14 12:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/14/14 12:51	1
Chloroethane	ND		0.500	0.360	ug/L			08/14/14 12:51	1
Chloroform	ND		0.500	0.230	ug/L			08/14/14 12:51	1
Chloromethane	ND		0.500	0.360	ug/L			08/14/14 12:51	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/14/14 12:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 12:51	1
Dibromomethane	ND		0.500	0.450	ug/L			08/14/14 12:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/14/14 12:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/14/14 12:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/14/14 12:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/14/14 12:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/14/14 12:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/14/14 12:51	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/14/14 12:51	1
2-Hexanone	ND		5.00	1.28	ug/L			08/14/14 12:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/14/14 12:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/14/14 12:51	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/14/14 12:51	1
o-Xylene	ND		0.500	0.200	ug/L			08/14/14 12:51	1
Styrene	ND		0.500	0.280	ug/L			08/14/14 12:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/14/14 12:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/14/14 12:51	1
Toluene	ND		0.500	0.170	ug/L			08/14/14 12:51	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/14/14 12:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/14/14 12:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/14/14 12:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 12:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/14/14 12:51	1
Trichloroethene	ND		0.500	0.200	ug/L			08/14/14 12:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/14/14 12:51	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/14/14 12:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/14/14 12:51*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*08/14/14 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*08/14/14 12:51*	*1*
Toluene-d8 (Surr)	*108*		*70 - 130*		*08/14/14 12:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-183700/3
Matrix: Water
Analysis Batch: 183700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	225.2		ug/L		90	54 - 145
Benzene	50.0	49.39		ug/L		99	80 - 121
Bromoform	50.0	58.00		ug/L		116	46 - 145
Bromomethane	50.0	38.64		ug/L		77	41 - 150
2-Butanone (MEK)	250	243.6		ug/L		97	62 - 133
Carbon disulfide	50.0	52.07		ug/L		104	77 - 126
Carbon tetrachloride	50.0	53.39		ug/L		107	64 - 147
Chlorobenzene	50.0	51.74		ug/L		103	80 - 120
Chlorodibromomethane	50.0	56.85		ug/L		114	69 - 133
Chloroethane	50.0	50.06		ug/L		100	72 - 120
Chloroform	50.0	49.35		ug/L		99	73 - 129
Chloromethane	50.0	46.56		ug/L		93	12 - 150
cis-1,2-Dichloroethene	50.0	49.50		ug/L		99	76 - 125
cis-1,3-Dichloropropene	50.0	54.45		ug/L		109	74 - 140
Dibromomethane	50.0	49.40		ug/L		99	71 - 125
Dichlorobromomethane	50.0	50.99		ug/L		102	75 - 129
1,1-Dichloroethane	50.0	48.40		ug/L		97	78 - 125
1,2-Dichloroethane	50.0	47.45		ug/L		95	77 - 121
1,1-Dichloroethene	50.0	50.15		ug/L		100	79 - 124
1,2-Dichloropropane	50.0	49.94		ug/L		100	75 - 120
1,1-Dichloropropene	50.0	50.36		ug/L		101	80 - 122
Ethylbenzene	50.0	53.43		ug/L		107	80 - 130
2-Hexanone	250	271.7		ug/L		109	60 - 142
Methylene Chloride	50.0	50.54		ug/L		101	79 - 123
4-Methyl-2-pentanone (MIBK)	250	245.4		ug/L		98	60 - 137
m-Xylene & p-Xylene	50.0	53.55		ug/L		107	80 - 141
o-Xylene	50.0	53.76		ug/L		108	80 - 127
Styrene	50.0	51.97		ug/L		104	80 - 127
1,1,1,2-Tetrachloroethane	50.0	54.45		ug/L		109	74 - 135
Tetrachloroethene	50.0	55.25		ug/L		111	80 - 126
Toluene	50.0	52.01		ug/L		104	80 - 126
trans-1,2-Dichloroethene	50.0	49.18		ug/L		98	79 - 126
trans-1,3-Dichloropropene	50.0	55.72		ug/L		111	63 - 134
1,3,5-Trichlorobenzene	50.0	53.12		ug/L		106	70 - 130
1,1,1-Trichloroethane	50.0	50.57		ug/L		101	78 - 135
1,1,2-Trichloroethane	50.0	49.33		ug/L		99	80 - 124
Trichloroethene	50.0	52.38		ug/L		105	80 - 123
Vinyl chloride	50.0	53.35		ug/L		107	68 - 120
Xylenes, Total	100	107.3		ug/L		107	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-183700/4
Matrix: Water
Analysis Batch: 183700

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
Acetone	250	232.6		ug/L		93	54 - 145	3	21
Benzene	50.0	50.46		ug/L		101	80 - 121	2	17
Bromoform	50.0	57.86		ug/L		116	46 - 145	0	16
Bromomethane	50.0	39.41		ug/L		79	41 - 150	2	50
2-Butanone (MEK)	250	252.4		ug/L		101	62 - 133	4	19
Carbon disulfide	50.0	52.11		ug/L		104	77 - 126	0	21
Carbon tetrachloride	50.0	54.53		ug/L		109	64 - 147	2	19
Chlorobenzene	50.0	51.74		ug/L		103	80 - 120	0	14
Chlorodibromomethane	50.0	56.98		ug/L		114	69 - 133	0	15
Chloroethane	50.0	50.78		ug/L		102	72 - 120	1	20
Chloroform	50.0	49.85		ug/L		100	73 - 129	1	18
Chloromethane	50.0	49.06		ug/L		98	12 - 150	5	31
cis-1,2-Dichloroethene	50.0	50.40		ug/L		101	76 - 125	2	17
cis-1,3-Dichloropropene	50.0	55.27		ug/L		111	74 - 140	1	15
Dibromomethane	50.0	49.20		ug/L		98	71 - 125	0	16
Dichlorobromomethane	50.0	52.24		ug/L		104	75 - 129	2	18
1,1-Dichloroethane	50.0	48.91		ug/L		98	78 - 125	1	17
1,2-Dichloroethane	50.0	48.17		ug/L		96	77 - 121	2	17
1,1-Dichloroethene	50.0	51.32		ug/L		103	79 - 124	2	17
1,2-Dichloropropane	50.0	48.99		ug/L		98	75 - 120	2	17
1,1-Dichloropropene	50.0	50.67		ug/L		101	80 - 122	1	17
Ethylbenzene	50.0	53.97		ug/L		108	80 - 130	1	15
2-Hexanone	250	275.5		ug/L		110	60 - 142	1	15
Methylene Chloride	50.0	51.50		ug/L		103	79 - 123	2	17
4-Methyl-2-pentanone (MIBK)	250	251.4		ug/L		101	60 - 137	2	17
m-Xylene & p-Xylene	50.0	54.11		ug/L		108	80 - 141	1	16
o-Xylene	50.0	53.84		ug/L		108	80 - 127	0	14
Styrene	50.0	51.35		ug/L		103	80 - 127	1	24
1,1,1,2-Tetrachloroethane	50.0	55.10		ug/L		110	74 - 135	1	16
Tetrachloroethene	50.0	53.98		ug/L		108	80 - 126	2	16
Toluene	50.0	52.25		ug/L		104	80 - 126	0	15
trans-1,2-Dichloroethene	50.0	49.32		ug/L		99	79 - 126	0	16
trans-1,3-Dichloropropene	50.0	55.45		ug/L		111	63 - 134	0	14
1,3,5-Trichlorobenzene	50.0	55.10		ug/L		110	70 - 130	4	30
1,1,1-Trichloroethane	50.0	51.31		ug/L		103	78 - 135	1	17
1,1,2-Trichloroethane	50.0	49.73		ug/L		99	80 - 124	1	15
Trichloroethene	50.0	52.48		ug/L		105	80 - 123	0	17
Vinyl chloride	50.0	54.13		ug/L		108	68 - 120	1	17
Xylenes, Total	100	107.9		ug/L		108	80 - 132	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-59109-B-1 MS
Matrix: Water
Analysis Batch: 183700

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	204.1		ug/L		82	45 - 141
Benzene	ND		50.0	48.38		ug/L		97	75 - 133
Bromoform	ND		50.0	58.19		ug/L		116	42 - 147
Bromomethane	ND		50.0	17.51		ug/L		35	16 - 163
2-Butanone (MEK)	ND		250	242.9		ug/L		97	50 - 138
Carbon disulfide	ND		50.0	40.55		ug/L		81	48 - 152
Carbon tetrachloride	ND		50.0	53.75		ug/L		108	62 - 164
Chlorobenzene	ND		50.0	51.74		ug/L		103	80 - 129
Chlorodibromomethane	ND		50.0	58.12		ug/L		116	66 - 140
Chloroethane	ND		50.0	49.24		ug/L		98	58 - 137
Chloroform	ND		50.0	50.05		ug/L		100	66 - 138
Chloromethane	ND		50.0	44.01		ug/L		88	10 - 169
cis-1,2-Dichloroethene	ND		50.0	49.58		ug/L		99	68 - 138
cis-1,3-Dichloropropene	ND		50.0	51.86		ug/L		104	71 - 141
Dibromomethane	ND		50.0	48.08		ug/L		96	58 - 140
Dichlorobromomethane	ND		50.0	52.82		ug/L		106	70 - 140
1,1-Dichloroethane	ND		50.0	49.38		ug/L		99	71 - 139
1,2-Dichloroethane	ND		50.0	47.18		ug/L		94	64 - 136
1,1-Dichloroethene	ND		50.0	49.94		ug/L		100	70 - 142
1,2-Dichloropropane	ND		50.0	49.39		ug/L		99	67 - 131
1,1-Dichloropropene	ND		50.0	50.01		ug/L		100	76 - 139
Ethylbenzene	ND		50.0	54.37		ug/L		109	79 - 139
2-Hexanone	ND		250	295.9		ug/L		118	50 - 150
Methylene Chloride	ND		50.0	50.15		ug/L		100	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	263.9		ug/L		106	50 - 147
m-Xylene & p-Xylene	0.630		50.0	55.02		ug/L		109	80 - 153
o-Xylene	0.215	J	50.0	53.32		ug/L		106	74 - 138
Styrene	ND		50.0	51.71		ug/L		103	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	55.61		ug/L		111	73 - 141
Tetrachloroethene	1.38		50.0	53.79		ug/L		105	72 - 145
Toluene	ND		50.0	50.87		ug/L		102	75 - 136
trans-1,2-Dichloroethene	ND		50.0	46.88		ug/L		94	66 - 143
trans-1,3-Dichloropropene	ND		50.0	52.47		ug/L		105	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	55.18		ug/L		110	60 - 140
1,1,1-Trichloroethane	ND		50.0	52.84		ug/L		106	76 - 149
1,1,2-Trichloroethane	ND		50.0	50.06		ug/L		100	74 - 134
Trichloroethene	ND		50.0	50.80		ug/L		102	73 - 144
Vinyl chloride	ND		50.0	52.32		ug/L		105	56 - 129
Xylenes, Total	0.845	J	100	108.3		ug/L		107	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*105*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-59109-C-1 MSD
Matrix: Water
Analysis Batch: 183700

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	192.7		ug/L		77	45 - 141	6	21
Benzene	ND		50.0	47.78		ug/L		96	75 - 133	1	17
Bromoform	ND		50.0	56.94		ug/L		114	42 - 147	2	16
Bromomethane	ND		50.0	24.27		ug/L		49	16 - 163	32	50
2-Butanone (MEK)	ND		250	238.5		ug/L		95	50 - 138	2	19
Carbon disulfide	ND		50.0	38.54		ug/L		77	48 - 152	5	21
Carbon tetrachloride	ND		50.0	52.58		ug/L		105	62 - 164	2	19
Chlorobenzene	ND		50.0	51.20		ug/L		102	80 - 129	1	14
Chlorodibromomethane	ND		50.0	56.83		ug/L		114	66 - 140	2	15
Chloroethane	ND		50.0	47.21		ug/L		94	58 - 137	4	20
Chloroform	ND		50.0	48.02		ug/L		96	66 - 138	4	18
Chloromethane	ND		50.0	42.51		ug/L		85	10 - 169	3	31
cis-1,2-Dichloroethene	ND		50.0	48.61		ug/L		97	68 - 138	2	17
cis-1,3-Dichloropropene	ND		50.0	50.90		ug/L		102	71 - 141	2	15
Dibromomethane	ND		50.0	47.90		ug/L		96	58 - 140	0	16
Dichlorobromomethane	ND		50.0	52.81		ug/L		106	70 - 140	0	18
1,1-Dichloroethane	ND		50.0	47.56		ug/L		95	71 - 139	4	17
1,2-Dichloroethane	ND		50.0	46.51		ug/L		93	64 - 136	1	17
1,1-Dichloroethene	ND		50.0	48.77		ug/L		98	70 - 142	2	17
1,2-Dichloropropane	ND		50.0	47.51		ug/L		95	67 - 131	4	17
1,1-Dichloropropene	ND		50.0	48.61		ug/L		97	76 - 139	3	17
Ethylbenzene	ND		50.0	54.41		ug/L		109	79 - 139	0	15
2-Hexanone	ND		250	283.1		ug/L		113	50 - 150	4	15
Methylene Chloride	ND		50.0	48.70		ug/L		97	64 - 139	3	17
4-Methyl-2-pentanone (MIBK)	ND		250	252.9		ug/L		101	50 - 147	4	17
m-Xylene & p-Xylene	0.630		50.0	54.57		ug/L		108	80 - 153	1	16
o-Xylene	0.215	J	50.0	54.39		ug/L		108	74 - 138	2	14
Styrene	ND		50.0	52.64		ug/L		105	61 - 148	2	24
1,1,1,2-Tetrachloroethane	ND		50.0	55.73		ug/L		111	73 - 141	0	16
Tetrachloroethene	1.38		50.0	55.64		ug/L		109	72 - 145	3	16
Toluene	ND		50.0	50.80		ug/L		102	75 - 136	0	15
trans-1,2-Dichloroethene	ND		50.0	45.32		ug/L		91	66 - 143	3	16
trans-1,3-Dichloropropene	ND		50.0	50.92		ug/L		102	59 - 135	3	14
1,3,5-Trichlorobenzene	ND		50.0	54.72		ug/L		109	60 - 140	1	30
1,1,1-Trichloroethane	ND		50.0	51.24		ug/L		102	76 - 149	3	17
1,1,2-Trichloroethane	ND		50.0	50.38		ug/L		101	74 - 134	1	15
Trichloroethene	ND		50.0	50.92		ug/L		102	73 - 144	0	17
Vinyl chloride	ND		50.0	49.46		ug/L		99	56 - 129	6	17
Xylenes, Total	0.845	J	100	109.0		ug/L		108	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*107*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59409-1

GC/MS VOA

Analysis Batch: 183700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-59109-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-59109-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-59409-1	IW-100	Total/NA	Water	8260B	
490-59409-2	IW-103	Total/NA	Water	8260B	
490-59409-3	GAC Outlet 2-3	Total/NA	Water	8260B	
490-59409-4	Effluent	Total/NA	Water	8260B	
490-59409-5	Trip Blank	Total/NA	Water	8260B	
LCS 490-183700/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-183700/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-183700/7	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59409-1

Client Sample ID: IW-100 — Lab Sample ID: 490-59409-1

Date Collected: 08/13/14 12:00 — **Matrix: Water**
Date Received: 08/14/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	183700	08/14/14 17:18	EML	TAL NSH

Client Sample ID: IW-103 — Lab Sample ID: 490-59409-2

Date Collected: 08/13/14 12:05 — **Matrix: Water**
Date Received: 08/14/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	183700	08/14/14 17:45	EML	TAL NSH

Client Sample ID: GAC Outlet 2-3 — Lab Sample ID: 490-59409-3

Date Collected: 08/13/14 12:10 — **Matrix: Water**
Date Received: 08/14/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	183700	08/14/14 18:12	EML	TAL NSH

Client Sample ID: Effluent — Lab Sample ID: 490-59409-4

Date Collected: 08/13/14 12:15 — **Matrix: Water**
Date Received: 08/14/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	183700	08/14/14 18:39	EML	TAL NSH

Client Sample ID: Trip Blank — Lab Sample ID: 490-59409-5

Date Collected: 08/13/14 00:01 — **Matrix: Water**
Date Received: 08/14/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	183700	08/14/14 15:57	EML	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59409-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59409-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-59409 Chain of Custody

Cooler Received/Opened On 8/14/2014 @ 0830

1. Tracking # 0119 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 4.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) AJH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AJH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AJH

I certify that I attached a label with the unique LIMS number to each container (intial) AJH

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...#_____

BIS = Broken in shipment

ARCADIS
Infrastructure · Water · Environment · Buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

8/22/2014

Send Results to:

Contact & Company Name: Chuck Castelluccio
Telephone: 978-937-9999
Address: 300 Howard Mills SQ #430
Fax: 978-937-7555
City: Wakefield State: MA Zip:
E-mail Address: chuck.castelluccio@arcadis-us.com
Project Name/Location (City, State): Ford/Tibbetts Barrington NH
Project #: MA000725 2014.
Sampler's Printed Name: DC
Sampler's Signature: Diane Champagne

Preservative	B												
Filtered (✓)													
# of Containers	3												
Container Information	1												

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	VOC LL MOD	NH Volatiles LIST							REMARKS
IW-100	8/13/14	1200		✓	W	3								
IW-103	↓	1205		✓	W	3								
GAC outlet 2-3	↓	1210		✓	W	3								
Effluent	↓	1215		✓	W	3								
Trip Blank	—	—	—	—	W	2								

Loc: 490
59409

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: _____

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):
Lab Proj # 49002494
Tibbetts Rd E 101274

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: Test America	Cooler Custody Seal (✓)	Printed Name: Diane Champagne	Printed Name: Adam Huskey	Printed Name:	Printed Name:
☒ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: Diane Champagne	Signature: Adam Huskey	Signature:	Signature:
Specify Turnaround Requirements: Standard	Sample Receipt:	Firm: Arcadis	Firm/Courier: TAI	Firm/Courier:	Firm:
Shipping Tracking #: Fed-ex	Condition/Cooler Temp: _____	Date/Time: 8/13/14 1600	Date/Time: 8/14/14 8:30	Date/Time:	Date/Time:

20730826 CofC AR Form 01.12.2007

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

Brown, Shali

From: Martz, Ian [Ian.Martz@arcadis-us.com]
Sent: Thursday, August 21, 2014 10:41 AM
To: Brown, Shali
Subject: RE: Sample Login Confirmation for 490-59409, FORD Tibbetts Road Site E101274
Attachments: Std_Tal_Login_Ack for 490-59409-1.pdf

Hi Shali, just noticed on this sample login that 1W-100 and 1W-103 should actually be named IW-100 and IW-103. Can you make this change please? Thanks!

From: Brown, Shali [mailto:shali.brown@testamericainc.com]
Sent: Thursday, August 14, 2014 5:41 PM
To: Castelluccio, Chuck; Martz, Ian
Subject: Sample Login Confirmation for 490-59409, FORD Tibbetts Road Site E101274

Good Afternoon,

Let me know what project # to use for these samples. COC has MA0007252014.

Thanks,
Shali

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

SHALI BROWN
Project Manager II

TestAmerica Nashville
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 615.301.5031

Reference: [163369]
Attachments: 2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-59409-1

Login Number: 59409

List Source: TestAmerica Nashville

List Number: 1

Creator: Huskey, Adam

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-59616-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
8/26/2014 4:52:00 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-59616-1	IW-100	Water	08/15/14 10:30	08/16/14 08:45
490-59616-2	IW-103	Water	08/15/14 10:25	08/16/14 08:45
490-59616-3	GAC Outlet 2-3	Water	08/15/14 10:20	08/16/14 08:45
490-59616-4	Effluent	Water	08/15/14 10:15	08/16/14 08:45
490-59616-5	Trip Blank	Water	08/15/14 00:01	08/16/14 08:45

Job ID: 490-59616-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-59616-1

Comments
No additional comments.

Receipt
The samples were received on 8/16/2014 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 3.2º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Client Sample ID: IW-100

Date Collected: 08/15/14 10:30
Date Received: 08/16/14 08:45

Lab Sample ID: 490-59616-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/19/14 20:01	1
Benzene	**21.3**		0.500	0.200	ug/L			08/19/14 20:01	1
Bromoform	ND		0.500	0.290	ug/L			08/19/14 20:01	1
Bromomethane	ND		0.500	0.350	ug/L			08/19/14 20:01	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/19/14 20:01	1
Carbon disulfide	**0.660**		0.500	0.220	ug/L			08/19/14 20:01	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/19/14 20:01	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/19/14 20:01	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/19/14 20:01	1
Chloroethane	ND		0.500	0.360	ug/L			08/19/14 20:01	1
Chloroform	ND		0.500	0.230	ug/L			08/19/14 20:01	1
Chloromethane	ND		0.500	0.360	ug/L			08/19/14 20:01	1
cis-1,2-Dichloroethene	**22.6**		0.500	0.210	ug/L			08/19/14 20:01	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 20:01	1
Dibromomethane	ND		0.500	0.450	ug/L			08/19/14 20:01	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/19/14 20:01	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/19/14 20:01	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/19/14 20:01	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/19/14 20:01	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/19/14 20:01	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/19/14 20:01	1
Ethylbenzene	**3.83**		0.500	0.190	ug/L			08/19/14 20:01	1
2-Hexanone	ND		5.00	1.28	ug/L			08/19/14 20:01	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/19/14 20:01	1
4-Methyl-2-pentanone (MIBK)	**15.3**		5.00	0.810	ug/L			08/19/14 20:01	1
m-Xylene & p-Xylene	**4.75**		0.500	0.380	ug/L			08/19/14 20:01	1
o-Xylene	**2.06**		0.500	0.200	ug/L			08/19/14 20:01	1
Styrene	ND		0.500	0.280	ug/L			08/19/14 20:01	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/19/14 20:01	1
Tetrachloroethene	**0.180**	**J**	0.500	0.140	ug/L			08/19/14 20:01	1
Toluene	**0.611**		0.500	0.170	ug/L			08/19/14 20:01	1
trans-1,2-Dichloroethene	**1.92**		0.500	0.230	ug/L			08/19/14 20:01	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 20:01	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/19/14 20:01	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 20:01	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 20:01	1
Trichloroethene	**2.42**		0.500	0.200	ug/L			08/19/14 20:01	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/19/14 20:01	1
Xylenes, Total	**6.81**		1.50	0.580	ug/L			08/19/14 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*08/19/14 20:01*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/19/14 20:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/19/14 20:01*	*1*
Toluene-d8 (Surr)	*92*		*70 - 130*		*08/19/14 20:01*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Client Sample ID: IW-103

Date Collected: 08/15/14 10:25
Date Received: 08/16/14 08:45

Lab Sample ID: 490-59616-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/19/14 20:28	1
Benzene	**35.3**		0.500	0.200	ug/L			08/19/14 20:28	1
Bromoform	ND		0.500	0.290	ug/L			08/19/14 20:28	1
Bromomethane	ND		0.500	0.350	ug/L			08/19/14 20:28	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/19/14 20:28	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/19/14 20:28	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/19/14 20:28	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/19/14 20:28	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/19/14 20:28	1
Chloroethane	ND		0.500	0.360	ug/L			08/19/14 20:28	1
Chloroform	ND		0.500	0.230	ug/L			08/19/14 20:28	1
Chloromethane	ND		0.500	0.360	ug/L			08/19/14 20:28	1
cis-1,2-Dichloroethene	**31.8**		0.500	0.210	ug/L			08/19/14 20:28	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 20:28	1
Dibromomethane	ND		0.500	0.450	ug/L			08/19/14 20:28	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/19/14 20:28	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/19/14 20:28	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/19/14 20:28	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/19/14 20:28	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/19/14 20:28	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/19/14 20:28	1
Ethylbenzene	**13.5**		0.500	0.190	ug/L			08/19/14 20:28	1
2-Hexanone	ND		5.00	1.28	ug/L			08/19/14 20:28	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/19/14 20:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/19/14 20:28	1
m-Xylene & p-Xylene	**11.5**		0.500	0.380	ug/L			08/19/14 20:28	1
o-Xylene	ND		0.500	0.200	ug/L			08/19/14 20:28	1
Styrene	ND		0.500	0.280	ug/L			08/19/14 20:28	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/19/14 20:28	1
Tetrachloroethene	**0.151**	**J**	0.500	0.140	ug/L			08/19/14 20:28	1
Toluene	ND		0.500	0.170	ug/L			08/19/14 20:28	1
trans-1,2-Dichloroethene	**0.276**	**J**	0.500	0.230	ug/L			08/19/14 20:28	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 20:28	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/19/14 20:28	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 20:28	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 20:28	1
Trichloroethene	**0.708**		0.500	0.200	ug/L			08/19/14 20:28	1
Vinyl chloride	**0.181**	**J**	0.500	0.180	ug/L			08/19/14 20:28	1
Xylenes, Total	**11.7**		1.50	0.580	ug/L			08/19/14 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*08/19/14 20:28*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/19/14 20:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/19/14 20:28*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/19/14 20:28*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Client Sample ID: GAC Outlet 2-3

Lab Sample ID: 490-59616-3

Date Collected: 08/15/14 10:20
Date Received: 08/16/14 08:45

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/19/14 20:55	1
Benzene	ND		0.500	0.200	ug/L			08/19/14 20:55	1
Bromoform	ND		0.500	0.290	ug/L			08/19/14 20:55	1
Bromomethane	ND		0.500	0.350	ug/L			08/19/14 20:55	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/19/14 20:55	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/19/14 20:55	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/19/14 20:55	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/19/14 20:55	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/19/14 20:55	1
Chloroethane	ND		0.500	0.360	ug/L			08/19/14 20:55	1
Chloroform	ND		0.500	0.230	ug/L			08/19/14 20:55	1
Chloromethane	ND		0.500	0.360	ug/L			08/19/14 20:55	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 20:55	1
Dibromomethane	ND		0.500	0.450	ug/L			08/19/14 20:55	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/19/14 20:55	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/19/14 20:55	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/19/14 20:55	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/19/14 20:55	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/19/14 20:55	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/19/14 20:55	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/19/14 20:55	1
2-Hexanone	ND		5.00	1.28	ug/L			08/19/14 20:55	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/19/14 20:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/19/14 20:55	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/19/14 20:55	1
o-Xylene	ND		0.500	0.200	ug/L			08/19/14 20:55	1
Styrene	ND		0.500	0.280	ug/L			08/19/14 20:55	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/19/14 20:55	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/19/14 20:55	1
Toluene	ND		0.500	0.170	ug/L			08/19/14 20:55	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/19/14 20:55	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 20:55	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/19/14 20:55	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 20:55	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 20:55	1
Trichloroethene	ND		0.500	0.200	ug/L			08/19/14 20:55	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/19/14 20:55	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/19/14 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/19/14 20:55*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/19/14 20:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/19/14 20:55*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*08/19/14 20:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/20/14 17:07	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Client Sample ID: GAC Outlet 2-3

Lab Sample ID: 490-59616-3

Date Collected: 08/15/14 10:20

Matrix: Water

Date Received: 08/16/14 08:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130		08/20/14 17:07	1
Dibromofluoromethane (Surr)	104		70 - 130		08/20/14 17:07	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		08/20/14 17:07	1
Toluene-d8 (Surr)	96		70 - 130		08/20/14 17:07	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Client Sample ID: Effluent

Lab Sample ID: 490-59616-4

Date Collected: 08/15/14 10:15
Date Received: 08/16/14 08:45

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/19/14 21:22	1
Benzene	ND		0.500	0.200	ug/L			08/19/14 21:22	1
Bromoform	ND		0.500	0.290	ug/L			08/19/14 21:22	1
Bromomethane	ND		0.500	0.350	ug/L			08/19/14 21:22	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/19/14 21:22	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/19/14 21:22	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/19/14 21:22	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/19/14 21:22	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/19/14 21:22	1
Chloroethane	ND		0.500	0.360	ug/L			08/19/14 21:22	1
Chloroform	ND		0.500	0.230	ug/L			08/19/14 21:22	1
Chloromethane	ND		0.500	0.360	ug/L			08/19/14 21:22	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 21:22	1
Dibromomethane	ND		0.500	0.450	ug/L			08/19/14 21:22	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/19/14 21:22	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/19/14 21:22	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/19/14 21:22	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/19/14 21:22	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/19/14 21:22	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/19/14 21:22	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/19/14 21:22	1
2-Hexanone	ND		5.00	1.28	ug/L			08/19/14 21:22	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/19/14 21:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/19/14 21:22	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/19/14 21:22	1
o-Xylene	ND		0.500	0.200	ug/L			08/19/14 21:22	1
Styrene	ND		0.500	0.280	ug/L			08/19/14 21:22	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/19/14 21:22	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/19/14 21:22	1
Toluene	ND		0.500	0.170	ug/L			08/19/14 21:22	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/19/14 21:22	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 21:22	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/19/14 21:22	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 21:22	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 21:22	1
Trichloroethene	ND		0.500	0.200	ug/L			08/19/14 21:22	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/19/14 21:22	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/19/14 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/19/14 21:22*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*08/19/14 21:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*08/19/14 21:22*	*1*
Toluene-d8 (Surr)	*96*		*70 - 130*		*08/19/14 21:22*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/20/14 17:34	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Client Sample ID: Effluent

Lab Sample ID: 490-59616-4

Date Collected: 08/15/14 10:15

Matrix: Water

Date Received: 08/16/14 08:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130		08/20/14 17:34	1
Dibromofluoromethane (Surr)	104		70 - 130		08/20/14 17:34	1
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		08/20/14 17:34	1
Toluene-d8 (Surr)	99		70 - 130		08/20/14 17:34	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-59616-5

Date Collected: 08/15/14 00:01
Date Received: 08/16/14 08:45

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/19/14 18:39	1
Benzene	ND		0.500	0.200	ug/L			08/19/14 18:39	1
Bromoform	ND		0.500	0.290	ug/L			08/19/14 18:39	1
Bromomethane	ND		0.500	0.350	ug/L			08/19/14 18:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/19/14 18:39	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/19/14 18:39	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/19/14 18:39	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/19/14 18:39	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/19/14 18:39	1
Chloroethane	ND		0.500	0.360	ug/L			08/19/14 18:39	1
Chloroform	**0.238**	**J**	0.500	0.230	ug/L			08/19/14 18:39	1
Chloromethane	ND		0.500	0.360	ug/L			08/19/14 18:39	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 18:39	1
Dibromomethane	ND		0.500	0.450	ug/L			08/19/14 18:39	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/19/14 18:39	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/19/14 18:39	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/19/14 18:39	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/19/14 18:39	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/19/14 18:39	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/19/14 18:39	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/19/14 18:39	1
2-Hexanone	ND		5.00	1.28	ug/L			08/19/14 18:39	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/19/14 18:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/19/14 18:39	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/19/14 18:39	1
o-Xylene	ND		0.500	0.200	ug/L			08/19/14 18:39	1
Styrene	ND		0.500	0.280	ug/L			08/19/14 18:39	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/19/14 18:39	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/19/14 18:39	1
Toluene	ND		0.500	0.170	ug/L			08/19/14 18:39	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/19/14 18:39	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 18:39	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/19/14 18:39	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 18:39	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 18:39	1
Trichloroethene	ND		0.500	0.200	ug/L			08/19/14 18:39	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/19/14 18:39	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/19/14 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*08/19/14 18:39*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/19/14 18:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 130*		*08/19/14 18:39*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*08/19/14 18:39*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/20/14 16:40	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-59616-5

Date Collected: 08/15/14 00:01

Matrix: Water

Date Received: 08/16/14 08:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130		08/20/14 16:40	1
Dibromofluoromethane (Surr)	104		70 - 130		08/20/14 16:40	1
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		08/20/14 16:40	1
Toluene-d8 (Surr)	100		70 - 130		08/20/14 16:40	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-184780/7
Matrix: Water
Analysis Batch: 184780

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/19/14 14:59	1
Benzene	ND		0.500	0.200	ug/L			08/19/14 14:59	1
Bromoform	ND		0.500	0.290	ug/L			08/19/14 14:59	1
Bromomethane	ND		0.500	0.350	ug/L			08/19/14 14:59	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/19/14 14:59	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/19/14 14:59	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/19/14 14:59	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/19/14 14:59	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/19/14 14:59	1
Chloroethane	ND		0.500	0.360	ug/L			08/19/14 14:59	1
Chloroform	ND		0.500	0.230	ug/L			08/19/14 14:59	1
Chloromethane	ND		0.500	0.360	ug/L			08/19/14 14:59	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/19/14 14:59	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 14:59	1
Dibromomethane	ND		0.500	0.450	ug/L			08/19/14 14:59	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/19/14 14:59	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/19/14 14:59	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/19/14 14:59	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/19/14 14:59	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/19/14 14:59	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/19/14 14:59	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/19/14 14:59	1
2-Hexanone	ND		5.00	1.28	ug/L			08/19/14 14:59	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/19/14 14:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/19/14 14:59	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/19/14 14:59	1
o-Xylene	ND		0.500	0.200	ug/L			08/19/14 14:59	1
Styrene	ND		0.500	0.280	ug/L			08/19/14 14:59	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/19/14 14:59	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/19/14 14:59	1
Toluene	ND		0.500	0.170	ug/L			08/19/14 14:59	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/19/14 14:59	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/19/14 14:59	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/19/14 14:59	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 14:59	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/19/14 14:59	1
Trichloroethene	ND		0.500	0.200	ug/L			08/19/14 14:59	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/19/14 14:59	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/19/14 14:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*08/19/14 14:59*	*1*
Dibromofluoromethane (Surr)	*107*		*70 - 130*		*08/19/14 14:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*08/19/14 14:59*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*08/19/14 14:59*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-184780/3
Matrix: Water
Analysis Batch: 184780

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	239.1		ug/L		96	54 - 145
Benzene	50.0	46.55		ug/L		93	80 - 121
Bromoform	50.0	58.71		ug/L		117	46 - 145
Bromomethane	50.0	35.19		ug/L		70	41 - 150
2-Butanone (MEK)	250	269.6		ug/L		108	62 - 133
Carbon disulfide	50.0	49.49		ug/L		99	77 - 126
Carbon tetrachloride	50.0	55.57		ug/L		111	64 - 147
Chlorobenzene	50.0	49.88		ug/L		100	80 - 120
Chlorodibromomethane	50.0	57.47		ug/L		115	69 - 133
Chloroethane	50.0	48.03		ug/L		96	72 - 120
Chloroform	50.0	47.56		ug/L		95	73 - 129
Chloromethane	50.0	51.02		ug/L		102	12 - 150
cis-1,2-Dichloroethene	50.0	47.34		ug/L		95	76 - 125
cis-1,3-Dichloropropene	50.0	45.25		ug/L		91	74 - 140
Dibromomethane	50.0	50.00		ug/L		100	71 - 125
Dichlorobromomethane	50.0	51.36		ug/L		103	75 - 129
1,1-Dichloroethane	50.0	46.84		ug/L		94	78 - 125
1,2-Dichloroethane	50.0	48.17		ug/L		96	77 - 121
1,1-Dichloroethene	50.0	52.57		ug/L		105	79 - 124
1,2-Dichloropropane	50.0	45.74		ug/L		91	75 - 120
1,1-Dichloropropene	50.0	48.52		ug/L		97	80 - 122
Ethylbenzene	50.0	52.27		ug/L		105	80 - 130
2-Hexanone	250	290.0		ug/L		116	60 - 142
Methylene Chloride	50.0	51.51		ug/L		103	79 - 123
4-Methyl-2-pentanone (MIBK)	250	222.0		ug/L		89	60 - 137
m-Xylene & p-Xylene	50.0	51.64		ug/L		103	80 - 141
o-Xylene	50.0	51.60		ug/L		103	80 - 127
Styrene	50.0	49.02		ug/L		98	80 - 127
1,1,1,2-Tetrachloroethane	50.0	54.06		ug/L		108	74 - 135
Tetrachloroethene	50.0	49.41		ug/L		99	80 - 126
Toluene	50.0	44.29		ug/L		89	80 - 126
trans-1,2-Dichloroethene	50.0	47.57		ug/L		95	79 - 126
trans-1,3-Dichloropropene	50.0	47.34		ug/L		95	63 - 134
1,3,5-Trichlorobenzene	50.0	51.72		ug/L		103	70 - 130
1,1,1-Trichloroethane	50.0	51.46		ug/L		103	78 - 135
1,1,2-Trichloroethane	50.0	43.62		ug/L		87	80 - 124
Trichloroethene	50.0	52.47		ug/L		105	80 - 123
Vinyl chloride	50.0	56.09		ug/L		112	68 - 120
Xylenes, Total	100	103.2		ug/L		103	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-59619-B-4 MS
Matrix: Water
Analysis Batch: 184780

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	57.9		250	292.9		ug/L		94	45 - 141
Benzene	ND		50.0	46.29		ug/L		93	75 - 133
Bromoform	ND		50.0	62.35		ug/L		125	42 - 147
Bromomethane	ND		50.0	13.20		ug/L		26	16 - 163
2-Butanone (MEK)	37.5	J	250	315.2		ug/L		111	50 - 138
Carbon disulfide	ND		50.0	33.62		ug/L		67	48 - 152
Carbon tetrachloride	ND		50.0	56.71		ug/L		113	62 - 164
Chlorobenzene	ND		50.0	51.29		ug/L		103	80 - 129
Chlorodibromomethane	ND		50.0	59.09		ug/L		118	66 - 140
Chloroethane	3.46		50.0	47.16		ug/L		87	58 - 137
Chloroform	ND		50.0	50.13		ug/L		100	66 - 138
Chloromethane	ND		50.0	39.92		ug/L		80	10 - 169
cis-1,2-Dichloroethene	12.6		50.0	59.47		ug/L		94	68 - 138
cis-1,3-Dichloropropene	ND		50.0	42.88		ug/L		86	71 - 141
Dibromomethane	ND		50.0	49.55		ug/L		99	58 - 140
Dichlorobromomethane	ND		50.0	52.55		ug/L		105	70 - 140
1,1-Dichloroethane	2.70		50.0	51.05		ug/L		97	71 - 139
1,2-Dichloroethane	ND		50.0	48.36		ug/L		97	64 - 136
1,1-Dichloroethene	ND		50.0	49.05		ug/L		98	70 - 142
1,2-Dichloropropane	ND		50.0	45.85		ug/L		92	67 - 131
1,1-Dichloropropene	ND		50.0	47.16		ug/L		94	76 - 139
Ethylbenzene	ND		50.0	53.88		ug/L		108	79 - 139
2-Hexanone	ND		250	321.6		ug/L		129	50 - 150
Methylene Chloride	ND		50.0	50.71		ug/L		101	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	228.3		ug/L		91	50 - 147
m-Xylene & p-Xylene	ND		50.0	53.51		ug/L		107	80 - 153
o-Xylene	ND		50.0	54.02		ug/L		108	74 - 138
Styrene	ND		50.0	52.19		ug/L		104	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	57.74		ug/L		115	73 - 141
Tetrachloroethene	ND		50.0	46.51		ug/L		93	72 - 145
Toluene	5.19		50.0	44.70		ug/L		79	75 - 136
trans-1,2-Dichloroethene	0.353	J	50.0	44.64		ug/L		89	66 - 143
trans-1,3-Dichloropropene	ND		50.0	44.23		ug/L		88	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	53.42		ug/L		107	60 - 140
1,1,1-Trichloroethane	ND		50.0	53.82		ug/L		108	76 - 149
1,1,2-Trichloroethane	ND		50.0	42.01		ug/L		84	74 - 134
Trichloroethene	ND		50.0	50.87		ug/L		102	73 - 144
Vinyl chloride	4.50		50.0	53.41		ug/L		98	56 - 129
Xylenes, Total	ND		100	107.5		ug/L		108	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*107*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*85*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-59619-C-4 MSD
Matrix: Water
Analysis Batch: 184780

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	57.9		250	306.7		ug/L		100	45 - 141	5	21
Benzene	ND		50.0	46.00		ug/L		92	75 - 133	1	17
Bromoform	ND		50.0	62.94		ug/L		126	42 - 147	1	16
Bromomethane	ND		50.0	18.70		ug/L		37	16 - 163	34	50
2-Butanone (MEK)	37.5	J	250	305.0		ug/L		107	50 - 138	3	19
Carbon disulfide	ND		50.0	34.06		ug/L		68	48 - 152	1	21
Carbon tetrachloride	ND		50.0	57.27		ug/L		115	62 - 164	1	19
Chlorobenzene	ND		50.0	51.62		ug/L		103	80 - 129	1	14
Chlorodibromomethane	ND		50.0	58.85		ug/L		118	66 - 140	0	15
Chloroethane	3.46		50.0	47.61		ug/L		88	58 - 137	1	20
Chloroform	ND		50.0	49.65		ug/L		99	66 - 138	1	18
Chloromethane	ND		50.0	40.83		ug/L		82	10 - 169	2	31
cis-1,2-Dichloroethene	12.6		50.0	59.19		ug/L		93	68 - 138	0	17
cis-1,3-Dichloropropene	ND		50.0	44.61		ug/L		89	71 - 141	4	15
Dibromomethane	ND		50.0	49.95		ug/L		100	58 - 140	1	16
Dichlorobromomethane	ND		50.0	54.87		ug/L		110	70 - 140	4	18
1,1-Dichloroethane	2.70		50.0	50.53		ug/L		96	71 - 139	1	17
1,2-Dichloroethane	ND		50.0	48.68		ug/L		97	64 - 136	1	17
1,1-Dichloroethene	ND		50.0	48.42		ug/L		97	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	46.90		ug/L		94	67 - 131	2	17
1,1-Dichloropropene	ND		50.0	46.97		ug/L		94	76 - 139	0	17
Ethylbenzene	ND		50.0	54.16		ug/L		108	79 - 139	1	15
2-Hexanone	ND		250	326.2		ug/L		130	50 - 150	1	15
Methylene Chloride	ND		50.0	50.79		ug/L		102	64 - 139	0	17
4-Methyl-2-pentanone (MIBK)	ND		250	229.8		ug/L		92	50 - 147	1	17
m-Xylene & p-Xylene	ND		50.0	54.26		ug/L		109	80 - 153	1	16
o-Xylene	ND		50.0	53.28		ug/L		107	74 - 138	1	14
Styrene	ND		50.0	51.42		ug/L		103	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	56.42		ug/L		113	73 - 141	2	16
Tetrachloroethene	ND		50.0	47.81		ug/L		96	72 - 145	3	16
Toluene	5.19		50.0	45.80		ug/L		81	75 - 136	2	15
trans-1,2-Dichloroethene	0.353	J	50.0	44.94		ug/L		89	66 - 143	1	16
trans-1,3-Dichloropropene	ND		50.0	45.83		ug/L		92	59 - 135	4	14
1,3,5-Trichlorobenzene	ND		50.0	56.16		ug/L		112	60 - 140	5	30
1,1,1-Trichloroethane	ND		50.0	53.70		ug/L		107	76 - 149	0	17
1,1,2-Trichloroethane	ND		50.0	43.10		ug/L		86	74 - 134	3	15
Trichloroethene	ND		50.0	51.38		ug/L		103	73 - 144	1	17
Vinyl chloride	4.50		50.0	53.91		ug/L		99	56 - 129	1	17
Xylenes, Total	ND		100	107.5		ug/L		108	74 - 141	0	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*87*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-185071/7
Matrix: Water
Analysis Batch: 185071

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/20/14 12:30	1
Benzene	ND		0.500	0.200	ug/L			08/20/14 12:30	1
Bromoform	ND		0.500	0.290	ug/L			08/20/14 12:30	1
Bromomethane	ND		0.500	0.350	ug/L			08/20/14 12:30	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/20/14 12:30	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/20/14 12:30	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/20/14 12:30	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/20/14 12:30	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/20/14 12:30	1
Chloroethane	ND		0.500	0.360	ug/L			08/20/14 12:30	1
Chloroform	ND		0.500	0.230	ug/L			08/20/14 12:30	1
Chloromethane	ND		0.500	0.360	ug/L			08/20/14 12:30	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/20/14 12:30	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/20/14 12:30	1
Dibromomethane	ND		0.500	0.450	ug/L			08/20/14 12:30	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/20/14 12:30	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/20/14 12:30	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/20/14 12:30	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/20/14 12:30	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/20/14 12:30	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/20/14 12:30	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/20/14 12:30	1
2-Hexanone	ND		5.00	1.28	ug/L			08/20/14 12:30	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/20/14 12:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/20/14 12:30	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/20/14 12:30	1
o-Xylene	ND		0.500	0.200	ug/L			08/20/14 12:30	1
Styrene	ND		0.500	0.280	ug/L			08/20/14 12:30	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/20/14 12:30	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/20/14 12:30	1
Toluene	ND		0.500	0.170	ug/L			08/20/14 12:30	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/20/14 12:30	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/20/14 12:30	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/20/14 12:30	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/20/14 12:30	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/20/14 12:30	1
Trichloroethene	ND		0.500	0.200	ug/L			08/20/14 12:30	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/20/14 12:30	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/20/14 12:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/20/14 12:30*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*08/20/14 12:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*08/20/14 12:30*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*08/20/14 12:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-185071/3
Matrix: Water
Analysis Batch: 185071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	240.3		ug/L		96	54 - 145
Benzene	50.0	47.00		ug/L		94	80 - 121
Bromoform	50.0	60.99		ug/L		122	46 - 145
Bromomethane	50.0	33.62		ug/L		67	41 - 150
2-Butanone (MEK)	250	281.9		ug/L		113	62 - 133
Carbon disulfide	50.0	46.99		ug/L		94	77 - 126
Carbon tetrachloride	50.0	53.04		ug/L		106	64 - 147
Chlorobenzene	50.0	49.97		ug/L		100	80 - 120
Chlorodibromomethane	50.0	58.38		ug/L		117	69 - 133
Chloroethane	50.0	48.78		ug/L		98	72 - 120
Chloroform	50.0	47.82		ug/L		96	73 - 129
Chloromethane	50.0	46.81		ug/L		94	12 - 150
cis-1,2-Dichloroethene	50.0	48.62		ug/L		97	76 - 125
cis-1,3-Dichloropropene	50.0	44.05		ug/L		88	74 - 140
Dibromomethane	50.0	51.84		ug/L		104	71 - 125
Dichlorobromomethane	50.0	51.84		ug/L		104	75 - 129
1,1-Dichloroethane	50.0	47.47		ug/L		95	78 - 125
1,2-Dichloroethane	50.0	48.51		ug/L		97	77 - 121
1,1-Dichloroethene	50.0	51.38		ug/L		103	79 - 124
1,2-Dichloropropane	50.0	47.01		ug/L		94	75 - 120
1,1-Dichloropropene	50.0	46.93		ug/L		94	80 - 122
Ethylbenzene	50.0	49.78		ug/L		100	80 - 130
2-Hexanone	250	288.7		ug/L		115	60 - 142
Methylene Chloride	50.0	53.35		ug/L		107	79 - 123
4-Methyl-2-pentanone (MIBK)	250	219.4		ug/L		88	60 - 137
m-Xylene & p-Xylene	50.0	49.64		ug/L		99	80 - 141
o-Xylene	50.0	50.12		ug/L		100	80 - 127
Styrene	50.0	48.63		ug/L		97	80 - 127
1,1,1,2-Tetrachloroethane	50.0	53.49		ug/L		107	74 - 135
Tetrachloroethene	50.0	48.66		ug/L		97	80 - 126
Toluene	50.0	41.74		ug/L		83	80 - 126
trans-1,2-Dichloroethene	50.0	47.47		ug/L		95	79 - 126
trans-1,3-Dichloropropene	50.0	45.63		ug/L		91	63 - 134
1,3,5-Trichlorobenzene	50.0	51.74		ug/L		103	70 - 130
1,1,1-Trichloroethane	50.0	50.83		ug/L		102	78 - 135
1,1,2-Trichloroethane	50.0	44.18		ug/L		88	80 - 124
Trichloroethene	50.0	52.85		ug/L		106	80 - 123
Vinyl chloride	50.0	55.12		ug/L		110	68 - 120
Xylenes, Total	100	99.76		ug/L		100	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*105*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*89*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-185071/4
Matrix: Water
Analysis Batch: 185071

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
Acetone	250	240.9		ug/L		96	54 - 145	0	21
Benzene	50.0	45.54		ug/L		91	80 - 121	3	17
Bromoform	50.0	59.13		ug/L		118	46 - 145	3	16
Bromomethane	50.0	33.40		ug/L		67	41 - 150	1	50
2-Butanone (MEK)	250	276.1		ug/L		110	62 - 133	2	19
Carbon disulfide	50.0	47.65		ug/L		95	77 - 126	1	21
Carbon tetrachloride	50.0	51.13		ug/L		102	64 - 147	4	19
Chlorobenzene	50.0	48.27		ug/L		97	80 - 120	3	14
Chlorodibromomethane	50.0	57.14		ug/L		114	69 - 133	2	15
Chloroethane	50.0	46.40		ug/L		93	72 - 120	5	20
Chloroform	50.0	46.00		ug/L		92	73 - 129	4	18
Chloromethane	50.0	46.35		ug/L		93	12 - 150	1	31
cis-1,2-Dichloroethene	50.0	45.12		ug/L		90	76 - 125	7	17
cis-1,3-Dichloropropene	50.0	43.93		ug/L		88	74 - 140	0	15
Dibromomethane	50.0	50.23		ug/L		100	71 - 125	3	16
Dichlorobromomethane	50.0	50.11		ug/L		100	75 - 129	3	18
1,1-Dichloroethane	50.0	45.07		ug/L		90	78 - 125	5	17
1,2-Dichloroethane	50.0	46.81		ug/L		94	77 - 121	4	17
1,1-Dichloroethene	50.0	50.26		ug/L		101	79 - 124	2	17
1,2-Dichloropropane	50.0	45.27		ug/L		91	75 - 120	4	17
1,1-Dichloropropene	50.0	45.59		ug/L		91	80 - 122	3	17
Ethylbenzene	50.0	49.55		ug/L		99	80 - 130	0	15
2-Hexanone	250	294.7		ug/L		118	60 - 142	2	15
Methylene Chloride	50.0	51.27		ug/L		103	79 - 123	4	17
4-Methyl-2-pentanone (MIBK)	250	226.0		ug/L		90	60 - 137	3	17
m-Xylene & p-Xylene	50.0	49.97		ug/L		100	80 - 141	1	16
o-Xylene	50.0	50.21		ug/L		100	80 - 127	0	14
Styrene	50.0	48.65		ug/L		97	80 - 127	0	24
1,1,1,2-Tetrachloroethane	50.0	52.54		ug/L		105	74 - 135	2	16
Tetrachloroethene	50.0	46.77		ug/L		94	80 - 126	4	16
Toluene	50.0	40.91		ug/L		82	80 - 126	2	15
trans-1,2-Dichloroethene	50.0	45.15		ug/L		90	79 - 126	5	16
trans-1,3-Dichloropropene	50.0	45.49		ug/L		91	63 - 134	0	14
1,3,5-Trichlorobenzene	50.0	52.25		ug/L		105	70 - 130	1	30
1,1,1-Trichloroethane	50.0	47.85		ug/L		96	78 - 135	6	17
1,1,2-Trichloroethane	50.0	43.26		ug/L		87	80 - 124	2	15
Trichloroethene	50.0	51.18		ug/L		102	80 - 123	3	17
Vinyl chloride	50.0	52.68		ug/L		105	68 - 120	5	17
Xylenes, Total	100	100.2		ug/L		100	80 - 132	0	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*90*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-59727-B-2 MS
Matrix: Water
Analysis Batch: 185071

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	3.54	J	250	234.0		ug/L		92	45 - 141
Benzene	ND		50.0	53.38		ug/L		107	75 - 133
Bromoform	ND		50.0	59.76		ug/L		120	42 - 147
Bromomethane	ND		50.0	30.89		ug/L		62	16 - 163
2-Butanone (MEK)	ND		250	250.2		ug/L		100	50 - 138
Carbon disulfide	ND		50.0	56.45		ug/L		113	48 - 152
Carbon tetrachloride	ND		50.0	62.21		ug/L		124	62 - 164
Chlorobenzene	ND		50.0	54.94		ug/L		110	80 - 129
Chlorodibromomethane	ND		50.0	57.85		ug/L		116	66 - 140
Chloroethane	ND		50.0	52.23		ug/L		104	58 - 137
Chloroform	0.241	J	50.0	51.96		ug/L		103	66 - 138
Chloromethane	ND		50.0	50.13		ug/L		100	10 - 169
cis-1,2-Dichloroethene	ND		50.0	52.98		ug/L		106	68 - 138
cis-1,3-Dichloropropene	ND		50.0	46.41		ug/L		93	71 - 141
Dibromomethane	ND		50.0	52.66		ug/L		105	58 - 140
Dichlorobromomethane	ND		50.0	54.78		ug/L		110	70 - 140
1,1-Dichloroethane	ND		50.0	53.28		ug/L		107	71 - 139
1,2-Dichloroethane	ND		50.0	50.24		ug/L		100	64 - 136
1,1-Dichloroethene	ND		50.0	59.45		ug/L		119	70 - 142
1,2-Dichloropropane	ND		50.0	50.65		ug/L		101	67 - 131
1,1-Dichloropropene	ND		50.0	54.35		ug/L		109	76 - 139
Ethylbenzene	ND		50.0	55.56		ug/L		111	79 - 139
2-Hexanone	ND		250	261.3		ug/L		105	50 - 150
Methylene Chloride	ND		50.0	56.14		ug/L		112	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	209.3		ug/L		84	50 - 147
m-Xylene & p-Xylene	ND		50.0	55.24		ug/L		110	80 - 153
o-Xylene	ND		50.0	54.54		ug/L		109	74 - 138
Styrene	ND		50.0	52.16		ug/L		104	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	56.92		ug/L		114	73 - 141
Tetrachloroethene	ND		50.0	54.19		ug/L		108	72 - 145
Toluene	ND		50.0	45.79		ug/L		92	75 - 136
trans-1,2-Dichloroethene	ND		50.0	52.06		ug/L		104	66 - 143
trans-1,3-Dichloropropene	ND		50.0	45.79		ug/L		92	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	57.41		ug/L		115	60 - 140
1,1,1-Trichloroethane	ND		50.0	57.20		ug/L		114	76 - 149
1,1,2-Trichloroethane	ND		50.0	43.04		ug/L		86	74 - 134
Trichloroethene	ND		50.0	58.98		ug/L		118	73 - 144
Vinyl chloride	ND		50.0	59.69		ug/L		119	56 - 129
Xylenes, Total	ND		100	109.8		ug/L		110	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*102*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*88*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-59727-C-2 MSD
Matrix: Water
Analysis Batch: 185071

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	3.54	J	250	255.4		ug/L		101	45 - 141	9	21
Benzene	ND		50.0	52.99		ug/L		106	75 - 133	1	17
Bromoform	ND		50.0	65.04		ug/L		130	42 - 147	8	16
Bromomethane	ND		50.0	34.34		ug/L		69	16 - 163	11	50
2-Butanone (MEK)	ND		250	276.1		ug/L		110	50 - 138	10	19
Carbon disulfide	ND		50.0	55.51		ug/L		111	48 - 152	2	21
Carbon tetrachloride	ND		50.0	63.52		ug/L		127	62 - 164	2	19
Chlorobenzene	ND		50.0	55.85		ug/L		112	80 - 129	2	14
Chlorodibromomethane	ND		50.0	60.91		ug/L		122	66 - 140	5	15
Chloroethane	ND		50.0	51.71		ug/L		103	58 - 137	1	20
Chloroform	0.241	J	50.0	54.32		ug/L		108	66 - 138	4	18
Chloromethane	ND		50.0	51.68		ug/L		103	10 - 169	3	31
cis-1,2-Dichloroethene	ND		50.0	53.13		ug/L		106	68 - 138	0	17
cis-1,3-Dichloropropene	ND		50.0	50.79		ug/L		102	71 - 141	9	15
Dibromomethane	ND		50.0	53.38		ug/L		107	58 - 140	1	16
Dichlorobromomethane	ND		50.0	56.68		ug/L		113	70 - 140	3	18
1,1-Dichloroethane	ND		50.0	52.68		ug/L		105	71 - 139	1	17
1,2-Dichloroethane	ND		50.0	51.69		ug/L		103	64 - 136	3	17
1,1-Dichloroethene	ND		50.0	58.66		ug/L		117	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	50.78		ug/L		102	67 - 131	0	17
1,1-Dichloropropene	ND		50.0	55.99		ug/L		112	76 - 139	3	17
Ethylbenzene	ND		50.0	58.64		ug/L		117	79 - 139	5	15
2-Hexanone	ND		250	295.3		ug/L		118	50 - 150	12	15
Methylene Chloride	ND		50.0	56.97		ug/L		114	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	236.0		ug/L		94	50 - 147	12	17
m-Xylene & p-Xylene	ND		50.0	58.87		ug/L		118	80 - 153	6	16
o-Xylene	ND		50.0	57.78		ug/L		116	74 - 138	6	14
Styrene	ND		50.0	55.14		ug/L		110	61 - 148	6	24
1,1,1,2-Tetrachloroethane	ND		50.0	59.11		ug/L		118	73 - 141	4	16
Tetrachloroethene	ND		50.0	54.98		ug/L		110	72 - 145	1	16
Toluene	ND		50.0	49.91		ug/L		100	75 - 136	9	15
trans-1,2-Dichloroethene	ND		50.0	52.30		ug/L		105	66 - 143	0	16
trans-1,3-Dichloropropene	ND		50.0	51.14		ug/L		102	59 - 135	11	14
1,3,5-Trichlorobenzene	ND		50.0	56.26		ug/L		113	60 - 140	2	30
1,1,1-Trichloroethane	ND		50.0	57.80		ug/L		116	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	47.55		ug/L		95	74 - 134	10	15
Trichloroethene	ND		50.0	60.83		ug/L		122	73 - 144	3	17
Vinyl chloride	ND		50.0	60.29		ug/L		121	56 - 129	1	17
Xylenes, Total	ND		100	116.6		ug/L		117	74 - 141	6	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*93*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

GC/MS VOA

Analysis Batch: 184780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-59616-1	IW-100	Total/NA	Water	8260B	
490-59616-2	IW-103	Total/NA	Water	8260B	
490-59616-3	GAC Outlet 2-3	Total/NA	Water	8260B	
490-59616-4	Effluent	Total/NA	Water	8260B	
490-59616-5	Trip Blank	Total/NA	Water	8260B	
490-59619-B-4 MS	Matrix Spike	Total/NA	Water	8260B	
490-59619-C-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-184780/3	Lab Control Sample	Total/NA	Water	8260B	
MB 490-184780/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 185071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-59616-3 - RA	GAC Outlet 2-3	Total/NA	Water	8260B	
490-59616-4 - RA	Effluent	Total/NA	Water	8260B	
490-59616-5 - RA	Trip Blank	Total/NA	Water	8260B	
490-59727-B-2 MS	Matrix Spike	Total/NA	Water	8260B	
490-59727-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-185071/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-185071/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-185071/7	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Client Sample ID: IW-100 — Lab Sample ID: 490-59616-1

Date Collected: 08/15/14 10:30 — **Matrix: Water**
Date Received: 08/16/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	184780	08/19/14 20:01	EML	TAL NSH

Client Sample ID: IW-103 — Lab Sample ID: 490-59616-2

Date Collected: 08/15/14 10:25 — **Matrix: Water**
Date Received: 08/16/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	184780	08/19/14 20:28	EML	TAL NSH

Client Sample ID: GAC Outlet 2-3 — Lab Sample ID: 490-59616-3

Date Collected: 08/15/14 10:20 — **Matrix: Water**
Date Received: 08/16/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	184780	08/19/14 20:55	EML	TAL NSH
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	185071	08/20/14 17:07	EML	TAL NSH

Client Sample ID: Effluent — Lab Sample ID: 490-59616-4

Date Collected: 08/15/14 10:15 — **Matrix: Water**
Date Received: 08/16/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	184780	08/19/14 21:22	EML	TAL NSH
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	185071	08/20/14 17:34	EML	TAL NSH

Client Sample ID: Trip Blank — Lab Sample ID: 490-59616-5

Date Collected: 08/15/14 00:01 — **Matrix: Water**
Date Received: 08/16/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	184780	08/19/14 18:39	EML	TAL NSH
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	185071	08/20/14 16:40	EML	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59616-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-59616 Chain of Custody

Cooler Received/Opened On 8/16/2014 @ 0845

1. Tracking # 9728 (last 4 digits, FedEx)

Courier: ____Fed Ex_____ IR Gun ID_____17960358_____

2. Temperature of rep. sample or temp blank when opened: 3.2 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

   b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) _____

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

   b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) _____

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) _____

I certify that I attached a label with the unique LIMS number to each container (intial) _____

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-3404

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

8/26/2014

Client Information	Sampler: DC / JB	Lab PM: Brown, Shali	Carrier Tracking No(s):	COC No: 490-24404-8963.1
Client Contact: Chuck Castelluccio	Phone: 978-937-9999	E-Mail: shali.brown@testamericainc.com		Page:
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Standard			
State, Zip: MA, 01824				
Phone:	PO #:			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: FORD Tibbetts Road Site E101274	Project #: 49002494			
Site:	SSOW#:			

Analysis Requested

Loc: 490
59616

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	524.2_Preserved_Standard_Analyte_list_(Buffalo)	200.7 - Iron/Manganese (Buffalo)	8260 NH full list VOC's	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	A		
IW-100	8/15/14	1030	G	W					3		01
IW-103	↓	1025	G	W					3		2
GAC outlet 2-3	↓	1020	G	W					3		3
Effluent	↓	1015	G	W					3		4
Trip Blank	—	—	—	W					2		5

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 8/15/14 1500	Company	Received by: [signature] TAN 3.2	Date/Time: 08/16/14 0815	Company TA Nashville
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 3.2

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-59616-1

Login Number: 59616

List Source: TestAmerica Nashville

List Number: 1

Creator: Gambill, Shane

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-59947-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
8/29/2014 7:30:12 AM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59947-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-59947-1	1W-100	Water	08/21/14 11:45	08/22/14 08:30
490-59947-2	1W-103	Water	08/21/14 11:50	08/22/14 08:30
490-59947-3	GAC Outlet 2-3	Water	08/21/14 11:55	08/22/14 08:30
490-59947-4	Effluent	Water	08/21/14 12:00	08/22/14 08:30
490-59947-5	Trip Blank	Water	08/21/14 00:01	08/22/14 08:30

Job ID: 490-59947-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-59947-1

Comments
No additional comments.

Receipt
The samples were received on 8/22/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 4.5º C.

GC/MS VOA
Method(s) 8260B: The method blank for batch 186350 contained chloroform 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 was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS 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.
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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59947-1

Client Sample ID: 1W-100

Date Collected: 08/21/14 11:45
Date Received: 08/22/14 08:30

Lab Sample ID: 490-59947-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/26/14 15:41	1
Benzene	**18.8**		0.500	0.200	ug/L			08/26/14 15:41	1
Bromoform	ND		0.500	0.290	ug/L			08/26/14 15:41	1
Bromomethane	ND		0.500	0.350	ug/L			08/26/14 15:41	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/26/14 15:41	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/26/14 15:41	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/26/14 15:41	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/26/14 15:41	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/26/14 15:41	1
Chloroethane	ND		0.500	0.360	ug/L			08/26/14 15:41	1
Chloroform	ND		0.500	0.230	ug/L			08/26/14 15:41	1
Chloromethane	ND		0.500	0.360	ug/L			08/26/14 15:41	1
cis-1,2-Dichloroethene	**17.4**		0.500	0.210	ug/L			08/26/14 15:41	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 15:41	1
Dibromomethane	ND		0.500	0.450	ug/L			08/26/14 15:41	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/26/14 15:41	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/26/14 15:41	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/26/14 15:41	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/26/14 15:41	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/26/14 15:41	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/26/14 15:41	1
Ethylbenzene	**3.78**		0.500	0.190	ug/L			08/26/14 15:41	1
2-Hexanone	ND		5.00	1.28	ug/L			08/26/14 15:41	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/26/14 15:41	1
4-Methyl-2-pentanone (MIBK)	**15.0**		5.00	0.810	ug/L			08/26/14 15:41	1
m-Xylene & p-Xylene	**3.62**		0.500	0.380	ug/L			08/26/14 15:41	1
o-Xylene	**1.84**		0.500	0.200	ug/L			08/26/14 15:41	1
Styrene	ND		0.500	0.280	ug/L			08/26/14 15:41	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/26/14 15:41	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/26/14 15:41	1
Toluene	**0.711**		0.500	0.170	ug/L			08/26/14 15:41	1
trans-1,2-Dichloroethene	**2.03**		0.500	0.230	ug/L			08/26/14 15:41	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 15:41	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/26/14 15:41	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 15:41	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 15:41	1
Trichloroethene	**2.32**		0.500	0.200	ug/L			08/26/14 15:41	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/26/14 15:41	1
Xylenes, Total	**5.46**		1.50	0.580	ug/L			08/26/14 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*08/26/14 15:41*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/26/14 15:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*08/26/14 15:41*	*1*
Toluene-d8 (Surr)	*94*		*70 - 130*		*08/26/14 15:41*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59947-1

Client Sample ID: 1W-103

Date Collected: 08/21/14 11:50
Date Received: 08/22/14 08:30

Lab Sample ID: 490-59947-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/26/14 14:47	1
Benzene	**26.7**		0.500	0.200	ug/L			08/26/14 14:47	1
Bromoform	ND		0.500	0.290	ug/L			08/26/14 14:47	1
Bromomethane	ND		0.500	0.350	ug/L			08/26/14 14:47	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/26/14 14:47	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/26/14 14:47	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/26/14 14:47	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/26/14 14:47	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/26/14 14:47	1
Chloroethane	ND		0.500	0.360	ug/L			08/26/14 14:47	1
Chloroform	ND		0.500	0.230	ug/L			08/26/14 14:47	1
Chloromethane	ND		0.500	0.360	ug/L			08/26/14 14:47	1
cis-1,2-Dichloroethene	**21.5**		0.500	0.210	ug/L			08/26/14 14:47	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 14:47	1
Dibromomethane	ND		0.500	0.450	ug/L			08/26/14 14:47	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/26/14 14:47	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/26/14 14:47	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/26/14 14:47	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/26/14 14:47	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/26/14 14:47	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/26/14 14:47	1
Ethylbenzene	**9.08**		0.500	0.190	ug/L			08/26/14 14:47	1
2-Hexanone	ND		5.00	1.28	ug/L			08/26/14 14:47	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/26/14 14:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/26/14 14:47	1
m-Xylene & p-Xylene	**7.28**		0.500	0.380	ug/L			08/26/14 14:47	1
o-Xylene	ND		0.500	0.200	ug/L			08/26/14 14:47	1
Styrene	ND		0.500	0.280	ug/L			08/26/14 14:47	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/26/14 14:47	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/26/14 14:47	1
Toluene	ND		0.500	0.170	ug/L			08/26/14 14:47	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/26/14 14:47	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 14:47	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/26/14 14:47	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 14:47	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 14:47	1
Trichloroethene	**0.521**		0.500	0.200	ug/L			08/26/14 14:47	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/26/14 14:47	1
Xylenes, Total	**7.28**		1.50	0.580	ug/L			08/26/14 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*08/26/14 14:47*	*1*
Dibromofluoromethane (Surr)	*103*		*70 - 130*		*08/26/14 14:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*08/26/14 14:47*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*08/26/14 14:47*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59947-1

Client Sample ID: GAC Outlet 2-3

Lab Sample ID: 490-59947-3

Date Collected: 08/21/14 11:55
Date Received: 08/22/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/26/14 13:25	1
Benzene	ND		0.500	0.200	ug/L			08/26/14 13:25	1
Bromoform	ND		0.500	0.290	ug/L			08/26/14 13:25	1
Bromomethane	ND		0.500	0.350	ug/L			08/26/14 13:25	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/26/14 13:25	1
Carbon disulfide	**11.6**		0.500	0.220	ug/L			08/26/14 13:25	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/26/14 13:25	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/26/14 13:25	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/26/14 13:25	1
Chloroethane	ND		0.500	0.360	ug/L			08/26/14 13:25	1
Chloroform	ND		0.500	0.230	ug/L			08/26/14 13:25	1
Chloromethane	**2.95**		0.500	0.360	ug/L			08/26/14 13:25	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/26/14 13:25	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 13:25	1
Dibromomethane	ND		0.500	0.450	ug/L			08/26/14 13:25	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/26/14 13:25	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/26/14 13:25	1
1,2-Dichloroethane	**0.684**		0.500	0.200	ug/L			08/26/14 13:25	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/26/14 13:25	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/26/14 13:25	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/26/14 13:25	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/26/14 13:25	1
2-Hexanone	ND		5.00	1.28	ug/L			08/26/14 13:25	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/26/14 13:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/26/14 13:25	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/26/14 13:25	1
o-Xylene	ND		0.500	0.200	ug/L			08/26/14 13:25	1
Styrene	ND		0.500	0.280	ug/L			08/26/14 13:25	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/26/14 13:25	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/26/14 13:25	1
Toluene	ND		0.500	0.170	ug/L			08/26/14 13:25	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/26/14 13:25	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 13:25	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/26/14 13:25	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 13:25	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 13:25	1
Trichloroethene	ND		0.500	0.200	ug/L			08/26/14 13:25	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/26/14 13:25	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/26/14 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/26/14 13:25*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/26/14 13:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*08/26/14 13:25*	*1*
Toluene-d8 (Surr)	*82*		*70 - 130*		*08/26/14 13:25*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59947-1

Client Sample ID: Effluent

Lab Sample ID: 490-59947-4

Date Collected: 08/21/14 12:00
Date Received: 08/22/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/26/14 13:52	1
Benzene	ND		0.500	0.200	ug/L			08/26/14 13:52	1
Bromoform	ND		0.500	0.290	ug/L			08/26/14 13:52	1
Bromomethane	ND		0.500	0.350	ug/L			08/26/14 13:52	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/26/14 13:52	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/26/14 13:52	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/26/14 13:52	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/26/14 13:52	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/26/14 13:52	1
Chloroethane	ND		0.500	0.360	ug/L			08/26/14 13:52	1
Chloroform	ND		0.500	0.230	ug/L			08/26/14 13:52	1
Chloromethane	ND		0.500	0.360	ug/L			08/26/14 13:52	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/26/14 13:52	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 13:52	1
Dibromomethane	ND		0.500	0.450	ug/L			08/26/14 13:52	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/26/14 13:52	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/26/14 13:52	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/26/14 13:52	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/26/14 13:52	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/26/14 13:52	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/26/14 13:52	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/26/14 13:52	1
2-Hexanone	ND		5.00	1.28	ug/L			08/26/14 13:52	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/26/14 13:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/26/14 13:52	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/26/14 13:52	1
o-Xylene	ND		0.500	0.200	ug/L			08/26/14 13:52	1
Styrene	ND		0.500	0.280	ug/L			08/26/14 13:52	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/26/14 13:52	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/26/14 13:52	1
Toluene	ND		0.500	0.170	ug/L			08/26/14 13:52	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/26/14 13:52	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 13:52	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/26/14 13:52	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 13:52	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 13:52	1
Trichloroethene	ND		0.500	0.200	ug/L			08/26/14 13:52	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/26/14 13:52	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/26/14 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*08/26/14 13:52*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*08/26/14 13:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*08/26/14 13:52*	*1*
Toluene-d8 (Surr)	*88*		*70 - 130*		*08/26/14 13:52*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59947-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-59947-5

Date Collected: 08/21/14 00:01
Date Received: 08/22/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/26/14 14:20	1
Benzene	ND		0.500	0.200	ug/L			08/26/14 14:20	1
Bromoform	ND		0.500	0.290	ug/L			08/26/14 14:20	1
Bromomethane	ND		0.500	0.350	ug/L			08/26/14 14:20	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/26/14 14:20	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/26/14 14:20	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/26/14 14:20	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/26/14 14:20	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/26/14 14:20	1
Chloroethane	ND		0.500	0.360	ug/L			08/26/14 14:20	1
Chloroform	**0.378**	**J B**	0.500	0.230	ug/L			08/26/14 14:20	1
Chloromethane	ND		0.500	0.360	ug/L			08/26/14 14:20	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/26/14 14:20	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 14:20	1
Dibromomethane	ND		0.500	0.450	ug/L			08/26/14 14:20	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/26/14 14:20	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/26/14 14:20	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/26/14 14:20	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/26/14 14:20	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/26/14 14:20	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/26/14 14:20	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/26/14 14:20	1
2-Hexanone	ND		5.00	1.28	ug/L			08/26/14 14:20	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/26/14 14:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/26/14 14:20	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/26/14 14:20	1
o-Xylene	ND		0.500	0.200	ug/L			08/26/14 14:20	1
Styrene	ND		0.500	0.280	ug/L			08/26/14 14:20	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/26/14 14:20	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/26/14 14:20	1
Toluene	ND		0.500	0.170	ug/L			08/26/14 14:20	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/26/14 14:20	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 14:20	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/26/14 14:20	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 14:20	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 14:20	1
Trichloroethene	ND		0.500	0.200	ug/L			08/26/14 14:20	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/26/14 14:20	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/26/14 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/26/14 14:20*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*08/26/14 14:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*70 - 130*		*08/26/14 14:20*	*1*
Toluene-d8 (Surr)	*84*		*70 - 130*		*08/26/14 14:20*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-186350/6
Matrix: Water
Analysis Batch: 186350

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			08/26/14 12:04	1
Benzene	ND		0.500	0.200	ug/L			08/26/14 12:04	1
Bromoform	ND		0.500	0.290	ug/L			08/26/14 12:04	1
Bromomethane	ND		0.500	0.350	ug/L			08/26/14 12:04	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			08/26/14 12:04	1
Carbon disulfide	ND		0.500	0.220	ug/L			08/26/14 12:04	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			08/26/14 12:04	1
Chlorobenzene	ND		0.500	0.180	ug/L			08/26/14 12:04	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			08/26/14 12:04	1
Chloroethane	ND		0.500	0.360	ug/L			08/26/14 12:04	1
Chloroform	0.4628	J	0.500	0.230	ug/L			08/26/14 12:04	1
Chloromethane	ND		0.500	0.360	ug/L			08/26/14 12:04	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			08/26/14 12:04	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 12:04	1
Dibromomethane	ND		0.500	0.450	ug/L			08/26/14 12:04	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			08/26/14 12:04	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			08/26/14 12:04	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			08/26/14 12:04	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			08/26/14 12:04	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			08/26/14 12:04	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			08/26/14 12:04	1
Ethylbenzene	ND		0.500	0.190	ug/L			08/26/14 12:04	1
2-Hexanone	ND		5.00	1.28	ug/L			08/26/14 12:04	1
Methylene Chloride	ND		5.00	0.220	ug/L			08/26/14 12:04	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			08/26/14 12:04	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			08/26/14 12:04	1
o-Xylene	ND		0.500	0.200	ug/L			08/26/14 12:04	1
Styrene	ND		0.500	0.280	ug/L			08/26/14 12:04	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			08/26/14 12:04	1
Tetrachloroethene	ND		0.500	0.140	ug/L			08/26/14 12:04	1
Toluene	ND		0.500	0.170	ug/L			08/26/14 12:04	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			08/26/14 12:04	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			08/26/14 12:04	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			08/26/14 12:04	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 12:04	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			08/26/14 12:04	1
Trichloroethene	ND		0.500	0.200	ug/L			08/26/14 12:04	1
Vinyl chloride	ND		0.500	0.180	ug/L			08/26/14 12:04	1
Xylenes, Total	ND		1.50	0.580	ug/L			08/26/14 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*08/26/14 12:04*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*08/26/14 12:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*08/26/14 12:04*	*1*
Toluene-d8 (Surr)	*83*		*70 - 130*		*08/26/14 12:04*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-186350/3
Matrix: Water
Analysis Batch: 186350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	107.3		ug/L		107	54 - 145
Benzene	20.0	21.03		ug/L		105	80 - 121
Bromoform	20.0	22.13		ug/L		111	46 - 145
Bromomethane	20.0	19.50		ug/L		97	41 - 150
2-Butanone (MEK)	100	107.5		ug/L		108	62 - 133
Carbon disulfide	20.0	20.40		ug/L		102	77 - 126
Carbon tetrachloride	20.0	19.45		ug/L		97	64 - 147
Chlorobenzene	20.0	20.29		ug/L		101	80 - 120
Chlorodibromomethane	20.0	22.13		ug/L		111	69 - 133
Chloroethane	20.0	17.70		ug/L		89	72 - 120
Chloroform	20.0	20.04		ug/L		100	73 - 129
Chloromethane	20.0	18.69		ug/L		93	12 - 150
cis-1,2-Dichloroethene	20.0	21.14		ug/L		106	76 - 125
cis-1,3-Dichloropropene	20.0	18.38		ug/L		92	74 - 140
Dibromomethane	20.0	20.67		ug/L		103	71 - 125
Dichlorobromomethane	20.0	22.16		ug/L		111	75 - 129
1,1-Dichloroethane	20.0	21.49		ug/L		107	78 - 125
1,2-Dichloroethane	20.0	19.39		ug/L		97	77 - 121
1,1-Dichloroethene	20.0	22.28		ug/L		111	79 - 124
1,2-Dichloropropane	20.0	22.33		ug/L		112	75 - 120
1,1-Dichloropropene	20.0	21.78		ug/L		109	80 - 122
Ethylbenzene	20.0	19.86		ug/L		99	80 - 130
2-Hexanone	100	109.0		ug/L		109	60 - 142
Methylene Chloride	20.0	21.32		ug/L		107	79 - 123
4-Methyl-2-pentanone (MIBK)	100	100.4		ug/L		100	60 - 137
m-Xylene & p-Xylene	20.0	19.42		ug/L		97	80 - 141
o-Xylene	20.0	19.15		ug/L		96	80 - 127
Styrene	20.0	19.71		ug/L		99	80 - 127
1,1,1,2-Tetrachloroethane	20.0	20.01		ug/L		100	74 - 135
Tetrachloroethene	20.0	20.91		ug/L		105	80 - 126
Toluene	20.0	17.72		ug/L		89	80 - 126
trans-1,2-Dichloroethene	20.0	21.20		ug/L		106	79 - 126
trans-1,3-Dichloropropene	20.0	18.57		ug/L		93	63 - 134
1,3,5-Trichlorobenzene	20.0	19.29		ug/L		96	70 - 130
1,1,1-Trichloroethane	20.0	19.10		ug/L		95	78 - 135
1,1,2-Trichloroethane	20.0	20.93		ug/L		105	80 - 124
Trichloroethene	20.0	21.33		ug/L		107	80 - 123
Vinyl chloride	20.0	21.85		ug/L		109	68 - 120
Xylenes, Total	40.0	38.57		ug/L		96	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*84*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-60023-C-20 MS
Matrix: Water
Analysis Batch: 186350

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	4.45	J	250	257.4		ug/L		101	45 - 141
Benzene	0.224	J	50.0	49.23		ug/L		98	75 - 133
Bromoform	ND		50.0	54.22	E	ug/L		108	42 - 147
Bromomethane	ND		50.0	42.16		ug/L		84	16 - 163
2-Butanone (MEK)	ND		250	264.5		ug/L		106	50 - 138
Carbon disulfide	ND		50.0	35.29		ug/L		71	48 - 152
Carbon tetrachloride	ND		50.0	46.91		ug/L		94	62 - 164
Chlorobenzene	ND		50.0	49.04		ug/L		98	80 - 129
Chlorodibromomethane	ND		50.0	55.15	E	ug/L		110	66 - 140
Chloroethane	ND		50.0	48.35		ug/L		97	58 - 137
Chloroform	ND		50.0	46.13		ug/L		92	66 - 138
Chloromethane	ND		50.0	53.20		ug/L		106	10 - 169
cis-1,2-Dichloroethene	ND		50.0	48.44		ug/L		97	68 - 138
cis-1,3-Dichloropropene	ND		50.0	42.12		ug/L		84	71 - 141
Dibromomethane	ND		50.0	47.43		ug/L		95	58 - 140
Dichlorobromomethane	ND		50.0	53.20		ug/L		106	70 - 140
1,1-Dichloroethane	ND		50.0	50.22		ug/L		100	71 - 139
1,2-Dichloroethane	ND		50.0	45.30		ug/L		91	64 - 136
1,1-Dichloroethene	ND		50.0	50.84		ug/L		102	70 - 142
1,2-Dichloropropane	ND		50.0	53.07		ug/L		106	67 - 131
1,1-Dichloropropene	ND		50.0	49.35		ug/L		99	76 - 139
Ethylbenzene	ND		50.0	49.98		ug/L		100	79 - 139
2-Hexanone	ND		250	337.7		ug/L		135	50 - 150
Methylene Chloride	0.515	J	50.0	47.13		ug/L		93	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	283.2		ug/L		113	50 - 147
m-Xylene & p-Xylene	ND		50.0	47.78		ug/L		96	80 - 153
o-Xylene	ND		50.0	46.71		ug/L		93	74 - 138
Styrene	ND		50.0	48.92		ug/L		98	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	49.39		ug/L		99	73 - 141
Tetrachloroethene	ND		50.0	50.04		ug/L		100	72 - 145
Toluene	ND		50.0	40.78		ug/L		82	75 - 136
trans-1,2-Dichloroethene	ND		50.0	46.75		ug/L		94	66 - 143
trans-1,3-Dichloropropene	ND		50.0	45.65		ug/L		91	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	46.97		ug/L		94	60 - 140
1,1,1-Trichloroethane	ND		50.0	46.49		ug/L		93	76 - 149
1,1,2-Trichloroethane	ND		50.0	52.78		ug/L		106	74 - 134
Trichloroethene	ND		50.0	51.24		ug/L		102	73 - 144
Vinyl chloride	ND		50.0	63.13		ug/L		126	56 - 129
Xylenes, Total	ND		100	94.48		ug/L		94	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*81*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-60023-D-20 MSD
Matrix: Water
Analysis Batch: 186350

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	4.45	J	250	266.4		ug/L		105	45 - 141	3	21
Benzene	0.224	J	50.0	49.27		ug/L		98	75 - 133	0	17
Bromoform	ND		50.0	54.98	E	ug/L		110	42 - 147	1	16
Bromomethane	ND		50.0	48.44		ug/L		97	16 - 163	14	50
2-Butanone (MEK)	ND		250	267.4		ug/L		107	50 - 138	1	19
Carbon disulfide	ND		50.0	35.58		ug/L		71	48 - 152	1	21
Carbon tetrachloride	ND		50.0	49.31		ug/L		99	62 - 164	5	19
Chlorobenzene	ND		50.0	48.34		ug/L		97	80 - 129	1	14
Chlorodibromomethane	ND		50.0	55.32	E	ug/L		111	66 - 140	0	15
Chloroethane	ND		50.0	48.57		ug/L		97	58 - 137	0	20
Chloroform	ND		50.0	46.97		ug/L		94	66 - 138	2	18
Chloromethane	ND		50.0	48.82		ug/L		98	10 - 169	9	31
cis-1,2-Dichloroethene	ND		50.0	48.94		ug/L		98	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	42.22		ug/L		84	71 - 141	0	15
Dibromomethane	ND		50.0	48.12		ug/L		96	58 - 140	1	16
Dichlorobromomethane	ND		50.0	54.27		ug/L		109	70 - 140	2	18
1,1-Dichloroethane	ND		50.0	51.22		ug/L		102	71 - 139	2	17
1,2-Dichloroethane	ND		50.0	46.78		ug/L		94	64 - 136	3	17
1,1-Dichloroethene	ND		50.0	52.08		ug/L		104	70 - 142	2	17
1,2-Dichloropropane	ND		50.0	53.80		ug/L		108	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	50.69		ug/L		101	76 - 139	3	17
Ethylbenzene	ND		50.0	47.98		ug/L		96	79 - 139	4	15
2-Hexanone	ND		250	337.3		ug/L		135	50 - 150	0	15
Methylene Chloride	0.515	J	50.0	47.52		ug/L		94	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	284.3		ug/L		114	50 - 147	0	17
m-Xylene & p-Xylene	ND		50.0	46.82		ug/L		94	80 - 153	2	16
o-Xylene	ND		50.0	46.94		ug/L		94	74 - 138	0	14
Styrene	ND		50.0	48.46		ug/L		97	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	48.34		ug/L		97	73 - 141	2	16
Tetrachloroethene	ND		50.0	48.32		ug/L		97	72 - 145	4	16
Toluene	ND		50.0	39.82		ug/L		80	75 - 136	2	15
trans-1,2-Dichloroethene	ND		50.0	48.41		ug/L		97	66 - 143	3	16
trans-1,3-Dichloropropene	ND		50.0	44.67		ug/L		89	59 - 135	2	14
1,3,5-Trichlorobenzene	ND		50.0	48.23		ug/L		96	60 - 140	3	30
1,1,1-Trichloroethane	ND		50.0	46.85		ug/L		94	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	52.01		ug/L		104	74 - 134	1	15
Trichloroethene	ND		50.0	52.33		ug/L		105	73 - 144	2	17
Vinyl chloride	ND		50.0	60.94		ug/L		122	56 - 129	4	17
Xylenes, Total	ND		100	93.76		ug/L		94	74 - 141	1	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*79*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59947-1

GC/MS VOA

Analysis Batch: 186350

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-59947-1	1W-100	Total/NA	Water	8260B	
490-59947-2	1W-103	Total/NA	Water	8260B	
490-59947-3	GAC Outlet 2-3	Total/NA	Water	8260B	
490-59947-4	Effluent	Total/NA	Water	8260B	
490-59947-5	Trip Blank	Total/NA	Water	8260B	
490-60023-C-20 MS	Matrix Spike	Total/NA	Water	8260B	
490-60023-D-20 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-186350/3	Lab Control Sample	Total/NA	Water	8260B	
MB 490-186350/6	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59947-1

Client Sample ID: 1W-100 — Lab Sample ID: 490-59947-1

Date Collected: 08/21/14 11:45 — **Matrix: Water**
Date Received: 08/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	186350	08/26/14 15:41	JJR	TAL NSH

Client Sample ID: 1W-103 — Lab Sample ID: 490-59947-2

Date Collected: 08/21/14 11:50 — **Matrix: Water**
Date Received: 08/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	186350	08/26/14 14:47	JJR	TAL NSH

Client Sample ID: GAC Outlet 2-3 — Lab Sample ID: 490-59947-3

Date Collected: 08/21/14 11:55 — **Matrix: Water**
Date Received: 08/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	186350	08/26/14 13:25	JJR	TAL NSH

Client Sample ID: Effluent — Lab Sample ID: 490-59947-4

Date Collected: 08/21/14 12:00 — **Matrix: Water**
Date Received: 08/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	186350	08/26/14 13:52	JJR	TAL NSH

Client Sample ID: Trip Blank — Lab Sample ID: 490-59947-5

Date Collected: 08/21/14 00:01 — **Matrix: Water**
Date Received: 08/22/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	186350	08/26/14 14:20	JJR	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59947-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-59947-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-59947 Chain of Custody

Cooler Received/Opened On : 8/22/2014 @ 0830

1. Tracking # 3218 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 96210146

2. Temperature of rep. sample or temp blank when opened: 4.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial)

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) AJH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AJH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AJH

I certify that I attached a label with the unique LIMS number to each container (intial) AJH

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

8/29/2014

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information
Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone:
Email: chuck.castelluccio@arcadis-us.com
Project Name: Tibbetts Road Site E101274
Site:

Sampler: Jeffrey Buckner
Phone: 513-582-7639
Due Date Requested:
TAT Requested (days): standard
PO #: Purchase Order Requested
WO #: MA000725.014B.00102
Lab Project #: 49002494
Client Project #:

Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Carrier Tracking No(s):

FORD Site E101274
Page:
Job #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	NH Full List VOC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	A		
1W-100	8/21/14	1145		W					3		
1W-103	↓	1150		W					3		
GAC Outlet 2-3		1155		W					3		Loc: 490
Effluent		1200		W					3		59947
Trip blank	—	—	—	W					2		

Possible Hazard Identification: [X] Non-Hazard [ ] Flammable [ ] Skin Irritant [ ] Poison B [ ] Unknown [ ] Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): [ ] Return To Client [X] Disposal By Lab [ ] Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Jeffrey Buckner	8/21/14 15:30	ARCADIS	[signature]	8/22/14 8:30	TAN

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 4.5

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-59947-1

Login Number: 59947
List Number: 1
Creator: Huskey, Adam

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-60459-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
9/9/2014 10:20:51 AM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-60459-1	IW-100	Water	08/28/14 11:00	08/29/14 08:20
490-60459-2	OW-103	Water	08/28/14 11:10	08/29/14 08:20
490-60459-3	GAC Outlet 2-3	Water	08/28/14 11:20	08/29/14 08:20
490-60459-4	Effluent	Water	08/28/14 11:30	08/29/14 08:20
490-60459-5	Trip Blank	Water	08/28/14 00:01	08/29/14 08:20

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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

Client Sample ID: IW-100

Date Collected: 08/28/14 11:00
Date Received: 08/29/14 08:20

Lab Sample ID: 490-60459-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/03/14 20:25	1
Benzene	**24.8**		0.500	0.200	ug/L			09/03/14 20:25	1
Bromoform	ND		0.500	0.290	ug/L			09/03/14 20:25	1
Bromomethane	ND		0.500	0.350	ug/L			09/03/14 20:25	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/03/14 20:25	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/03/14 20:25	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/03/14 20:25	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/03/14 20:25	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/03/14 20:25	1
Chloroethane	ND		0.500	0.360	ug/L			09/03/14 20:25	1
Chloroform	ND		0.500	0.230	ug/L			09/03/14 20:25	1
Chloromethane	ND		0.500	0.360	ug/L			09/03/14 20:25	1
cis-1,2-Dichloroethene	**20.9**		0.500	0.210	ug/L			09/03/14 20:25	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 20:25	1
Dibromomethane	ND		0.500	0.450	ug/L			09/03/14 20:25	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/03/14 20:25	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/03/14 20:25	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/03/14 20:25	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/03/14 20:25	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/03/14 20:25	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/03/14 20:25	1
Ethylbenzene	**5.25**		0.500	0.190	ug/L			09/03/14 20:25	1
2-Hexanone	ND		5.00	1.28	ug/L			09/03/14 20:25	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/03/14 20:25	1
4-Methyl-2-pentanone (MIBK)	**24.3**		5.00	0.810	ug/L			09/03/14 20:25	1
m-Xylene & p-Xylene	**4.95**		0.500	0.380	ug/L			09/03/14 20:25	1
o-Xylene	**3.02**		0.500	0.200	ug/L			09/03/14 20:25	1
Styrene	ND		0.500	0.280	ug/L			09/03/14 20:25	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/03/14 20:25	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/03/14 20:25	1
Toluene	**1.08**		0.500	0.170	ug/L			09/03/14 20:25	1
trans-1,2-Dichloroethene	**2.10**		0.500	0.230	ug/L			09/03/14 20:25	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 20:25	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/03/14 20:25	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 20:25	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 20:25	1
Trichloroethene	**2.78**		0.500	0.200	ug/L			09/03/14 20:25	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/03/14 20:25	1
Xylenes, Total	**7.98**		1.50	0.580	ug/L			09/03/14 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*09/03/14 20:25*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*09/03/14 20:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*09/03/14 20:25*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/03/14 20:25*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

Client Sample ID: OW-103

Date Collected: 08/28/14 11:10
Date Received: 08/29/14 08:20

Lab Sample ID: 490-60459-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/03/14 20:51	1
Benzene	**34.6**		0.500	0.200	ug/L			09/03/14 20:51	1
Bromoform	ND		0.500	0.290	ug/L			09/03/14 20:51	1
Bromomethane	ND		0.500	0.350	ug/L			09/03/14 20:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/03/14 20:51	1
Carbon disulfide	**0.280**	**J**	0.500	0.220	ug/L			09/03/14 20:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/03/14 20:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/03/14 20:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/03/14 20:51	1
Chloroethane	ND		0.500	0.360	ug/L			09/03/14 20:51	1
Chloroform	ND		0.500	0.230	ug/L			09/03/14 20:51	1
Chloromethane	ND		0.500	0.360	ug/L			09/03/14 20:51	1
cis-1,2-Dichloroethene	**30.1**		0.500	0.210	ug/L			09/03/14 20:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 20:51	1
Dibromomethane	ND		0.500	0.450	ug/L			09/03/14 20:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/03/14 20:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/03/14 20:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/03/14 20:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/03/14 20:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/03/14 20:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/03/14 20:51	1
Ethylbenzene	**11.3**		0.500	0.190	ug/L			09/03/14 20:51	1
2-Hexanone	ND		5.00	1.28	ug/L			09/03/14 20:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/03/14 20:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/03/14 20:51	1
m-Xylene & p-Xylene	**9.19**		0.500	0.380	ug/L			09/03/14 20:51	1
o-Xylene	ND		0.500	0.200	ug/L			09/03/14 20:51	1
Styrene	ND		0.500	0.280	ug/L			09/03/14 20:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/03/14 20:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/03/14 20:51	1
Toluene	ND		0.500	0.170	ug/L			09/03/14 20:51	1
trans-1,2-Dichloroethene	**0.314**	**J**	0.500	0.230	ug/L			09/03/14 20:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 20:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/03/14 20:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 20:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 20:51	1
Trichloroethene	**0.759**		0.500	0.200	ug/L			09/03/14 20:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/03/14 20:51	1
Xylenes, Total	**9.36**		1.50	0.580	ug/L			09/03/14 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*09/03/14 20:51*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*09/03/14 20:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/03/14 20:51*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*09/03/14 20:51*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

Client Sample ID: GAC Outlet 2-3

Lab Sample ID: 490-60459-3

Date Collected: 08/28/14 11:20
Date Received: 08/29/14 08:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/03/14 21:17	1
Benzene	ND		0.500	0.200	ug/L			09/03/14 21:17	1
Bromoform	ND		0.500	0.290	ug/L			09/03/14 21:17	1
Bromomethane	ND		0.500	0.350	ug/L			09/03/14 21:17	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/03/14 21:17	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/03/14 21:17	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/03/14 21:17	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/03/14 21:17	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/03/14 21:17	1
Chloroethane	ND		0.500	0.360	ug/L			09/03/14 21:17	1
Chloroform	ND		0.500	0.230	ug/L			09/03/14 21:17	1
Chloromethane	ND		0.500	0.360	ug/L			09/03/14 21:17	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/03/14 21:17	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 21:17	1
Dibromomethane	ND		0.500	0.450	ug/L			09/03/14 21:17	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/03/14 21:17	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/03/14 21:17	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/03/14 21:17	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/03/14 21:17	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/03/14 21:17	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/03/14 21:17	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/03/14 21:17	1
2-Hexanone	ND		5.00	1.28	ug/L			09/03/14 21:17	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/03/14 21:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/03/14 21:17	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/03/14 21:17	1
o-Xylene	ND		0.500	0.200	ug/L			09/03/14 21:17	1
Styrene	ND		0.500	0.280	ug/L			09/03/14 21:17	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/03/14 21:17	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/03/14 21:17	1
Toluene	ND		0.500	0.170	ug/L			09/03/14 21:17	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/03/14 21:17	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 21:17	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/03/14 21:17	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 21:17	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 21:17	1
Trichloroethene	ND		0.500	0.200	ug/L			09/03/14 21:17	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/03/14 21:17	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/03/14 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*09/03/14 21:17*	*1*
Dibromofluoromethane (Surr)	*105*		*70 - 130*		*09/03/14 21:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*09/03/14 21:17*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/03/14 21:17*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

Client Sample ID: Effluent

Lab Sample ID: 490-60459-4

Date Collected: 08/28/14 11:30
Matrix: Water
Date Received: 08/29/14 08:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/03/14 19:33	1
Benzene	ND		0.500	0.200	ug/L			09/03/14 19:33	1
Bromoform	ND		0.500	0.290	ug/L			09/03/14 19:33	1
Bromomethane	ND		0.500	0.350	ug/L			09/03/14 19:33	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/03/14 19:33	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/03/14 19:33	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/03/14 19:33	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/03/14 19:33	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/03/14 19:33	1
Chloroethane	ND		0.500	0.360	ug/L			09/03/14 19:33	1
Chloroform	ND		0.500	0.230	ug/L			09/03/14 19:33	1
Chloromethane	ND		0.500	0.360	ug/L			09/03/14 19:33	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/03/14 19:33	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 19:33	1
Dibromomethane	ND		0.500	0.450	ug/L			09/03/14 19:33	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/03/14 19:33	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/03/14 19:33	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/03/14 19:33	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/03/14 19:33	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/03/14 19:33	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/03/14 19:33	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/03/14 19:33	1
2-Hexanone	ND		5.00	1.28	ug/L			09/03/14 19:33	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/03/14 19:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/03/14 19:33	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/03/14 19:33	1
o-Xylene	ND		0.500	0.200	ug/L			09/03/14 19:33	1
Styrene	ND		0.500	0.280	ug/L			09/03/14 19:33	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/03/14 19:33	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/03/14 19:33	1
Toluene	ND		0.500	0.170	ug/L			09/03/14 19:33	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/03/14 19:33	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 19:33	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/03/14 19:33	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 19:33	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 19:33	1
Trichloroethene	**0.206**	**J**	0.500	0.200	ug/L			09/03/14 19:33	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/03/14 19:33	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/03/14 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*09/03/14 19:33*	*1*
Dibromofluoromethane (Surr)	*104*		*70 - 130*		*09/03/14 19:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*09/03/14 19:33*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/03/14 19:33*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-60459-5

Date Collected: 08/28/14 00:01
Date Received: 08/29/14 08:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/03/14 19:08	1
Benzene	ND		0.500	0.200	ug/L			09/03/14 19:08	1
Bromoform	ND		0.500	0.290	ug/L			09/03/14 19:08	1
Bromomethane	ND		0.500	0.350	ug/L			09/03/14 19:08	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/03/14 19:08	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/03/14 19:08	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/03/14 19:08	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/03/14 19:08	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/03/14 19:08	1
Chloroethane	ND		0.500	0.360	ug/L			09/03/14 19:08	1
Chloromethane	ND		0.500	0.360	ug/L			09/03/14 19:08	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/03/14 19:08	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 19:08	1
Dibromomethane	ND		0.500	0.450	ug/L			09/03/14 19:08	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/03/14 19:08	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/03/14 19:08	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/03/14 19:08	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/03/14 19:08	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/03/14 19:08	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/03/14 19:08	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/03/14 19:08	1
2-Hexanone	ND		5.00	1.28	ug/L			09/03/14 19:08	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/03/14 19:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/03/14 19:08	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/03/14 19:08	1
o-Xylene	ND		0.500	0.200	ug/L			09/03/14 19:08	1
Styrene	ND		0.500	0.280	ug/L			09/03/14 19:08	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/03/14 19:08	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/03/14 19:08	1
Toluene	ND		0.500	0.170	ug/L			09/03/14 19:08	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/03/14 19:08	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 19:08	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/03/14 19:08	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 19:08	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 19:08	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/03/14 19:08	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/03/14 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*09/03/14 19:08*	*1*
Dibromofluoromethane (Surr)	*106*		*70 - 130*		*09/03/14 19:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/03/14 19:08*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/03/14 19:08*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		0.500	0.230	ug/L			09/05/14 21:40	1
Trichloroethene	ND		0.500	0.200	ug/L			09/05/14 21:40	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-60459-5

Date Collected: 08/28/14 00:01

Matrix: Water

Date Received: 08/29/14 08:20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130		09/05/14 21:40	1
Dibromofluoromethane (Surr)	99		70 - 130		09/05/14 21:40	1
1,2-Dichloroethane-d4 (Surr)	97		70 - 130		09/05/14 21:40	1
Toluene-d8 (Surr)	103		70 - 130		09/05/14 21:40	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-188175/8
Matrix: Water
Analysis Batch: 188175

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/03/14 15:05	1
Benzene	ND		0.500	0.200	ug/L			09/03/14 15:05	1
Bromoform	ND		0.500	0.290	ug/L			09/03/14 15:05	1
Bromomethane	ND		0.500	0.350	ug/L			09/03/14 15:05	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/03/14 15:05	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/03/14 15:05	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/03/14 15:05	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/03/14 15:05	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/03/14 15:05	1
Chloroethane	ND		0.500	0.360	ug/L			09/03/14 15:05	1
Chloroform	ND		0.500	0.230	ug/L			09/03/14 15:05	1
Chloromethane	ND		0.500	0.360	ug/L			09/03/14 15:05	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/03/14 15:05	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 15:05	1
Dibromomethane	ND		0.500	0.450	ug/L			09/03/14 15:05	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/03/14 15:05	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/03/14 15:05	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/03/14 15:05	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/03/14 15:05	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/03/14 15:05	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/03/14 15:05	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/03/14 15:05	1
2-Hexanone	ND		5.00	1.28	ug/L			09/03/14 15:05	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/03/14 15:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/03/14 15:05	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/03/14 15:05	1
o-Xylene	ND		0.500	0.200	ug/L			09/03/14 15:05	1
Styrene	ND		0.500	0.280	ug/L			09/03/14 15:05	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/03/14 15:05	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/03/14 15:05	1
Toluene	ND		0.500	0.170	ug/L			09/03/14 15:05	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/03/14 15:05	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/03/14 15:05	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/03/14 15:05	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 15:05	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/03/14 15:05	1
Trichloroethene	ND		0.500	0.200	ug/L			09/03/14 15:05	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/03/14 15:05	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/03/14 15:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*09/03/14 15:05*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*09/03/14 15:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*09/03/14 15:05*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*09/03/14 15:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-188175/3
Matrix: Water
Analysis Batch: 188175

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	292.9		ug/L		117	54 - 145
Benzene	50.0	59.99		ug/L		120	80 - 121
Bromoform	50.0	51.10		ug/L		102	46 - 145
Bromomethane	50.0	52.86		ug/L		106	41 - 150
2-Butanone (MEK)	250	263.7		ug/L		105	62 - 133
Carbon disulfide	50.0	59.50		ug/L		119	77 - 126
Carbon tetrachloride	50.0	57.96		ug/L		116	64 - 147
Chlorobenzene	50.0	53.10		ug/L		106	80 - 120
Chlorodibromomethane	50.0	52.60		ug/L		105	69 - 133
Chloroethane	50.0	53.71		ug/L		107	72 - 120
Chloroform	50.0	58.74		ug/L		117	73 - 129
Chloromethane	50.0	36.66		ug/L		73	12 - 150
cis-1,2-Dichloroethene	50.0	56.55		ug/L		113	76 - 125
cis-1,3-Dichloropropene	50.0	53.04		ug/L		106	74 - 140
Dibromomethane	50.0	49.92		ug/L		100	71 - 125
Dichlorobromomethane	50.0	55.60		ug/L		111	75 - 129
1,1-Dichloroethane	50.0	58.49		ug/L		117	78 - 125
1,2-Dichloroethane	50.0	50.44		ug/L		101	77 - 121
1,1-Dichloroethene	50.0	61.70		ug/L		123	79 - 124
1,2-Dichloropropane	50.0	58.07		ug/L		116	75 - 120
1,1-Dichloropropene	50.0	57.22		ug/L		114	80 - 122
Ethylbenzene	50.0	52.31		ug/L		105	80 - 130
2-Hexanone	250	258.6		ug/L		103	60 - 142
Methylene Chloride	50.0	57.88		ug/L		116	79 - 123
4-Methyl-2-pentanone (MIBK)	250	256.2		ug/L		102	60 - 137
m-Xylene & p-Xylene	50.0	53.39		ug/L		107	80 - 141
o-Xylene	50.0	52.95		ug/L		106	80 - 127
Styrene	50.0	53.94		ug/L		108	80 - 127
1,1,1,2-Tetrachloroethane	50.0	52.15		ug/L		104	74 - 135
Tetrachloroethene	50.0	53.31		ug/L		107	80 - 126
Toluene	50.0	54.76		ug/L		110	80 - 126
trans-1,2-Dichloroethene	50.0	58.80		ug/L		118	79 - 126
trans-1,3-Dichloropropene	50.0	51.66		ug/L		103	63 - 134
1,3,5-Trichlorobenzene	50.0	50.11		ug/L		100	70 - 130
1,1,1-Trichloroethane	50.0	56.81		ug/L		114	78 - 135
1,1,2-Trichloroethane	50.0	50.62		ug/L		101	80 - 124
Trichloroethene	50.0	58.52		ug/L		117	80 - 123
Vinyl chloride	50.0	56.49		ug/L		113	68 - 120
Xylenes, Total	100	106.3		ug/L		106	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-188175/4
Matrix: Water
Analysis Batch: 188175

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
Acetone	250	302.9		ug/L		121	54 - 145	3	21
Benzene	50.0	59.07		ug/L		118	80 - 121	2	17
Bromoform	50.0	51.17		ug/L		102	46 - 145	0	16
Bromomethane	50.0	54.41		ug/L		109	41 - 150	3	50
2-Butanone (MEK)	250	270.9		ug/L		108	62 - 133	3	19
Carbon disulfide	50.0	58.62		ug/L		117	77 - 126	1	21
Carbon tetrachloride	50.0	56.14		ug/L		112	64 - 147	3	19
Chlorobenzene	50.0	52.14		ug/L		104	80 - 120	2	14
Chlorodibromomethane	50.0	52.35		ug/L		105	69 - 133	0	15
Chloroethane	50.0	53.76		ug/L		108	72 - 120	0	20
Chloroform	50.0	58.39		ug/L		117	73 - 129	1	18
Chloromethane	50.0	36.18		ug/L		72	12 - 150	1	31
cis-1,2-Dichloroethene	50.0	55.35		ug/L		111	76 - 125	2	17
cis-1,3-Dichloropropene	50.0	52.55		ug/L		105	74 - 140	1	15
Dibromomethane	50.0	49.73		ug/L		99	71 - 125	0	16
Dichlorobromomethane	50.0	54.88		ug/L		110	75 - 129	1	18
1,1-Dichloroethane	50.0	57.75		ug/L		116	78 - 125	1	17
1,2-Dichloroethane	50.0	50.14		ug/L		100	77 - 121	1	17
1,1-Dichloroethene	50.0	60.24		ug/L		120	79 - 124	2	17
1,2-Dichloropropane	50.0	56.85		ug/L		114	75 - 120	2	17
1,1-Dichloropropene	50.0	56.11		ug/L		112	80 - 122	2	17
Ethylbenzene	50.0	51.35		ug/L		103	80 - 130	2	15
2-Hexanone	250	269.6		ug/L		108	60 - 142	4	15
Methylene Chloride	50.0	57.55		ug/L		115	79 - 123	1	17
4-Methyl-2-pentanone (MIBK)	250	262.8		ug/L		105	60 - 137	3	17
m-Xylene & p-Xylene	50.0	51.47		ug/L		103	80 - 141	4	16
o-Xylene	50.0	52.25		ug/L		104	80 - 127	1	14
Styrene	50.0	53.13		ug/L		106	80 - 127	2	24
1,1,1,2-Tetrachloroethane	50.0	51.76		ug/L		104	74 - 135	1	16
Tetrachloroethene	50.0	52.02		ug/L		104	80 - 126	2	16
Toluene	50.0	53.91		ug/L		108	80 - 126	2	15
trans-1,2-Dichloroethene	50.0	57.27		ug/L		115	79 - 126	3	16
trans-1,3-Dichloropropene	50.0	51.07		ug/L		102	63 - 134	1	14
1,3,5-Trichlorobenzene	50.0	50.43		ug/L		101	70 - 130	1	30
1,1,1-Trichloroethane	50.0	55.55		ug/L		111	78 - 135	2	17
1,1,2-Trichloroethane	50.0	50.96		ug/L		102	80 - 124	1	15
Trichloroethene	50.0	57.19		ug/L		114	80 - 123	2	17
Vinyl chloride	50.0	54.81		ug/L		110	68 - 120	3	17
Xylenes, Total	100	103.7		ug/L		104	80 - 132	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-60469-A-1 MS
Matrix: Water
Analysis Batch: 188175

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	317.7		ug/L		127	45 - 141
Benzene	ND		50.0	62.43		ug/L		125	75 - 133
Bromoform	ND		50.0	52.94		ug/L		106	42 - 147
Bromomethane	ND		50.0	45.40		ug/L		91	16 - 163
2-Butanone (MEK)	ND		250	294.2		ug/L		118	50 - 138
Carbon disulfide	ND		50.0	55.29		ug/L		111	48 - 152
Carbon tetrachloride	ND		50.0	60.76		ug/L		122	62 - 164
Chlorobenzene	ND		50.0	54.13		ug/L		108	80 - 129
Chlorodibromomethane	ND		50.0	54.82		ug/L		110	66 - 140
Chloroethane	ND		50.0	55.05		ug/L		110	58 - 137
Chloroform	ND		50.0	61.45		ug/L		123	66 - 138
Chloromethane	ND		50.0	35.02		ug/L		70	10 - 169
cis-1,2-Dichloroethene	ND		50.0	59.12		ug/L		118	68 - 138
cis-1,3-Dichloropropene	ND		50.0	53.55		ug/L		107	71 - 141
Dibromomethane	ND		50.0	53.93		ug/L		108	58 - 140
Dichlorobromomethane	ND		50.0	59.03		ug/L		118	70 - 140
1,1-Dichloroethane	ND		50.0	61.85		ug/L		124	71 - 139
1,2-Dichloroethane	ND		50.0	54.59		ug/L		109	64 - 136
1,1-Dichloroethene	ND		50.0	63.59		ug/L		127	70 - 142
1,2-Dichloropropane	ND		50.0	61.28		ug/L		123	67 - 131
1,1-Dichloropropene	ND		50.0	59.48		ug/L		119	76 - 139
Ethylbenzene	ND		50.0	53.15		ug/L		106	79 - 139
2-Hexanone	ND		250	284.9		ug/L		114	50 - 150
Methylene Chloride	ND		50.0	59.61		ug/L		119	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	279.5		ug/L		112	50 - 147
m-Xylene & p-Xylene	ND		50.0	53.54		ug/L		107	80 - 153
o-Xylene	ND		50.0	53.75		ug/L		107	74 - 138
Styrene	ND		50.0	55.35		ug/L		111	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	54.13		ug/L		108	73 - 141
Tetrachloroethene	ND		50.0	53.80		ug/L		108	72 - 145
Toluene	ND		50.0	54.69		ug/L		109	75 - 136
trans-1,2-Dichloroethene	ND		50.0	60.03		ug/L		120	66 - 143
trans-1,3-Dichloropropene	ND		50.0	52.36		ug/L		105	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	48.92		ug/L		98	60 - 140
1,1,1-Trichloroethane	ND		50.0	60.22		ug/L		120	76 - 149
1,1,2-Trichloroethane	ND		50.0	53.68		ug/L		107	74 - 134
Trichloroethene	ND		50.0	61.33		ug/L		123	73 - 144
Vinyl chloride	ND		50.0	55.25		ug/L		111	56 - 129
Xylenes, Total	ND		100	107.3		ug/L		107	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*95*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-60469-A-1 MSD
Matrix: Water
Analysis Batch: 188175

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	335.8		ug/L		134	45 - 141	6	21
Benzene	ND		50.0	63.39		ug/L		127	75 - 133	2	17
Bromoform	ND		50.0	55.74		ug/L		111	42 - 147	5	16
Bromomethane	ND		50.0	56.77		ug/L		114	16 - 163	22	50
2-Butanone (MEK)	ND		250	316.4		ug/L		127	50 - 138	7	19
Carbon disulfide	ND		50.0	56.65		ug/L		113	48 - 152	2	21
Carbon tetrachloride	ND		50.0	62.04		ug/L		124	62 - 164	2	19
Chlorobenzene	ND		50.0	55.36		ug/L		111	80 - 129	2	14
Chlorodibromomethane	ND		50.0	57.00		ug/L		114	66 - 140	4	15
Chloroethane	ND		50.0	56.53		ug/L		113	58 - 137	3	20
Chloroform	ND		50.0	62.70		ug/L		125	66 - 138	2	18
Chloromethane	ND		50.0	37.72		ug/L		75	10 - 169	7	31
cis-1,2-Dichloroethene	ND		50.0	60.19		ug/L		120	68 - 138	2	17
cis-1,3-Dichloropropene	ND		50.0	54.83		ug/L		110	71 - 141	2	15
Dibromomethane	ND		50.0	55.64		ug/L		111	58 - 140	3	16
Dichlorobromomethane	ND		50.0	60.35		ug/L		121	70 - 140	2	18
1,1-Dichloroethane	ND		50.0	63.03		ug/L		126	71 - 139	2	17
1,2-Dichloroethane	ND		50.0	55.74		ug/L		111	64 - 136	2	17
1,1-Dichloroethene	ND		50.0	61.25		ug/L		123	70 - 142	4	17
1,2-Dichloropropane	ND		50.0	61.95		ug/L		124	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	59.97		ug/L		120	76 - 139	1	17
Ethylbenzene	ND		50.0	54.26		ug/L		109	79 - 139	2	15
2-Hexanone	ND		250	301.0		ug/L		120	50 - 150	6	15
Methylene Chloride	ND		50.0	60.89		ug/L		122	64 - 139	2	17
4-Methyl-2-pentanone (MIBK)	ND		250	294.3		ug/L		118	50 - 147	5	17
m-Xylene & p-Xylene	ND		50.0	54.57		ug/L		109	80 - 153	2	16
o-Xylene	ND		50.0	55.04		ug/L		110	74 - 138	2	14
Styrene	ND		50.0	56.19		ug/L		112	61 - 148	2	24
1,1,1,2-Tetrachloroethane	ND		50.0	55.32		ug/L		111	73 - 141	2	16
Tetrachloroethene	ND		50.0	54.82		ug/L		110	72 - 145	2	16
Toluene	ND		50.0	56.56		ug/L		113	75 - 136	3	15
trans-1,2-Dichloroethene	ND		50.0	61.51		ug/L		123	66 - 143	2	16
trans-1,3-Dichloropropene	ND		50.0	54.54		ug/L		109	59 - 135	4	14
1,3,5-Trichlorobenzene	ND		50.0	52.05		ug/L		104	60 - 140	6	30
1,1,1-Trichloroethane	ND		50.0	61.38		ug/L		123	76 - 149	2	17
1,1,2-Trichloroethane	ND		50.0	55.57		ug/L		111	74 - 134	3	15
Trichloroethene	ND		50.0	62.95		ug/L		126	73 - 144	3	17
Vinyl chloride	ND		50.0	56.40		ug/L		113	56 - 129	2	17
Xylenes, Total	ND		100	109.6		ug/L		110	74 - 141	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*106*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*96*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-188835/8
Matrix: Water
Analysis Batch: 188835

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	11.67		5.00	2.66	ug/L			09/05/14 19:57	1
Benzene	ND		0.500	0.200	ug/L			09/05/14 19:57	1
Bromoform	ND		0.500	0.290	ug/L			09/05/14 19:57	1
Bromomethane	ND		0.500	0.350	ug/L			09/05/14 19:57	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/05/14 19:57	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/05/14 19:57	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/05/14 19:57	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/05/14 19:57	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/05/14 19:57	1
Chloroethane	ND		0.500	0.360	ug/L			09/05/14 19:57	1
Chloroform	ND		0.500	0.230	ug/L			09/05/14 19:57	1
Chloromethane	ND		0.500	0.360	ug/L			09/05/14 19:57	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/05/14 19:57	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/05/14 19:57	1
Dibromomethane	ND		0.500	0.450	ug/L			09/05/14 19:57	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/05/14 19:57	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/05/14 19:57	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/05/14 19:57	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/05/14 19:57	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/05/14 19:57	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/05/14 19:57	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/05/14 19:57	1
2-Hexanone	ND		5.00	1.28	ug/L			09/05/14 19:57	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/05/14 19:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/05/14 19:57	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/05/14 19:57	1
o-Xylene	ND		0.500	0.200	ug/L			09/05/14 19:57	1
Styrene	ND		0.500	0.280	ug/L			09/05/14 19:57	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/05/14 19:57	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/05/14 19:57	1
Toluene	ND		0.500	0.170	ug/L			09/05/14 19:57	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/05/14 19:57	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/05/14 19:57	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/05/14 19:57	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/05/14 19:57	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/05/14 19:57	1
Trichloroethene	ND		0.500	0.200	ug/L			09/05/14 19:57	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/05/14 19:57	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/05/14 19:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*09/05/14 19:57*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/05/14 19:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*		*09/05/14 19:57*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/05/14 19:57*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-188835/3
Matrix: Water
Analysis Batch: 188835

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	320.7		ug/L		128	54 - 145
Benzene	50.0	54.05		ug/L		108	80 - 121
Bromoform	50.0	48.23		ug/L		96	46 - 145
Bromomethane	50.0	47.37		ug/L		95	41 - 150
2-Butanone (MEK)	250	281.9		ug/L		113	62 - 133
Carbon disulfide	50.0	51.87		ug/L		104	77 - 126
Carbon tetrachloride	50.0	46.76		ug/L		94	64 - 147
Chlorobenzene	50.0	51.64		ug/L		103	80 - 120
Chlorodibromomethane	50.0	51.36		ug/L		103	69 - 133
Chloroethane	50.0	49.52		ug/L		99	72 - 120
Chloroform	50.0	53.57		ug/L		107	73 - 129
Chloromethane	50.0	32.61		ug/L		65	12 - 150
cis-1,2-Dichloroethene	50.0	52.14		ug/L		104	76 - 125
cis-1,3-Dichloropropene	50.0	52.22		ug/L		104	74 - 140
Dibromomethane	50.0	48.43		ug/L		97	71 - 125
Dichlorobromomethane	50.0	50.92		ug/L		102	75 - 129
1,1-Dichloroethane	50.0	53.99		ug/L		108	78 - 125
1,2-Dichloroethane	50.0	50.27		ug/L		101	77 - 121
1,1-Dichloroethene	50.0	51.63		ug/L		103	79 - 124
1,2-Dichloropropane	50.0	54.13		ug/L		108	75 - 120
1,1-Dichloropropene	50.0	50.67		ug/L		101	80 - 122
Ethylbenzene	50.0	50.82		ug/L		102	80 - 130
2-Hexanone	250	295.5		ug/L		118	60 - 142
Methylene Chloride	50.0	53.15		ug/L		106	79 - 123
4-Methyl-2-pentanone (MIBK)	250	290.0		ug/L		116	60 - 137
m-Xylene & p-Xylene	50.0	51.31		ug/L		103	80 - 141
o-Xylene	50.0	51.76		ug/L		104	80 - 127
Styrene	50.0	52.95		ug/L		106	80 - 127
1,1,1,2-Tetrachloroethane	50.0	50.59		ug/L		101	74 - 135
Tetrachloroethene	50.0	49.68		ug/L		99	80 - 126
Toluene	50.0	53.16		ug/L		106	80 - 126
trans-1,2-Dichloroethene	50.0	51.83		ug/L		104	79 - 126
trans-1,3-Dichloropropene	50.0	52.73		ug/L		105	63 - 134
1,3,5-Trichlorobenzene	50.0	50.17		ug/L		100	70 - 130
1,1,1-Trichloroethane	50.0	50.51		ug/L		101	78 - 135
1,1,2-Trichloroethane	50.0	52.94		ug/L		106	80 - 124
Trichloroethene	50.0	51.14		ug/L		102	80 - 123
Vinyl chloride	50.0	51.37		ug/L		103	68 - 120
Xylenes, Total	100	103.1		ug/L		103	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-188835/4
Matrix: Water
Analysis Batch: 188835

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
Acetone	250	322.4		ug/L		129	54 - 145	1	21
Benzene	50.0	52.76		ug/L		106	80 - 121	2	17
Bromoform	50.0	47.40		ug/L		95	46 - 145	2	16
Bromomethane	50.0	49.36		ug/L		99	41 - 150	4	50
2-Butanone (MEK)	250	279.4		ug/L		112	62 - 133	1	19
Carbon disulfide	50.0	51.37		ug/L		103	77 - 126	1	21
Carbon tetrachloride	50.0	46.54		ug/L		93	64 - 147	0	19
Chlorobenzene	50.0	50.07		ug/L		100	80 - 120	3	14
Chlorodibromomethane	50.0	50.20		ug/L		100	69 - 133	2	15
Chloroethane	50.0	48.48		ug/L		97	72 - 120	2	20
Chloroform	50.0	52.53		ug/L		105	73 - 129	2	18
Chloromethane	50.0	34.25		ug/L		68	12 - 150	5	31
cis-1,2-Dichloroethene	50.0	51.44		ug/L		103	76 - 125	1	17
cis-1,3-Dichloropropene	50.0	51.04		ug/L		102	74 - 140	2	15
Dibromomethane	50.0	47.64		ug/L		95	71 - 125	2	16
Dichlorobromomethane	50.0	50.17		ug/L		100	75 - 129	1	18
1,1-Dichloroethane	50.0	52.81		ug/L		106	78 - 125	2	17
1,2-Dichloroethane	50.0	49.38		ug/L		99	77 - 121	2	17
1,1-Dichloroethene	50.0	51.33		ug/L		103	79 - 124	1	17
1,2-Dichloropropane	50.0	52.76		ug/L		106	75 - 120	3	17
1,1-Dichloropropene	50.0	49.93		ug/L		100	80 - 122	1	17
Ethylbenzene	50.0	49.91		ug/L		100	80 - 130	2	15
2-Hexanone	250	297.2		ug/L		119	60 - 142	1	15
Methylene Chloride	50.0	51.99		ug/L		104	79 - 123	2	17
4-Methyl-2-pentanone (MIBK)	250	284.9		ug/L		114	60 - 137	2	17
m-Xylene & p-Xylene	50.0	50.38		ug/L		101	80 - 141	2	16
o-Xylene	50.0	50.51		ug/L		101	80 - 127	2	14
Styrene	50.0	51.70		ug/L		103	80 - 127	2	24
1,1,1,2-Tetrachloroethane	50.0	49.09		ug/L		98	74 - 135	3	16
Tetrachloroethene	50.0	48.17		ug/L		96	80 - 126	3	16
Toluene	50.0	51.88		ug/L		104	80 - 126	2	15
trans-1,2-Dichloroethene	50.0	51.28		ug/L		103	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	51.14		ug/L		102	63 - 134	3	14
1,3,5-Trichlorobenzene	50.0	49.39		ug/L		99	70 - 130	2	30
1,1,1-Trichloroethane	50.0	49.53		ug/L		99	78 - 135	2	17
1,1,2-Trichloroethane	50.0	51.63		ug/L		103	80 - 124	3	15
Trichloroethene	50.0	50.52		ug/L		101	80 - 123	1	17
Vinyl chloride	50.0	49.49		ug/L		99	68 - 120	4	17
Xylenes, Total	100	100.9		ug/L		101	80 - 132	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-60522-C-4 MS
Matrix: Water
Analysis Batch: 188835

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	7.49	B	250	324.3		ug/L		127	45 - 141
Benzene	ND		50.0	55.94		ug/L		112	75 - 133
Bromoform	ND		50.0	49.36		ug/L		99	42 - 147
Bromomethane	ND		50.0	35.23		ug/L		70	16 - 163
2-Butanone (MEK)	ND		250	277.2		ug/L		111	50 - 138
Carbon disulfide	ND		50.0	53.43		ug/L		107	48 - 152
Carbon tetrachloride	ND		50.0	49.89		ug/L		100	62 - 164
Chlorobenzene	ND		50.0	53.43		ug/L		107	80 - 129
Chlorodibromomethane	ND		50.0	51.47		ug/L		103	66 - 140
Chloroethane	ND		50.0	48.60		ug/L		97	58 - 137
Chloroform	ND		50.0	56.47		ug/L		113	66 - 138
Chloromethane	ND		50.0	29.84		ug/L		60	10 - 169
cis-1,2-Dichloroethene	ND		50.0	54.37		ug/L		109	68 - 138
cis-1,3-Dichloropropene	ND		50.0	52.71		ug/L		105	71 - 141
Dibromomethane	ND		50.0	48.49		ug/L		97	58 - 140
Dichlorobromomethane	ND		50.0	52.22		ug/L		104	70 - 140
1,1-Dichloroethane	ND		50.0	54.75		ug/L		110	71 - 139
1,2-Dichloroethane	ND		50.0	51.25		ug/L		102	64 - 136
1,1-Dichloroethene	ND		50.0	55.76		ug/L		112	70 - 142
1,2-Dichloropropane	ND		50.0	55.75		ug/L		111	67 - 131
1,1-Dichloropropene	ND		50.0	54.55		ug/L		109	76 - 139
Ethylbenzene	ND		50.0	53.31		ug/L		107	79 - 139
2-Hexanone	ND		250	305.6		ug/L		122	50 - 150
Methylene Chloride	ND		50.0	55.10		ug/L		110	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	295.2		ug/L		118	50 - 147
m-Xylene & p-Xylene	ND		50.0	53.48		ug/L		107	80 - 153
o-Xylene	ND		50.0	53.41		ug/L		107	74 - 138
Styrene	ND		50.0	54.04		ug/L		108	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	51.56		ug/L		103	73 - 141
Tetrachloroethene	ND		50.0	51.44		ug/L		103	72 - 145
Toluene	ND		50.0	54.00		ug/L		108	75 - 136
trans-1,2-Dichloroethene	ND		50.0	54.56		ug/L		109	66 - 143
trans-1,3-Dichloropropene	ND		50.0	51.61		ug/L		103	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	49.70		ug/L		99	60 - 140
1,1,1-Trichloroethane	ND		50.0	54.33		ug/L		109	76 - 149
1,1,2-Trichloroethane	ND		50.0	53.70		ug/L		107	74 - 134
Trichloroethene	ND		50.0	54.22		ug/L		108	73 - 144
Vinyl chloride	ND		50.0	48.42		ug/L		97	56 - 129
Xylenes, Total	ND		100	106.9		ug/L		107	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-60522-D-4 MSD
Matrix: Water
Analysis Batch: 188835

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	7.49	B	250	307.1		ug/L		120	45 - 141	5	21
Benzene	ND		50.0	57.95		ug/L		116	75 - 133	4	17
Bromoform	ND		50.0	49.96		ug/L		100	42 - 147	1	16
Bromomethane	ND		50.0	46.45		ug/L		93	16 - 163	27	50
2-Butanone (MEK)	ND		250	276.0		ug/L		110	50 - 138	0	19
Carbon disulfide	ND		50.0	55.43		ug/L		111	48 - 152	4	21
Carbon tetrachloride	ND		50.0	53.34		ug/L		107	62 - 164	7	19
Chlorobenzene	ND		50.0	55.55		ug/L		111	80 - 129	4	14
Chlorodibromomethane	ND		50.0	54.06		ug/L		108	66 - 140	5	15
Chloroethane	ND		50.0	50.32		ug/L		101	58 - 137	3	20
Chloroform	ND		50.0	57.89		ug/L		116	66 - 138	2	18
Chloromethane	ND		50.0	33.83		ug/L		68	10 - 169	13	31
cis-1,2-Dichloroethene	ND		50.0	56.25		ug/L		112	68 - 138	3	17
cis-1,3-Dichloropropene	ND		50.0	55.96		ug/L		112	71 - 141	6	15
Dibromomethane	ND		50.0	49.75		ug/L		99	58 - 140	3	16
Dichlorobromomethane	ND		50.0	53.65		ug/L		107	70 - 140	3	18
1,1-Dichloroethane	ND		50.0	58.83		ug/L		118	71 - 139	7	17
1,2-Dichloroethane	ND		50.0	51.92		ug/L		104	64 - 136	1	17
1,1-Dichloroethene	ND		50.0	58.02		ug/L		116	70 - 142	4	17
1,2-Dichloropropane	ND		50.0	58.18		ug/L		116	67 - 131	4	17
1,1-Dichloropropene	ND		50.0	57.37		ug/L		115	76 - 139	5	17
Ethylbenzene	ND		50.0	55.68		ug/L		111	79 - 139	4	15
2-Hexanone	ND		250	304.0		ug/L		122	50 - 150	1	15
Methylene Chloride	ND		50.0	56.03		ug/L		112	64 - 139	2	17
4-Methyl-2-pentanone (MIBK)	ND		250	295.8		ug/L		118	50 - 147	0	17
m-Xylene & p-Xylene	ND		50.0	55.61		ug/L		111	80 - 153	4	16
o-Xylene	ND		50.0	55.66		ug/L		111	74 - 138	4	14
Styrene	ND		50.0	56.38		ug/L		113	61 - 148	4	24
1,1,1,2-Tetrachloroethane	ND		50.0	54.39		ug/L		109	73 - 141	5	16
Tetrachloroethene	ND		50.0	54.63		ug/L		109	72 - 145	6	16
Toluene	ND		50.0	57.59		ug/L		115	75 - 136	6	15
trans-1,2-Dichloroethene	ND		50.0	56.49		ug/L		113	66 - 143	3	16
trans-1,3-Dichloropropene	ND		50.0	54.15		ug/L		108	59 - 135	5	14
1,3,5-Trichlorobenzene	ND		50.0	53.57		ug/L		107	60 - 140	7	30
1,1,1-Trichloroethane	ND		50.0	56.49		ug/L		113	76 - 149	4	17
1,1,2-Trichloroethane	ND		50.0	55.30		ug/L		111	74 - 134	3	15
Trichloroethene	ND		50.0	56.30		ug/L		113	73 - 144	4	17
Vinyl chloride	ND		50.0	49.12		ug/L		98	56 - 129	1	17
Xylenes, Total	ND		100	111.3		ug/L		111	74 - 141	4	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

GC/MS VOA

Analysis Batch: 188175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-60459-1	IW-100	Total/NA	Water	8260B	
490-60459-2	OW-103	Total/NA	Water	8260B	
490-60459-3	GAC Outlet 2-3	Total/NA	Water	8260B	
490-60459-4	Effluent	Total/NA	Water	8260B	
490-60459-5	Trip Blank	Total/NA	Water	8260B	
490-60469-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-60469-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-188175/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-188175/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-188175/8	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 188835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-60459-5 - RA	Trip Blank	Total/NA	Water	8260B	
490-60522-C-4 MS	Matrix Spike	Total/NA	Water	8260B	
490-60522-D-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-188835/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-188835/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-188835/8	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

Client Sample ID: IW-100 — Lab Sample ID: 490-60459-1

Date Collected: 08/28/14 11:00 — **Matrix: Water**
Date Received: 08/29/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	188175	09/03/14 20:25	BJM	TAL NSH

Client Sample ID: OW-103 — Lab Sample ID: 490-60459-2

Date Collected: 08/28/14 11:10 — **Matrix: Water**
Date Received: 08/29/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	188175	09/03/14 20:51	BJM	TAL NSH

Client Sample ID: GAC Outlet 2-3 — Lab Sample ID: 490-60459-3

Date Collected: 08/28/14 11:20 — **Matrix: Water**
Date Received: 08/29/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	188175	09/03/14 21:17	BJM	TAL NSH

Client Sample ID: Effluent — Lab Sample ID: 490-60459-4

Date Collected: 08/28/14 11:30 — **Matrix: Water**
Date Received: 08/29/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	188175	09/03/14 19:33	BJM	TAL NSH

Client Sample ID: Trip Blank — Lab Sample ID: 490-60459-5

Date Collected: 08/28/14 00:01 — **Matrix: Water**
Date Received: 08/29/14 08:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	188175	09/03/14 19:08	BJM	TAL NSH
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	188835	09/05/14 21:40	BJM	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60459-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-60459 Chain of Custody

Cooler Received/Opened On 8/29/2014 @ 0820

1. Tracking # 3229 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 4.4 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: _____

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) mdm

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) mdm

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mdm

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mdm

I certify that I attached a label with the unique LIMS number to each container (intial) mdm

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN EN

Loc: 490
60459

9/9/2014

Client Information	Sampler: Jeffrey Buckman	Lab PM: Brown, Shali	Carrier Tracking No(s):	FORD Site E10
Client Contact: Chuck Castelluccio	Phone: 513-582-7639	E-Mail: shali.brown@testamericainc.com		Page:
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Standard			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #: MA000725.014B.00102			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	NH full list VOC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D	A		
1W-100	8/28/14	1100		W					3		-1
1W-103	↓	1110		W					3		2
GAC outlet 2-3		1120		W					3		3
Effluent		1130		W					3		4
Trip Blank	—	—	—	W					2		5

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 8/28/14 15:30	Company: ARCADIS	Received by: [signature]	Date/Time: 8.29.14 @ 0830	Company: TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 4.4c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-60459-1

Login Number: 60459

List Number: 1

Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.4
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-60918-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
9/16/2014 11:31:03 AM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60918-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-60918-1	1W-100	Water	09/05/14 11:00	09/06/14 08:30
490-60918-2	1W-103	Water	09/05/14 11:10	09/06/14 08:30
490-60918-3	GAC Outlet 2-3	Water	09/05/14 11:20	09/06/14 08:30
490-60918-4	Effluent	Water	09/05/14 11:30	09/06/14 08:30
490-60918-5	Trip Blank	Water	09/05/14 00:01	09/06/14 08:30

Job ID: 490-60918-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-60918-1

Comments
No additional comments.

Receipt
The samples were received on 9/6/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8º C.

GC/MS VOA
Method(s) 8260B: The method blank for batch 189843 contained Toluene 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 was not performed. (MB 490-189843/9)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60918-1

Client Sample ID: 1W-100

Date Collected: 09/05/14 11:00
Date Received: 09/06/14 08:30

Lab Sample ID: 490-60918-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/11/14 21:00	1
Benzene	**18.4**		0.500	0.200	ug/L			09/11/14 21:00	1
Bromoform	ND		0.500	0.290	ug/L			09/11/14 21:00	1
Bromomethane	ND		0.500	0.350	ug/L			09/11/14 21:00	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/11/14 21:00	1
Carbon disulfide	**1.48**		0.500	0.220	ug/L			09/11/14 21:00	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/11/14 21:00	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/11/14 21:00	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/11/14 21:00	1
Chloroethane	ND		0.500	0.360	ug/L			09/11/14 21:00	1
Chloroform	ND		0.500	0.230	ug/L			09/11/14 21:00	1
Chloromethane	ND		0.500	0.360	ug/L			09/11/14 21:00	1
cis-1,2-Dichloroethene	**16.1**		0.500	0.210	ug/L			09/11/14 21:00	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 21:00	1
Dibromomethane	ND		0.500	0.450	ug/L			09/11/14 21:00	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/11/14 21:00	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/11/14 21:00	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/11/14 21:00	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/11/14 21:00	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/11/14 21:00	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/11/14 21:00	1
Ethylbenzene	**4.42**		0.500	0.190	ug/L			09/11/14 21:00	1
2-Hexanone	ND		5.00	1.28	ug/L			09/11/14 21:00	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/11/14 21:00	1
4-Methyl-2-pentanone (MIBK)	**13.7**		5.00	0.810	ug/L			09/11/14 21:00	1
m-Xylene & p-Xylene	**4.07**		0.500	0.380	ug/L			09/11/14 21:00	1
o-Xylene	**2.67**		0.500	0.200	ug/L			09/11/14 21:00	1
Styrene	ND		0.500	0.280	ug/L			09/11/14 21:00	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/11/14 21:00	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/11/14 21:00	1
Toluene	**0.994**	**B**	0.500	0.170	ug/L			09/11/14 21:00	1
trans-1,2-Dichloroethene	**2.07**		0.500	0.230	ug/L			09/11/14 21:00	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 21:00	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/11/14 21:00	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 21:00	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 21:00	1
Trichloroethene	**2.11**		0.500	0.200	ug/L			09/11/14 21:00	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/11/14 21:00	1
Xylenes, Total	**6.74**		1.50	0.580	ug/L			09/11/14 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/11/14 21:00*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/11/14 21:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*09/11/14 21:00*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/11/14 21:00*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60918-1

Client Sample ID: 1W-103

Date Collected: 09/05/14 11:10
Date Received: 09/06/14 08:30

Lab Sample ID: 490-60918-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/11/14 21:28	1
Benzene	**31.8**		0.500	0.200	ug/L			09/11/14 21:28	1
Bromoform	ND		0.500	0.290	ug/L			09/11/14 21:28	1
Bromomethane	ND		0.500	0.350	ug/L			09/11/14 21:28	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/11/14 21:28	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/11/14 21:28	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/11/14 21:28	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/11/14 21:28	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/11/14 21:28	1
Chloroethane	ND		0.500	0.360	ug/L			09/11/14 21:28	1
Chloroform	ND		0.500	0.230	ug/L			09/11/14 21:28	1
Chloromethane	ND		0.500	0.360	ug/L			09/11/14 21:28	1
cis-1,2-Dichloroethene	**29.2**		0.500	0.210	ug/L			09/11/14 21:28	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 21:28	1
Dibromomethane	ND		0.500	0.450	ug/L			09/11/14 21:28	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/11/14 21:28	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/11/14 21:28	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/11/14 21:28	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/11/14 21:28	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/11/14 21:28	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/11/14 21:28	1
Ethylbenzene	**11.5**		0.500	0.190	ug/L			09/11/14 21:28	1
2-Hexanone	ND		5.00	1.28	ug/L			09/11/14 21:28	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/11/14 21:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/11/14 21:28	1
m-Xylene & p-Xylene	**9.66**		0.500	0.380	ug/L			09/11/14 21:28	1
o-Xylene	ND		0.500	0.200	ug/L			09/11/14 21:28	1
Styrene	ND		0.500	0.280	ug/L			09/11/14 21:28	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/11/14 21:28	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/11/14 21:28	1
Toluene	**0.210**	**J B**	0.500	0.170	ug/L			09/11/14 21:28	1
trans-1,2-Dichloroethene	**1.08**		0.500	0.230	ug/L			09/11/14 21:28	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 21:28	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/11/14 21:28	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 21:28	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 21:28	1
Trichloroethene	**0.530**		0.500	0.200	ug/L			09/11/14 21:28	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/11/14 21:28	1
Xylenes, Total	**9.81**		1.50	0.580	ug/L			09/11/14 21:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/11/14 21:28*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/11/14 21:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*09/11/14 21:28*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/11/14 21:28*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60918-1

Client Sample ID: GAC Outlet 2-3

Lab Sample ID: 490-60918-3

Date Collected: 09/05/14 11:20
Date Received: 09/06/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/11/14 21:56	1
Benzene	ND		0.500	0.200	ug/L			09/11/14 21:56	1
Bromoform	ND		0.500	0.290	ug/L			09/11/14 21:56	1
Bromomethane	ND		0.500	0.350	ug/L			09/11/14 21:56	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/11/14 21:56	1
Carbon disulfide	**12.0**		0.500	0.220	ug/L			09/11/14 21:56	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/11/14 21:56	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/11/14 21:56	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/11/14 21:56	1
Chloroethane	ND		0.500	0.360	ug/L			09/11/14 21:56	1
Chloroform	ND		0.500	0.230	ug/L			09/11/14 21:56	1
Chloromethane	**2.01**		0.500	0.360	ug/L			09/11/14 21:56	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/11/14 21:56	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 21:56	1
Dibromomethane	ND		0.500	0.450	ug/L			09/11/14 21:56	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/11/14 21:56	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/11/14 21:56	1
1,2-Dichloroethane	**0.546**		0.500	0.200	ug/L			09/11/14 21:56	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/11/14 21:56	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/11/14 21:56	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/11/14 21:56	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/11/14 21:56	1
2-Hexanone	ND		5.00	1.28	ug/L			09/11/14 21:56	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/11/14 21:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/11/14 21:56	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/11/14 21:56	1
o-Xylene	ND		0.500	0.200	ug/L			09/11/14 21:56	1
Styrene	ND		0.500	0.280	ug/L			09/11/14 21:56	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/11/14 21:56	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/11/14 21:56	1
Toluene	ND		0.500	0.170	ug/L			09/11/14 21:56	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/11/14 21:56	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 21:56	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/11/14 21:56	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 21:56	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 21:56	1
Trichloroethene	ND		0.500	0.200	ug/L			09/11/14 21:56	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/11/14 21:56	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/11/14 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*09/11/14 21:56*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/11/14 21:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/11/14 21:56*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*09/11/14 21:56*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60918-1

Client Sample ID: Effluent

Lab Sample ID: 490-60918-4

Date Collected: 09/05/14 11:30
Date Received: 09/06/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/11/14 20:31	1
Benzene	ND		0.500	0.200	ug/L			09/11/14 20:31	1
Bromoform	ND		0.500	0.290	ug/L			09/11/14 20:31	1
Bromomethane	ND		0.500	0.350	ug/L			09/11/14 20:31	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/11/14 20:31	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/11/14 20:31	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/11/14 20:31	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/11/14 20:31	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/11/14 20:31	1
Chloroethane	ND		0.500	0.360	ug/L			09/11/14 20:31	1
Chloroform	ND		0.500	0.230	ug/L			09/11/14 20:31	1
Chloromethane	ND		0.500	0.360	ug/L			09/11/14 20:31	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/11/14 20:31	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 20:31	1
Dibromomethane	ND		0.500	0.450	ug/L			09/11/14 20:31	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/11/14 20:31	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/11/14 20:31	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/11/14 20:31	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/11/14 20:31	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/11/14 20:31	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/11/14 20:31	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/11/14 20:31	1
2-Hexanone	ND		5.00	1.28	ug/L			09/11/14 20:31	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/11/14 20:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/11/14 20:31	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/11/14 20:31	1
o-Xylene	ND		0.500	0.200	ug/L			09/11/14 20:31	1
Styrene	ND		0.500	0.280	ug/L			09/11/14 20:31	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/11/14 20:31	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/11/14 20:31	1
Toluene	ND		0.500	0.170	ug/L			09/11/14 20:31	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/11/14 20:31	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 20:31	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/11/14 20:31	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 20:31	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 20:31	1
Trichloroethene	ND		0.500	0.200	ug/L			09/11/14 20:31	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/11/14 20:31	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/11/14 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*09/11/14 20:31*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/11/14 20:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*09/11/14 20:31*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/11/14 20:31*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60918-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-60918-5

Date Collected: 09/05/14 00:01
Date Received: 09/06/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/11/14 13:54	1
Benzene	ND		0.500	0.200	ug/L			09/11/14 13:54	1
Bromoform	ND		0.500	0.290	ug/L			09/11/14 13:54	1
Bromomethane	ND		0.500	0.350	ug/L			09/11/14 13:54	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/11/14 13:54	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/11/14 13:54	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/11/14 13:54	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/11/14 13:54	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/11/14 13:54	1
Chloroethane	ND		0.500	0.360	ug/L			09/11/14 13:54	1
Chloroform	ND		0.500	0.230	ug/L			09/11/14 13:54	1
Chloromethane	ND		0.500	0.360	ug/L			09/11/14 13:54	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/11/14 13:54	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 13:54	1
Dibromomethane	ND		0.500	0.450	ug/L			09/11/14 13:54	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/11/14 13:54	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/11/14 13:54	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/11/14 13:54	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/11/14 13:54	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/11/14 13:54	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/11/14 13:54	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/11/14 13:54	1
2-Hexanone	ND		5.00	1.28	ug/L			09/11/14 13:54	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/11/14 13:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/11/14 13:54	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/11/14 13:54	1
o-Xylene	ND		0.500	0.200	ug/L			09/11/14 13:54	1
Styrene	ND		0.500	0.280	ug/L			09/11/14 13:54	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/11/14 13:54	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/11/14 13:54	1
Toluene	**0.373**	**J B**	0.500	0.170	ug/L			09/11/14 13:54	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/11/14 13:54	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 13:54	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/11/14 13:54	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 13:54	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 13:54	1
Trichloroethene	ND		0.500	0.200	ug/L			09/11/14 13:54	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/11/14 13:54	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/11/14 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*09/11/14 13:54*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*09/11/14 13:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/11/14 13:54*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/11/14 13:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-189843/9
Matrix: Water
Analysis Batch: 189843

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/11/14 13:16	1
Benzene	ND		0.500	0.200	ug/L			09/11/14 13:16	1
Bromoform	ND		0.500	0.290	ug/L			09/11/14 13:16	1
Bromomethane	ND		0.500	0.350	ug/L			09/11/14 13:16	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/11/14 13:16	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/11/14 13:16	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/11/14 13:16	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/11/14 13:16	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/11/14 13:16	1
Chloroethane	ND		0.500	0.360	ug/L			09/11/14 13:16	1
Chloroform	ND		0.500	0.230	ug/L			09/11/14 13:16	1
Chloromethane	ND		0.500	0.360	ug/L			09/11/14 13:16	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/11/14 13:16	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 13:16	1
Dibromomethane	ND		0.500	0.450	ug/L			09/11/14 13:16	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/11/14 13:16	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/11/14 13:16	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/11/14 13:16	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/11/14 13:16	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/11/14 13:16	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/11/14 13:16	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/11/14 13:16	1
2-Hexanone	ND		5.00	1.28	ug/L			09/11/14 13:16	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/11/14 13:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/11/14 13:16	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/11/14 13:16	1
o-Xylene	ND		0.500	0.200	ug/L			09/11/14 13:16	1
Styrene	ND		0.500	0.280	ug/L			09/11/14 13:16	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/11/14 13:16	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/11/14 13:16	1
Toluene	0.2013	J	0.500	0.170	ug/L			09/11/14 13:16	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/11/14 13:16	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/11/14 13:16	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/11/14 13:16	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 13:16	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/11/14 13:16	1
Trichloroethene	ND		0.500	0.200	ug/L			09/11/14 13:16	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/11/14 13:16	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/11/14 13:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*09/11/14 13:16*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/11/14 13:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*09/11/14 13:16*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*09/11/14 13:16*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-189843/5
Matrix: Water
Analysis Batch: 189843

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	275.7		ug/L		110	54 - 145
Benzene	50.0	53.66		ug/L		107	80 - 121
Bromoform	50.0	55.42		ug/L		111	46 - 145
Bromomethane	50.0	54.54		ug/L		109	41 - 150
2-Butanone (MEK)	250	283.6		ug/L		113	62 - 133
Carbon disulfide	50.0	52.10		ug/L		104	77 - 126
Carbon tetrachloride	50.0	53.97		ug/L		108	64 - 147
Chlorobenzene	50.0	53.46		ug/L		107	80 - 120
Chlorodibromomethane	50.0	54.64		ug/L		109	69 - 133
Chloroethane	50.0	54.28		ug/L		109	72 - 120
Chloroform	50.0	51.34		ug/L		103	73 - 129
Chloromethane	50.0	52.44		ug/L		105	12 - 150
cis-1,2-Dichloroethene	50.0	54.78		ug/L		110	76 - 125
cis-1,3-Dichloropropene	50.0	54.28		ug/L		109	74 - 140
Dibromomethane	50.0	53.02		ug/L		106	71 - 125
Dichlorobromomethane	50.0	53.60		ug/L		107	75 - 129
1,1-Dichloroethane	50.0	54.88		ug/L		110	78 - 125
1,2-Dichloroethane	50.0	53.34		ug/L		107	77 - 121
1,1-Dichloroethene	50.0	53.99		ug/L		108	79 - 124
1,2-Dichloropropane	50.0	53.29		ug/L		107	75 - 120
1,1-Dichloropropene	50.0	54.39		ug/L		109	80 - 122
Ethylbenzene	50.0	54.49		ug/L		109	80 - 130
2-Hexanone	250	270.7		ug/L		108	60 - 142
Methylene Chloride	50.0	52.26		ug/L		105	79 - 123
4-Methyl-2-pentanone (MIBK)	250	270.0		ug/L		108	60 - 137
m-Xylene & p-Xylene	50.0	54.76		ug/L		110	80 - 141
o-Xylene	50.0	56.12		ug/L		112	80 - 127
Styrene	50.0	56.58		ug/L		113	80 - 127
1,1,1,2-Tetrachloroethane	50.0	53.59		ug/L		107	74 - 135
Tetrachloroethene	50.0	53.64		ug/L		107	80 - 126
Toluene	50.0	54.06		ug/L		108	80 - 126
trans-1,2-Dichloroethene	50.0	54.83		ug/L		110	79 - 126
trans-1,3-Dichloropropene	50.0	54.35		ug/L		109	63 - 134
1,3,5-Trichlorobenzene	50.0	58.09		ug/L		116	70 - 130
1,1,1-Trichloroethane	50.0	52.94		ug/L		106	78 - 135
1,1,2-Trichloroethane	50.0	53.56		ug/L		107	80 - 124
Trichloroethene	50.0	54.81		ug/L		110	80 - 123
Vinyl chloride	50.0	54.41		ug/L		109	68 - 120
Xylenes, Total	100	110.9		ug/L		111	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-189843/6
Matrix: Water
Analysis Batch: 189843

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
Acetone	250	274.7		ug/L		110	54 - 145	0	21
Benzene	50.0	52.45		ug/L		105	80 - 121	2	17
Bromoform	50.0	53.15		ug/L		106	46 - 145	4	16
Bromomethane	50.0	56.70		ug/L		113	41 - 150	4	50
2-Butanone (MEK)	250	279.4		ug/L		112	62 - 133	2	19
Carbon disulfide	50.0	52.21		ug/L		104	77 - 126	0	21
Carbon tetrachloride	50.0	52.18		ug/L		104	64 - 147	3	19
Chlorobenzene	50.0	51.84		ug/L		104	80 - 120	3	14
Chlorodibromomethane	50.0	52.58		ug/L		105	69 - 133	4	15
Chloroethane	50.0	53.16		ug/L		106	72 - 120	2	20
Chloroform	50.0	50.19		ug/L		100	73 - 129	2	18
Chloromethane	50.0	52.84		ug/L		106	12 - 150	1	31
cis-1,2-Dichloroethene	50.0	53.55		ug/L		107	76 - 125	2	17
cis-1,3-Dichloropropene	50.0	53.14		ug/L		106	74 - 140	2	15
Dibromomethane	50.0	51.79		ug/L		104	71 - 125	2	16
Dichlorobromomethane	50.0	52.41		ug/L		105	75 - 129	2	18
1,1-Dichloroethane	50.0	53.70		ug/L		107	78 - 125	2	17
1,2-Dichloroethane	50.0	52.40		ug/L		105	77 - 121	2	17
1,1-Dichloroethene	50.0	51.93		ug/L		104	79 - 124	4	17
1,2-Dichloropropane	50.0	52.38		ug/L		105	75 - 120	2	17
1,1-Dichloropropene	50.0	52.67		ug/L		105	80 - 122	3	17
Ethylbenzene	50.0	53.23		ug/L		106	80 - 130	2	15
2-Hexanone	250	263.8		ug/L		106	60 - 142	3	15
Methylene Chloride	50.0	51.15		ug/L		102	79 - 123	2	17
4-Methyl-2-pentanone (MIBK)	250	259.1		ug/L		104	60 - 137	4	17
m-Xylene & p-Xylene	50.0	53.39		ug/L		107	80 - 141	3	16
o-Xylene	50.0	54.55		ug/L		109	80 - 127	3	14
Styrene	50.0	55.67		ug/L		111	80 - 127	2	24
1,1,1,2-Tetrachloroethane	50.0	52.03		ug/L		104	74 - 135	3	16
Tetrachloroethene	50.0	52.10		ug/L		104	80 - 126	3	16
Toluene	50.0	52.73		ug/L		105	80 - 126	2	15
trans-1,2-Dichloroethene	50.0	54.54		ug/L		109	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	53.27		ug/L		107	63 - 134	2	14
1,3,5-Trichlorobenzene	50.0	55.94		ug/L		112	70 - 130	4	30
1,1,1-Trichloroethane	50.0	51.66		ug/L		103	78 - 135	2	17
1,1,2-Trichloroethane	50.0	51.47		ug/L		103	80 - 124	4	15
Trichloroethene	50.0	53.36		ug/L		107	80 - 123	3	17
Vinyl chloride	50.0	53.33		ug/L		107	68 - 120	2	17
Xylenes, Total	100	107.9		ug/L		108	80 - 132	3	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-60922-B-1 MS
Matrix: Water
Analysis Batch: 189843

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	241.5		ug/L		97	45 - 141
Benzene	ND		50.0	54.56		ug/L		109	75 - 133
Bromoform	ND		50.0	51.80		ug/L		104	42 - 147
Bromomethane	ND		50.0	49.06		ug/L		98	16 - 163
2-Butanone (MEK)	ND		250	256.8		ug/L		103	50 - 138
Carbon disulfide	ND		50.0	54.15		ug/L		108	48 - 152
Carbon tetrachloride	ND		50.0	57.37		ug/L		115	62 - 164
Chlorobenzene	ND		50.0	52.88		ug/L		106	80 - 129
Chlorodibromomethane	ND		50.0	52.00		ug/L		104	66 - 140
Chloroethane	ND		50.0	55.51		ug/L		111	58 - 137
Chloroform	ND		50.0	52.26		ug/L		105	66 - 138
Chloromethane	ND		50.0	53.89		ug/L		108	10 - 169
cis-1,2-Dichloroethene	ND		50.0	50.50		ug/L		101	68 - 138
cis-1,3-Dichloropropene	ND		50.0	45.40		ug/L		91	71 - 141
Dibromomethane	ND		50.0	51.93		ug/L		104	58 - 140
Dichlorobromomethane	ND		50.0	53.30		ug/L		107	70 - 140
1,1-Dichloroethane	ND		50.0	55.69		ug/L		111	71 - 139
1,2-Dichloroethane	ND		50.0	52.55		ug/L		105	64 - 136
1,1-Dichloroethene	ND		50.0	56.09		ug/L		112	70 - 142
1,2-Dichloropropane	ND		50.0	53.54		ug/L		107	67 - 131
1,1-Dichloropropene	ND		50.0	56.44		ug/L		113	76 - 139
Ethylbenzene	ND		50.0	54.99		ug/L		110	79 - 139
2-Hexanone	ND		250	245.4		ug/L		98	50 - 150
Methylene Chloride	ND		50.0	51.14		ug/L		102	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	245.5		ug/L		98	50 - 147
m-Xylene & p-Xylene	ND		50.0	55.10		ug/L		110	80 - 153
o-Xylene	ND		50.0	56.04		ug/L		112	74 - 138
Styrene	ND		50.0	54.73		ug/L		109	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	53.29		ug/L		107	73 - 141
Tetrachloroethene	ND		50.0	53.86		ug/L		108	72 - 145
Toluene	0.196	J B	50.0	54.17		ug/L		108	75 - 136
trans-1,2-Dichloroethene	ND		50.0	55.81		ug/L		112	66 - 143
trans-1,3-Dichloropropene	ND		50.0	44.94		ug/L		90	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	53.71		ug/L		107	60 - 140
1,1,1-Trichloroethane	ND		50.0	55.41		ug/L		111	76 - 149
1,1,2-Trichloroethane	ND		50.0	51.75		ug/L		103	74 - 134
Trichloroethene	ND		50.0	56.35		ug/L		113	73 - 144
Vinyl chloride	ND		50.0	55.85		ug/L		112	56 - 129
Xylenes, Total	ND		100	111.1		ug/L		111	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-60922-C-1 MSD
Matrix: Water
Analysis Batch: 189843

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	289.8		ug/L		116	45 - 141	18	21
Benzene	ND		50.0	58.29		ug/L		117	75 - 133	7	17
Bromoform	ND		50.0	57.98		ug/L		116	42 - 147	11	16
Bromomethane	ND		50.0	60.31		ug/L		121	16 - 163	21	50
2-Butanone (MEK)	ND		250	289.0		ug/L		116	50 - 138	12	19
Carbon disulfide	ND		50.0	59.14		ug/L		118	48 - 152	9	21
Carbon tetrachloride	ND		50.0	60.97		ug/L		122	62 - 164	6	19
Chlorobenzene	ND		50.0	57.35		ug/L		115	80 - 129	8	14
Chlorodibromomethane	ND		50.0	57.40		ug/L		115	66 - 140	10	15
Chloroethane	ND		50.0	60.16		ug/L		120	58 - 137	8	20
Chloroform	ND		50.0	55.40		ug/L		111	66 - 138	6	18
Chloromethane	ND		50.0	60.04		ug/L		120	10 - 169	11	31
cis-1,2-Dichloroethene	ND		50.0	54.17		ug/L		108	68 - 138	7	17
cis-1,3-Dichloropropene	ND		50.0	50.63		ug/L		101	71 - 141	11	15
Dibromomethane	ND		50.0	56.82		ug/L		114	58 - 140	9	16
Dichlorobromomethane	ND		50.0	57.17		ug/L		114	70 - 140	7	18
1,1-Dichloroethane	ND		50.0	60.10		ug/L		120	71 - 139	8	17
1,2-Dichloroethane	ND		50.0	56.53		ug/L		113	64 - 136	7	17
1,1-Dichloroethene	ND		50.0	64.59		ug/L		129	70 - 142	14	17
1,2-Dichloropropane	ND		50.0	56.91		ug/L		114	67 - 131	6	17
1,1-Dichloropropene	ND		50.0	60.58		ug/L		121	76 - 139	7	17
Ethylbenzene	ND		50.0	59.66		ug/L		119	79 - 139	8	15
2-Hexanone	ND		250	281.6		ug/L		113	50 - 150	14	15
Methylene Chloride	ND		50.0	55.74		ug/L		111	64 - 139	9	17
4-Methyl-2-pentanone (MIBK)	ND		250	284.1		ug/L		114	50 - 147	15	17
m-Xylene & p-Xylene	ND		50.0	60.89		ug/L		122	80 - 153	10	16
o-Xylene	ND		50.0	61.19		ug/L		122	74 - 138	9	14
Styrene	ND		50.0	59.94		ug/L		120	61 - 148	9	24
1,1,1,2-Tetrachloroethane	ND		50.0	57.61		ug/L		115	73 - 141	8	16
Tetrachloroethene	ND		50.0	58.81		ug/L		118	72 - 145	9	16
Toluene	0.196	J B	50.0	59.11		ug/L		118	75 - 136	9	15
trans-1,2-Dichloroethene	ND		50.0	60.51		ug/L		121	66 - 143	8	16
trans-1,3-Dichloropropene	ND		50.0	49.81		ug/L		100	59 - 135	10	14
1,3,5-Trichlorobenzene	ND		50.0	59.82		ug/L		120	60 - 140	11	30
1,1,1-Trichloroethane	ND		50.0	58.91		ug/L		118	76 - 149	6	17
1,1,2-Trichloroethane	ND		50.0	56.63		ug/L		113	74 - 134	9	15
Trichloroethene	ND		50.0	60.05		ug/L		120	73 - 144	6	17
Vinyl chloride	ND		50.0	61.46		ug/L		123	56 - 129	10	17
Xylenes, Total	ND		100	122.1		ug/L		122	74 - 141	9	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60918-1

GC/MS VOA

Analysis Batch: 189843

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-60918-1	1W-100	Total/NA	Water	8260B	
490-60918-2	1W-103	Total/NA	Water	8260B	
490-60918-3	GAC Outlet 2-3	Total/NA	Water	8260B	
490-60918-4	Effluent	Total/NA	Water	8260B	
490-60918-5	Trip Blank	Total/NA	Water	8260B	
490-60922-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-60922-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-189843/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-189843/6	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-189843/9	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60918-1

Client Sample ID: 1W-100 — Lab Sample ID: 490-60918-1

Date Collected: 09/05/14 11:00 — **Matrix: Water**
Date Received: 09/06/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	189843	09/11/14 21:00	JMG	TAL NSH

Client Sample ID: 1W-103 — Lab Sample ID: 490-60918-2

Date Collected: 09/05/14 11:10 — **Matrix: Water**
Date Received: 09/06/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	189843	09/11/14 21:28	JMG	TAL NSH

Client Sample ID: GAC Outlet 2-3 — Lab Sample ID: 490-60918-3

Date Collected: 09/05/14 11:20 — **Matrix: Water**
Date Received: 09/06/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	189843	09/11/14 21:56	JMG	TAL NSH

Client Sample ID: Effluent — Lab Sample ID: 490-60918-4

Date Collected: 09/05/14 11:30 — **Matrix: Water**
Date Received: 09/06/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	189843	09/11/14 20:31	JMG	TAL NSH

Client Sample ID: Trip Blank — Lab Sample ID: 490-60918-5

Date Collected: 09/05/14 00:01 — **Matrix: Water**
Date Received: 09/06/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	189843	09/11/14 13:54	JMG	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60918-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-60918-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14 *

* Certification renewal pending - certification considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-60918 Chain of Custody

Cooler Received/Opened On 9/6/2014 @ 0830

1. Tracking # 5807 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 2.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) GW

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial) AJH

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AJH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AJH

I certify that I attached a label with the unique LIMS number to each container (intial) AJH

21. Were there Non-Conformance issues at login? YES...NO Was a PIPE generated? YES...NO...#

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/2012

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information
Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone:
Email: chuck.castelluccio@arcadis-us.com
Project Name: Tibbetts Road Site E101274
Site:

Sampler: Jeffrey Buckman
Phone: 513-582-7639
Due Date Requested:
TAT Requested (days): Standard
PO #: Purchase Order Requested
WO #: MA000725.014B.00102
Lab Project #: 49002494
Client Project #:

Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Carrier Tracking No(s):

FORD Site E101274
Page:
Job #:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	NH full list VOC	Total Number of containers
			Preservation Code				A	D	A	
IW-100	9/5/14	1100		W					3	
IW-103	↓	1110		W					3	
GAC outlet 2-3		1120		W					3	
Effluent		1130		W					3	
Trip Blank	—	—	—	W					3	

Preservation Codes:
A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)
Other:

Special Instructions/Note:
Loc: 490
60918

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)
Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	9/5/14 15:30	ARCADIS	[signature]	9/6/14 5:30	TAN

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 2.4

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-60918-1

Login Number: 60918

List Source: TestAmerica Nashville

List Number: 1

Creator: Huskey, Adam

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Headspace larger than 1/4" in one or more vials, one vial with accpt. headspace
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-61427-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
9/24/2014 1:40:47 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-61427-1	IW-100	Water	09/11/14 09:00	09/13/14 09:05
490-61427-2	IW-103	Water	09/11/14 09:10	09/13/14 09:05
490-61427-3	202R	Water	09/11/14 09:39	09/13/14 09:05
490-61427-4	203R	Water	09/11/14 11:03	09/13/14 09:05
490-61427-5	204R	Water	09/11/14 10:45	09/13/14 09:05
490-61427-6	35R	Water	09/11/14 12:05	09/13/14 09:05
490-61427-7	201R	Water	09/11/14 13:15	09/13/14 09:05
490-61427-8	MW-301 (35-45)	Water	09/12/14 08:27	09/13/14 09:05
490-61427-9	MW-305 (145-155)	Water	09/12/14 08:45	09/13/14 09:05
490-61427-10	MW-305 (62-72)	Water	09/12/14 08:52	09/13/14 09:05
490-61427-11	Trip Blank	Water	09/11/14 00:01	09/13/14 09:05

Job ID: 490-61427-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-61427-1

Comments
No additional comments.

Receipt
The samples were received on 9/13/2014 9:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 1.3º C.

GC/MS VOA
Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with batch 191712.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: IW-100

Date Collected: 09/11/14 09:00
Date Received: 09/13/14 09:05

Lab Sample ID: 490-61427-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/18/14 03:05	1
Benzene	**15.1**		0.500	0.200	ug/L			09/18/14 03:05	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 03:05	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 03:05	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 03:05	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 03:05	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 03:05	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 03:05	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 03:05	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 03:05	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 03:05	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 03:05	1
cis-1,2-Dichloroethene	**18.5**		0.500	0.210	ug/L			09/18/14 03:05	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 03:05	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 03:05	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 03:05	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 03:05	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 03:05	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 03:05	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 03:05	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 03:05	1
Ethylbenzene	**3.77**		0.500	0.190	ug/L			09/18/14 03:05	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 03:05	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 03:05	1
4-Methyl-2-pentanone (MIBK)	**11.0**		5.00	0.810	ug/L			09/18/14 03:05	1
m-Xylene & p-Xylene	**3.52**		0.500	0.380	ug/L			09/18/14 03:05	1
o-Xylene	**2.25**		0.500	0.200	ug/L			09/18/14 03:05	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 03:05	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 03:05	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 03:05	1
Toluene	**0.635**		0.500	0.170	ug/L			09/18/14 03:05	1
trans-1,2-Dichloroethene	**1.98**		0.500	0.230	ug/L			09/18/14 03:05	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 03:05	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 03:05	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 03:05	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 03:05	1
Trichloroethene	**2.29**		0.500	0.200	ug/L			09/18/14 03:05	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 03:05	1
Xylenes, Total	**5.77**		1.50	0.580	ug/L			09/18/14 03:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/18/14 03:05*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/18/14 03:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*09/18/14 03:05*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/18/14 03:05*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: IW-103

Date Collected: 09/11/14 09:10
Date Received: 09/13/14 09:05

Lab Sample ID: 490-61427-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/18/14 03:31	1
Benzene	**24.8**		0.500	0.200	ug/L			09/18/14 03:31	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 03:31	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 03:31	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 03:31	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 03:31	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 03:31	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 03:31	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 03:31	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 03:31	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 03:31	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 03:31	1
cis-1,2-Dichloroethene	**27.5**		0.500	0.210	ug/L			09/18/14 03:31	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 03:31	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 03:31	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 03:31	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 03:31	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 03:31	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 03:31	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 03:31	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 03:31	1
Ethylbenzene	**8.55**		0.500	0.190	ug/L			09/18/14 03:31	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 03:31	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 03:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 03:31	1
m-Xylene & p-Xylene	**7.67**		0.500	0.380	ug/L			09/18/14 03:31	1
o-Xylene	ND		0.500	0.200	ug/L			09/18/14 03:31	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 03:31	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 03:31	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 03:31	1
Toluene	ND		0.500	0.170	ug/L			09/18/14 03:31	1
trans-1,2-Dichloroethene	**0.308**	**J**	0.500	0.230	ug/L			09/18/14 03:31	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 03:31	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 03:31	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 03:31	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 03:31	1
Trichloroethene	**0.564**		0.500	0.200	ug/L			09/18/14 03:31	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 03:31	1
Xylenes, Total	**7.82**		1.50	0.580	ug/L			09/18/14 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/18/14 03:31*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*09/18/14 03:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/18/14 03:31*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/18/14 03:31*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: 202R

Date Collected: 09/11/14 09:39
Date Received: 09/13/14 09:05

Lab Sample ID: 490-61427-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/18/14 03:58	1
Benzene	**0.264**	**J**	0.500	0.200	ug/L			09/18/14 03:58	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 03:58	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 03:58	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 03:58	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 03:58	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 03:58	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 03:58	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 03:58	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 03:58	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 03:58	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 03:58	1
cis-1,2-Dichloroethene	**2.92**		0.500	0.210	ug/L			09/18/14 03:58	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 03:58	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 03:58	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 03:58	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 03:58	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 03:58	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 03:58	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 03:58	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 03:58	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/18/14 03:58	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 03:58	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 03:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 03:58	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/18/14 03:58	1
o-Xylene	ND		0.500	0.200	ug/L			09/18/14 03:58	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 03:58	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 03:58	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 03:58	1
Toluene	ND		0.500	0.170	ug/L			09/18/14 03:58	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/18/14 03:58	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 03:58	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 03:58	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 03:58	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 03:58	1
Trichloroethene	**0.316**	**J**	0.500	0.200	ug/L			09/18/14 03:58	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 03:58	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/18/14 03:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*09/18/14 03:58*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/18/14 03:58*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/18/14 03:58*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/18/14 03:58*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: 203R

Date Collected: 09/11/14 11:03
Date Received: 09/13/14 09:05

Lab Sample ID: 490-61427-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/18/14 04:24	1
Benzene	**56.0**		0.500	0.200	ug/L			09/18/14 04:24	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 04:24	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 04:24	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 04:24	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 04:24	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 04:24	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 04:24	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 04:24	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 04:24	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 04:24	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 04:24	1
cis-1,2-Dichloroethene	**67.1**		0.500	0.210	ug/L			09/18/14 04:24	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 04:24	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 04:24	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 04:24	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 04:24	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 04:24	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 04:24	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 04:24	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 04:24	1
Ethylbenzene	**18.1**		0.500	0.190	ug/L			09/18/14 04:24	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 04:24	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 04:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 04:24	1
m-Xylene & p-Xylene	**15.5**		0.500	0.380	ug/L			09/18/14 04:24	1
o-Xylene	**0.240**	**J**	0.500	0.200	ug/L			09/18/14 04:24	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 04:24	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 04:24	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 04:24	1
Toluene	**0.177**	**J**	0.500	0.170	ug/L			09/18/14 04:24	1
trans-1,2-Dichloroethene	**0.294**	**J**	0.500	0.230	ug/L			09/18/14 04:24	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 04:24	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 04:24	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 04:24	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 04:24	1
Trichloroethene	**0.494**	**J**	0.500	0.200	ug/L			09/18/14 04:24	1
Vinyl chloride	**0.413**	**J**	0.500	0.180	ug/L			09/18/14 04:24	1
Xylenes, Total	**15.8**		1.50	0.580	ug/L			09/18/14 04:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/18/14 04:24*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*09/18/14 04:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*09/18/14 04:24*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/18/14 04:24*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: 204R

Date Collected: 09/11/14 10:45
Date Received: 09/13/14 09:05

Lab Sample ID: 490-61427-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/18/14 04:51	1
Benzene	ND		0.500	0.200	ug/L			09/18/14 04:51	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 04:51	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 04:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 04:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 04:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 04:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 04:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 04:51	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 04:51	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 04:51	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 04:51	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/18/14 04:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 04:51	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 04:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 04:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 04:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 04:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 04:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 04:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 04:51	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/18/14 04:51	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 04:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 04:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 04:51	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/18/14 04:51	1
o-Xylene	ND		0.500	0.200	ug/L			09/18/14 04:51	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 04:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 04:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 04:51	1
Toluene	ND		0.500	0.170	ug/L			09/18/14 04:51	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/18/14 04:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 04:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 04:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 04:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 04:51	1
Trichloroethene	ND		0.500	0.200	ug/L			09/18/14 04:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 04:51	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/18/14 04:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/18/14 04:51*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/18/14 04:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/18/14 04:51*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/18/14 04:51*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: 35R

Date Collected: 09/11/14 12:05
Date Received: 09/13/14 09:05

Lab Sample ID: 490-61427-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/18/14 05:17	1
Benzene	ND		0.500	0.200	ug/L			09/18/14 05:17	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 05:17	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 05:17	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 05:17	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 05:17	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 05:17	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 05:17	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 05:17	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 05:17	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 05:17	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 05:17	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/18/14 05:17	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 05:17	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 05:17	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 05:17	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 05:17	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 05:17	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 05:17	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 05:17	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 05:17	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/18/14 05:17	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 05:17	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 05:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 05:17	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/18/14 05:17	1
o-Xylene	ND		0.500	0.200	ug/L			09/18/14 05:17	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 05:17	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 05:17	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 05:17	1
Toluene	ND		0.500	0.170	ug/L			09/18/14 05:17	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/18/14 05:17	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 05:17	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 05:17	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 05:17	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 05:17	1
Trichloroethene	ND		0.500	0.200	ug/L			09/18/14 05:17	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 05:17	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/18/14 05:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/18/14 05:17*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/18/14 05:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*09/18/14 05:17*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/18/14 05:17*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: 201R

Date Collected: 09/11/14 13:15
Date Received: 09/13/14 09:05

Lab Sample ID: 490-61427-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/18/14 05:44	1
Benzene	**4.88**		0.500	0.200	ug/L			09/18/14 05:44	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 05:44	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 05:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 05:44	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 05:44	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 05:44	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 05:44	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 05:44	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 05:44	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 05:44	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 05:44	1
cis-1,2-Dichloroethene	**33.4**		0.500	0.210	ug/L			09/18/14 05:44	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 05:44	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 05:44	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 05:44	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 05:44	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 05:44	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 05:44	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 05:44	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 05:44	1
Ethylbenzene	**0.224**	**J**	0.500	0.190	ug/L			09/18/14 05:44	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 05:44	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 05:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 05:44	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/18/14 05:44	1
o-Xylene	ND		0.500	0.200	ug/L			09/18/14 05:44	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 05:44	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 05:44	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 05:44	1
Toluene	ND		0.500	0.170	ug/L			09/18/14 05:44	1
trans-1,2-Dichloroethene	**2.68**		0.500	0.230	ug/L			09/18/14 05:44	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 05:44	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 05:44	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 05:44	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 05:44	1
Trichloroethene	**0.617**		0.500	0.200	ug/L			09/18/14 05:44	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 05:44	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/18/14 05:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*09/18/14 05:44*	*1*
Dibromofluoromethane (Surr)	*99*		*70 - 130*		*09/18/14 05:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/18/14 05:44*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/18/14 05:44*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: MW-301 (35-45)

Lab Sample ID: 490-61427-8

Date Collected: 09/12/14 08:27
Date Received: 09/13/14 09:05

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**13.7**		5.00	2.66	ug/L			09/18/14 06:10	1
Benzene	**28.1**		0.500	0.200	ug/L			09/18/14 06:10	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 06:10	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 06:10	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 06:10	1
Carbon disulfide	**0.307**	**J**	0.500	0.220	ug/L			09/18/14 06:10	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 06:10	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 06:10	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 06:10	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 06:10	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 06:10	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 06:10	1
cis-1,2-Dichloroethene	**12.6**		0.500	0.210	ug/L			09/18/14 06:10	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 06:10	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 06:10	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 06:10	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 06:10	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 06:10	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 06:10	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 06:10	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 06:10	1
Ethylbenzene	**12.2**		0.500	0.190	ug/L			09/18/14 06:10	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 06:10	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 06:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 06:10	1
m-Xylene & p-Xylene	**10.4**		0.500	0.380	ug/L			09/18/14 06:10	1
o-Xylene	**0.216**	**J**	0.500	0.200	ug/L			09/18/14 06:10	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 06:10	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 06:10	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 06:10	1
Toluene	**0.514**		0.500	0.170	ug/L			09/18/14 06:10	1
trans-1,2-Dichloroethene	**0.241**	**J**	0.500	0.230	ug/L			09/18/14 06:10	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 06:10	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 06:10	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 06:10	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 06:10	1
Trichloroethene	ND		0.500	0.200	ug/L			09/18/14 06:10	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 06:10	1
Xylenes, Total	**10.6**		1.50	0.580	ug/L			09/18/14 06:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/18/14 06:10*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*09/18/14 06:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*09/18/14 06:10*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*09/18/14 06:10*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: MW-305 (145-155)

Lab Sample ID: 490-61427-9

Date Collected: 09/12/14 08:45
Date Received: 09/13/14 09:05

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.21**		5.00	2.66	ug/L			09/18/14 06:36	1
Benzene	**0.260**	**J**	0.500	0.200	ug/L			09/18/14 06:36	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 06:36	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 06:36	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 06:36	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 06:36	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 06:36	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 06:36	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 06:36	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 06:36	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 06:36	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 06:36	1
cis-1,2-Dichloroethene	**0.763**		0.500	0.210	ug/L			09/18/14 06:36	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 06:36	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 06:36	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 06:36	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 06:36	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 06:36	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 06:36	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 06:36	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 06:36	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/18/14 06:36	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 06:36	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 06:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 06:36	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/18/14 06:36	1
o-Xylene	ND		0.500	0.200	ug/L			09/18/14 06:36	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 06:36	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 06:36	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 06:36	1
Toluene	**0.886**		0.500	0.170	ug/L			09/18/14 06:36	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/18/14 06:36	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 06:36	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 06:36	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 06:36	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 06:36	1
Trichloroethene	ND		0.500	0.200	ug/L			09/18/14 06:36	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 06:36	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/18/14 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/18/14 06:36*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*09/18/14 06:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*09/18/14 06:36*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/18/14 06:36*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: MW-305 (62-72)

Date Collected: 09/12/14 08:52
Date Received: 09/13/14 09:05

Lab Sample ID: 490-61427-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/18/14 07:03	1
Benzene	**3.06**		0.500	0.200	ug/L			09/18/14 07:03	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 07:03	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 07:03	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 07:03	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 07:03	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 07:03	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 07:03	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 07:03	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 07:03	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 07:03	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 07:03	1
cis-1,2-Dichloroethene	**1.77**		0.500	0.210	ug/L			09/18/14 07:03	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 07:03	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 07:03	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 07:03	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 07:03	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 07:03	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 07:03	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 07:03	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 07:03	1
Ethylbenzene	**0.354**	**J**	0.500	0.190	ug/L			09/18/14 07:03	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 07:03	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 07:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 07:03	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/18/14 07:03	1
o-Xylene	ND		0.500	0.200	ug/L			09/18/14 07:03	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 07:03	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 07:03	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 07:03	1
Toluene	**0.842**		0.500	0.170	ug/L			09/18/14 07:03	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/18/14 07:03	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 07:03	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 07:03	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 07:03	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 07:03	1
Trichloroethene	ND		0.500	0.200	ug/L			09/18/14 07:03	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 07:03	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/18/14 07:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/18/14 07:03*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/18/14 07:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 130*		*09/18/14 07:03*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*09/18/14 07:03*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-61427-11

Date Collected: 09/11/14 00:01
Date Received: 09/13/14 09:05

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/18/14 02:39	1
Benzene	ND		0.500	0.200	ug/L			09/18/14 02:39	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 02:39	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 02:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 02:39	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 02:39	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 02:39	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 02:39	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 02:39	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 02:39	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 02:39	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/18/14 02:39	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 02:39	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 02:39	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 02:39	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 02:39	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 02:39	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 02:39	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 02:39	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 02:39	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/18/14 02:39	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 02:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 02:39	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/18/14 02:39	1
o-Xylene	ND		0.500	0.200	ug/L			09/18/14 02:39	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 02:39	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 02:39	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 02:39	1
Toluene	ND		0.500	0.170	ug/L			09/18/14 02:39	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/18/14 02:39	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 02:39	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 02:39	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 02:39	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 02:39	1
Trichloroethene	ND		0.500	0.200	ug/L			09/18/14 02:39	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 02:39	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/18/14 02:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*09/18/14 02:39*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/18/14 02:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*		*09/18/14 02:39*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/18/14 02:39*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	**1.13**		0.500	0.360	ug/L			09/19/14 19:41	1
Methylene Chloride	**0.266**	**J**	5.00	0.220	ug/L			09/19/14 19:41	1

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-61427-11

Date Collected: 09/11/14 00:01

Matrix: Water

Date Received: 09/13/14 09:05

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130		09/19/14 19:41	1
Dibromofluoromethane (Surr)	99		70 - 130		09/19/14 19:41	1
1,2-Dichloroethane-d4 (Surr)	101		70 - 130		09/19/14 19:41	1
Toluene-d8 (Surr)	101		70 - 130		09/19/14 19:41	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-191296/7
Matrix: Water
Analysis Batch: 191296

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			09/18/14 01:46	1
Benzene	ND		0.500	0.200	ug/L			09/18/14 01:46	1
Bromoform	ND		0.500	0.290	ug/L			09/18/14 01:46	1
Bromomethane	ND		0.500	0.350	ug/L			09/18/14 01:46	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			09/18/14 01:46	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/18/14 01:46	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/18/14 01:46	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/18/14 01:46	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/18/14 01:46	1
Chloroethane	ND		0.500	0.360	ug/L			09/18/14 01:46	1
Chloroform	ND		0.500	0.230	ug/L			09/18/14 01:46	1
Chloromethane	ND		0.500	0.360	ug/L			09/18/14 01:46	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/18/14 01:46	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 01:46	1
Dibromomethane	ND		0.500	0.450	ug/L			09/18/14 01:46	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/18/14 01:46	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/18/14 01:46	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/18/14 01:46	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/18/14 01:46	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/18/14 01:46	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/18/14 01:46	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/18/14 01:46	1
2-Hexanone	ND		5.00	1.28	ug/L			09/18/14 01:46	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/18/14 01:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/18/14 01:46	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/18/14 01:46	1
o-Xylene	ND		0.500	0.200	ug/L			09/18/14 01:46	1
Styrene	ND		0.500	0.280	ug/L			09/18/14 01:46	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/18/14 01:46	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/18/14 01:46	1
Toluene	ND		0.500	0.170	ug/L			09/18/14 01:46	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/18/14 01:46	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/18/14 01:46	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/18/14 01:46	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 01:46	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/18/14 01:46	1
Trichloroethene	ND		0.500	0.200	ug/L			09/18/14 01:46	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/18/14 01:46	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/18/14 01:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/18/14 01:46*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*09/18/14 01:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*09/18/14 01:46*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/18/14 01:46*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-191296/3
Matrix: Water
Analysis Batch: 191296

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	274.6		ug/L		110	54 - 145
Benzene	50.0	51.01		ug/L		102	80 - 121
Bromoform	50.0	48.53		ug/L		97	46 - 145
Bromomethane	50.0	55.74		ug/L		111	41 - 150
2-Butanone (MEK)	250	260.7		ug/L		104	62 - 133
Carbon disulfide	50.0	52.22		ug/L		104	77 - 126
Carbon tetrachloride	50.0	50.84		ug/L		102	64 - 147
Chlorobenzene	50.0	49.43		ug/L		99	80 - 120
Chlorodibromomethane	50.0	50.16		ug/L		100	69 - 133
Chloroethane	50.0	49.75		ug/L		99	72 - 120
Chloroform	50.0	50.05		ug/L		100	73 - 129
Chloromethane	50.0	48.43		ug/L		97	12 - 150
cis-1,2-Dichloroethene	50.0	50.72		ug/L		101	76 - 125
cis-1,3-Dichloropropene	50.0	50.65		ug/L		101	74 - 140
Dibromomethane	50.0	51.15		ug/L		102	71 - 125
Dichlorobromomethane	50.0	50.03		ug/L		100	75 - 129
1,1-Dichloroethane	50.0	49.84		ug/L		100	78 - 125
1,2-Dichloroethane	50.0	52.20		ug/L		104	77 - 121
1,1-Dichloroethene	50.0	50.29		ug/L		101	79 - 124
1,2-Dichloropropane	50.0	50.12		ug/L		100	75 - 120
1,1-Dichloropropene	50.0	49.91		ug/L		100	80 - 122
Ethylbenzene	50.0	49.44		ug/L		99	80 - 130
2-Hexanone	250	271.0		ug/L		108	60 - 142
Methylene Chloride	50.0	53.65		ug/L		107	79 - 123
4-Methyl-2-pentanone (MIBK)	250	265.2		ug/L		106	60 - 137
m-Xylene & p-Xylene	50.0	49.72		ug/L		99	80 - 141
o-Xylene	50.0	49.57		ug/L		99	80 - 127
Styrene	50.0	52.32		ug/L		105	80 - 127
1,1,1,2-Tetrachloroethane	50.0	50.43		ug/L		101	74 - 135
Tetrachloroethene	50.0	52.61		ug/L		105	80 - 126
Toluene	50.0	52.50		ug/L		105	80 - 126
trans-1,2-Dichloroethene	50.0	51.03		ug/L		102	79 - 126
trans-1,3-Dichloropropene	50.0	49.57		ug/L		99	63 - 134
1,3,5-Trichlorobenzene	50.0	54.65		ug/L		109	70 - 130
1,1,1-Trichloroethane	50.0	50.68		ug/L		101	78 - 135
1,1,2-Trichloroethane	50.0	50.43		ug/L		101	80 - 124
Trichloroethene	50.0	53.06		ug/L		106	80 - 123
Vinyl chloride	50.0	49.81		ug/L		100	68 - 120
Xylenes, Total	100	99.30		ug/L		99	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-191296/4
Matrix: Water
Analysis Batch: 191296

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
Acetone	250	269.2		ug/L		108	54 - 145	2	21
Benzene	50.0	49.84		ug/L		100	80 - 121	2	17
Bromoform	50.0	48.93		ug/L		98	46 - 145	1	16
Bromomethane	50.0	54.87		ug/L		110	41 - 150	2	50
2-Butanone (MEK)	250	265.7		ug/L		106	62 - 133	2	19
Carbon disulfide	50.0	49.66		ug/L		99	77 - 126	5	21
Carbon tetrachloride	50.0	48.69		ug/L		97	64 - 147	4	19
Chlorobenzene	50.0	48.97		ug/L		98	80 - 120	1	14
Chlorodibromomethane	50.0	50.20		ug/L		100	69 - 133	0	15
Chloroethane	50.0	48.52		ug/L		97	72 - 120	2	20
Chloroform	50.0	48.89		ug/L		98	73 - 129	2	18
Chloromethane	50.0	47.04		ug/L		94	12 - 150	3	31
cis-1,2-Dichloroethene	50.0	49.14		ug/L		98	76 - 125	3	17
cis-1,3-Dichloropropene	50.0	49.85		ug/L		100	74 - 140	2	15
Dibromomethane	50.0	49.80		ug/L		100	71 - 125	3	16
Dichlorobromomethane	50.0	48.32		ug/L		97	75 - 129	3	18
1,1-Dichloroethane	50.0	48.64		ug/L		97	78 - 125	2	17
1,2-Dichloroethane	50.0	50.91		ug/L		102	77 - 121	2	17
1,1-Dichloroethene	50.0	49.11		ug/L		98	79 - 124	2	17
1,2-Dichloropropane	50.0	48.72		ug/L		97	75 - 120	3	17
1,1-Dichloropropene	50.0	48.31		ug/L		97	80 - 122	3	17
Ethylbenzene	50.0	48.51		ug/L		97	80 - 130	2	15
2-Hexanone	250	268.4		ug/L		107	60 - 142	1	15
Methylene Chloride	50.0	52.34		ug/L		105	79 - 123	2	17
4-Methyl-2-pentanone (MIBK)	250	265.5		ug/L		106	60 - 137	0	17
m-Xylene & p-Xylene	50.0	48.64		ug/L		97	80 - 141	2	16
o-Xylene	50.0	48.81		ug/L		98	80 - 127	2	14
Styrene	50.0	51.35		ug/L		103	80 - 127	2	24
1,1,1,2-Tetrachloroethane	50.0	49.79		ug/L		100	74 - 135	1	16
Tetrachloroethene	50.0	51.03		ug/L		102	80 - 126	3	16
Toluene	50.0	51.26		ug/L		103	80 - 126	2	15
trans-1,2-Dichloroethene	50.0	49.67		ug/L		99	79 - 126	3	16
trans-1,3-Dichloropropene	50.0	48.37		ug/L		97	63 - 134	2	14
1,3,5-Trichlorobenzene	50.0	53.13		ug/L		106	70 - 130	3	30
1,1,1-Trichloroethane	50.0	48.97		ug/L		98	78 - 135	3	17
1,1,2-Trichloroethane	50.0	50.28		ug/L		101	80 - 124	0	15
Trichloroethene	50.0	51.42		ug/L		103	80 - 123	3	17
Vinyl chloride	50.0	48.73		ug/L		97	68 - 120	2	17
Xylenes, Total	100	97.45		ug/L		97	80 - 132	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-61560-B-1 MS
Matrix: Water
Analysis Batch: 191296

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	227.7		ug/L		91	45 - 141
Benzene	ND		50.0	54.34		ug/L		109	75 - 133
Bromoform	ND		50.0	46.93		ug/L		94	42 - 147
Bromomethane	ND		50.0	30.21		ug/L		60	16 - 163
2-Butanone (MEK)	ND		250	243.8		ug/L		98	50 - 138
Carbon disulfide	ND		50.0	59.99		ug/L		120	48 - 152
Carbon tetrachloride	ND		50.0	56.71		ug/L		113	62 - 164
Chlorobenzene	ND		50.0	52.08		ug/L		104	80 - 129
Chlorodibromomethane	ND		50.0	49.76		ug/L		100	66 - 140
Chloroethane	ND		50.0	47.86		ug/L		96	58 - 137
Chloroform	ND		50.0	52.37		ug/L		105	66 - 138
Chloromethane	ND		50.0	35.41		ug/L		71	10 - 169
cis-1,2-Dichloroethene	ND		50.0	55.97		ug/L		112	68 - 138
cis-1,3-Dichloropropene	ND		50.0	52.75		ug/L		106	71 - 141
Dibromomethane	ND		50.0	49.78		ug/L		100	58 - 140
Dichlorobromomethane	ND		50.0	50.22		ug/L		100	70 - 140
1,1-Dichloroethane	ND		50.0	53.87		ug/L		108	71 - 139
1,2-Dichloroethane	ND		50.0	52.76		ug/L		106	64 - 136
1,1-Dichloroethene	ND		50.0	56.76		ug/L		114	70 - 142
1,2-Dichloropropane	ND		50.0	51.09		ug/L		102	67 - 131
1,1-Dichloropropene	ND		50.0	57.19		ug/L		114	76 - 139
Ethylbenzene	ND		50.0	53.64		ug/L		107	79 - 139
2-Hexanone	ND		250	268.9		ug/L		108	50 - 150
Methylene Chloride	ND		50.0	53.74		ug/L		107	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	265.2		ug/L		106	50 - 147
m-Xylene & p-Xylene	ND		50.0	53.62		ug/L		107	80 - 153
o-Xylene	ND		50.0	52.09		ug/L		104	74 - 138
Styrene	ND		50.0	53.73		ug/L		107	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	50.97		ug/L		102	73 - 141
Tetrachloroethene	ND		50.0	59.25		ug/L		119	72 - 145
Toluene	ND		50.0	57.27		ug/L		115	75 - 136
trans-1,2-Dichloroethene	ND		50.0	57.09		ug/L		114	66 - 143
trans-1,3-Dichloropropene	ND		50.0	50.78		ug/L		102	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	54.95		ug/L		110	60 - 140
1,1,1-Trichloroethane	ND		50.0	56.53		ug/L		113	76 - 149
1,1,2-Trichloroethane	ND		50.0	50.14		ug/L		100	74 - 134
Trichloroethene	ND		50.0	56.17		ug/L		112	73 - 144
Vinyl chloride	ND		50.0	44.48		ug/L		89	56 - 129
Xylenes, Total	ND		100	105.7		ug/L		106	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*
Toluene-d8 (Surr)	*103*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-61560-C-1 MSD
Matrix: Water
Analysis Batch: 191296

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	229.6		ug/L		92	45 - 141	1	21
Benzene	ND		50.0	55.05		ug/L		110	75 - 133	1	17
Bromoform	ND		50.0	43.69		ug/L		87	42 - 147	7	16
Bromomethane	ND		50.0	42.68		ug/L		85	16 - 163	34	50
2-Butanone (MEK)	ND		250	250.1		ug/L		100	50 - 138	3	19
Carbon disulfide	ND		50.0	60.67		ug/L		121	48 - 152	1	21
Carbon tetrachloride	ND		50.0	57.50		ug/L		115	62 - 164	1	19
Chlorobenzene	ND		50.0	52.02		ug/L		104	80 - 129	0	14
Chlorodibromomethane	ND		50.0	50.53		ug/L		101	66 - 140	2	15
Chloroethane	ND		50.0	48.82		ug/L		98	58 - 137	2	20
Chloroform	ND		50.0	53.94		ug/L		108	66 - 138	3	18
Chloromethane	ND		50.0	36.06		ug/L		72	10 - 169	2	31
cis-1,2-Dichloroethene	ND		50.0	56.52		ug/L		113	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	53.66		ug/L		107	71 - 141	2	15
Dibromomethane	ND		50.0	50.82		ug/L		102	58 - 140	2	16
Dichlorobromomethane	ND		50.0	51.90		ug/L		104	70 - 140	3	18
1,1-Dichloroethane	ND		50.0	54.91		ug/L		110	71 - 139	2	17
1,2-Dichloroethane	ND		50.0	54.27		ug/L		109	64 - 136	3	17
1,1-Dichloroethene	ND		50.0	57.58		ug/L		115	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	52.32		ug/L		105	67 - 131	2	17
1,1-Dichloropropene	ND		50.0	56.97		ug/L		114	76 - 139	0	17
Ethylbenzene	ND		50.0	52.93		ug/L		106	79 - 139	1	15
2-Hexanone	ND		250	273.4		ug/L		109	50 - 150	2	15
Methylene Chloride	ND		50.0	55.82		ug/L		112	64 - 139	4	17
4-Methyl-2-pentanone (MIBK)	ND		250	267.4		ug/L		107	50 - 147	1	17
m-Xylene & p-Xylene	ND		50.0	52.19		ug/L		104	80 - 153	3	16
o-Xylene	ND		50.0	51.71		ug/L		103	74 - 138	1	14
Styrene	ND		50.0	54.03		ug/L		108	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	50.68		ug/L		101	73 - 141	1	16
Tetrachloroethene	ND		50.0	56.14		ug/L		112	72 - 145	5	16
Toluene	ND		50.0	56.48		ug/L		113	75 - 136	1	15
trans-1,2-Dichloroethene	ND		50.0	57.69		ug/L		115	66 - 143	1	16
trans-1,3-Dichloropropene	ND		50.0	51.10		ug/L		102	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	49.73		ug/L		99	60 - 140	10	30
1,1,1-Trichloroethane	ND		50.0	57.21		ug/L		114	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	50.44		ug/L		101	74 - 134	1	15
Trichloroethene	ND		50.0	57.12		ug/L		114	73 - 144	2	17
Vinyl chloride	ND		50.0	45.21		ug/L		90	56 - 129	2	17
Xylenes, Total	ND		100	103.9		ug/L		104	74 - 141	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-191712/6
Matrix: Water
Analysis Batch: 191712

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.500	0.200	ug/L			09/19/14 13:01	1
Bromoform	ND		0.500	0.290	ug/L			09/19/14 13:01	1
Bromomethane	ND		0.500	0.350	ug/L			09/19/14 13:01	1
Carbon disulfide	ND		0.500	0.220	ug/L			09/19/14 13:01	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			09/19/14 13:01	1
Chlorobenzene	ND		0.500	0.180	ug/L			09/19/14 13:01	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			09/19/14 13:01	1
Chloroethane	ND		0.500	0.360	ug/L			09/19/14 13:01	1
Chloroform	ND		0.500	0.230	ug/L			09/19/14 13:01	1
Chloromethane	ND		0.500	0.360	ug/L			09/19/14 13:01	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			09/19/14 13:01	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/19/14 13:01	1
Dibromomethane	ND		0.500	0.450	ug/L			09/19/14 13:01	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			09/19/14 13:01	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			09/19/14 13:01	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			09/19/14 13:01	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			09/19/14 13:01	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			09/19/14 13:01	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			09/19/14 13:01	1
Ethylbenzene	ND		0.500	0.190	ug/L			09/19/14 13:01	1
2-Hexanone	ND		5.00	1.28	ug/L			09/19/14 13:01	1
Methylene Chloride	ND		5.00	0.220	ug/L			09/19/14 13:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			09/19/14 13:01	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			09/19/14 13:01	1
o-Xylene	ND		0.500	0.200	ug/L			09/19/14 13:01	1
Styrene	ND		0.500	0.280	ug/L			09/19/14 13:01	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			09/19/14 13:01	1
Tetrachloroethene	ND		0.500	0.140	ug/L			09/19/14 13:01	1
Toluene	ND		0.500	0.170	ug/L			09/19/14 13:01	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			09/19/14 13:01	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			09/19/14 13:01	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			09/19/14 13:01	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			09/19/14 13:01	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			09/19/14 13:01	1
Trichloroethene	ND		0.500	0.200	ug/L			09/19/14 13:01	1
Vinyl chloride	ND		0.500	0.180	ug/L			09/19/14 13:01	1
Xylenes, Total	ND		1.50	0.580	ug/L			09/19/14 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*09/19/14 13:01*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*09/19/14 13:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*		*09/19/14 13:01*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*09/19/14 13:01*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-191712/3
Matrix: Water
Analysis Batch: 191712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	50.0	50.51		ug/L		101	80 - 121
Bromoform	50.0	45.17		ug/L		90	46 - 145
Bromomethane	50.0	56.20		ug/L		112	41 - 150
Carbon disulfide	50.0	51.50		ug/L		103	77 - 126
Carbon tetrachloride	50.0	49.74		ug/L		99	64 - 147
Chlorobenzene	50.0	48.85		ug/L		98	80 - 120
Chlorodibromomethane	50.0	49.50		ug/L		99	69 - 133
Chloroethane	50.0	49.36		ug/L		99	72 - 120
Chloroform	50.0	49.99		ug/L		100	73 - 129
Chloromethane	50.0	48.16		ug/L		96	12 - 150
cis-1,2-Dichloroethene	50.0	52.05		ug/L		104	76 - 125
cis-1,3-Dichloropropene	50.0	51.02		ug/L		102	74 - 140
Dibromomethane	50.0	50.62		ug/L		101	71 - 125
Dichlorobromomethane	50.0	48.88		ug/L		98	75 - 129
1,1-Dichloroethane	50.0	49.85		ug/L		100	78 - 125
1,2-Dichloroethane	50.0	53.32		ug/L		107	77 - 121
1,1-Dichloroethene	50.0	50.18		ug/L		100	79 - 124
1,2-Dichloropropane	50.0	49.59		ug/L		99	75 - 120
1,1-Dichloropropene	50.0	49.09		ug/L		98	80 - 122
Ethylbenzene	50.0	49.16		ug/L		98	80 - 130
2-Hexanone	250	276.1		ug/L		110	60 - 142
Methylene Chloride	50.0	52.10		ug/L		104	79 - 123
4-Methyl-2-pentanone (MIBK)	250	272.9		ug/L		109	60 - 137
m-Xylene & p-Xylene	50.0	48.79		ug/L		98	80 - 141
o-Xylene	50.0	48.93		ug/L		98	80 - 127
Styrene	50.0	50.86		ug/L		102	80 - 127
1,1,1,2-Tetrachloroethane	50.0	48.61		ug/L		97	74 - 135
Tetrachloroethene	50.0	51.63		ug/L		103	80 - 126
Toluene	50.0	51.32		ug/L		103	80 - 126
trans-1,2-Dichloroethene	50.0	50.57		ug/L		101	79 - 126
trans-1,3-Dichloropropene	50.0	50.00		ug/L		100	63 - 134
1,3,5-Trichlorobenzene	50.0	51.81		ug/L		104	70 - 130
1,1,1-Trichloroethane	50.0	50.40		ug/L		101	78 - 135
1,1,2-Trichloroethane	50.0	50.49		ug/L		101	80 - 124
Trichloroethene	50.0	50.46		ug/L		101	80 - 123
Vinyl chloride	50.0	49.29		ug/L		99	68 - 120
Xylenes, Total	100	97.72		ug/L		98	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-191712/4
Matrix: Water
Analysis Batch: 191712

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
Benzene	50.0	48.40		ug/L		97	80 - 121	4	17
Bromoform	50.0	46.95		ug/L		94	46 - 145	4	16
Bromomethane	50.0	52.58		ug/L		105	41 - 150	7	50
Carbon disulfide	50.0	48.05		ug/L		96	77 - 126	7	21
Carbon tetrachloride	50.0	47.10		ug/L		94	64 - 147	5	19
Chlorobenzene	50.0	46.95		ug/L		94	80 - 120	4	14
Chlorodibromomethane	50.0	49.59		ug/L		99	69 - 133	0	15
Chloroethane	50.0	47.12		ug/L		94	72 - 120	5	20
Chloroform	50.0	48.04		ug/L		96	73 - 129	4	18
Chloromethane	50.0	46.38		ug/L		93	12 - 150	4	31
cis-1,2-Dichloroethene	50.0	48.98		ug/L		98	76 - 125	6	17
cis-1,3-Dichloropropene	50.0	50.05		ug/L		100	74 - 140	2	15
Dibromomethane	50.0	50.75		ug/L		102	71 - 125	0	16
Dichlorobromomethane	50.0	48.09		ug/L		96	75 - 129	2	18
1,1-Dichloroethane	50.0	47.69		ug/L		95	78 - 125	4	17
1,2-Dichloroethane	50.0	52.20		ug/L		104	77 - 121	2	17
1,1-Dichloroethene	50.0	46.80		ug/L		94	79 - 124	7	17
1,2-Dichloropropane	50.0	48.04		ug/L		96	75 - 120	3	17
1,1-Dichloropropene	50.0	46.65		ug/L		93	80 - 122	5	17
Ethylbenzene	50.0	46.67		ug/L		93	80 - 130	5	15
2-Hexanone	250	295.3		ug/L		118	60 - 142	7	15
Methylene Chloride	50.0	51.24		ug/L		102	79 - 123	2	17
4-Methyl-2-pentanone (MIBK)	250	288.6		ug/L		115	60 - 137	6	17
m-Xylene & p-Xylene	50.0	46.98		ug/L		94	80 - 141	4	16
o-Xylene	50.0	46.41		ug/L		93	80 - 127	5	14
Styrene	50.0	49.03		ug/L		98	80 - 127	4	24
1,1,1,2-Tetrachloroethane	50.0	46.91		ug/L		94	74 - 135	4	16
Tetrachloroethene	50.0	48.32		ug/L		97	80 - 126	7	16
Toluene	50.0	49.15		ug/L		98	80 - 126	4	15
trans-1,2-Dichloroethene	50.0	48.38		ug/L		97	79 - 126	4	16
trans-1,3-Dichloropropene	50.0	49.40		ug/L		99	63 - 134	1	14
1,3,5-Trichlorobenzene	50.0	50.92		ug/L		102	70 - 130	2	30
1,1,1-Trichloroethane	50.0	47.68		ug/L		95	78 - 135	6	17
1,1,2-Trichloroethane	50.0	50.96		ug/L		102	80 - 124	1	15
Trichloroethene	50.0	48.37		ug/L		97	80 - 123	4	17
Vinyl chloride	50.0	46.39		ug/L		93	68 - 120	6	17
Xylenes, Total	100	93.39		ug/L		93	80 - 132	5	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*100*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

GC/MS VOA

Analysis Batch: 191296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-61427-1	IW-100	Total/NA	Water	8260B	
490-61427-2	IW-103	Total/NA	Water	8260B	
490-61427-3	202R	Total/NA	Water	8260B	
490-61427-4	203R	Total/NA	Water	8260B	
490-61427-5	204R	Total/NA	Water	8260B	
490-61427-6	35R	Total/NA	Water	8260B	
490-61427-7	201R	Total/NA	Water	8260B	
490-61427-8	MW-301 (35-45)	Total/NA	Water	8260B	
490-61427-9	MW-305 (145-155)	Total/NA	Water	8260B	
490-61427-10	MW-305 (62-72)	Total/NA	Water	8260B	
490-61427-11	Trip Blank	Total/NA	Water	8260B	
490-61560-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-61560-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-191296/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-191296/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-191296/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 191712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-61427-11 - RA	Trip Blank	Total/NA	Water	8260B	
LCS 490-191712/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-191712/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-191712/6	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: IW-100 — Lab Sample ID: 490-61427-1

Date Collected: 09/11/14 09:00 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 03:05	EML	TAL NSH

Client Sample ID: IW-103 — Lab Sample ID: 490-61427-2

Date Collected: 09/11/14 09:10 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 03:31	EML	TAL NSH

Client Sample ID: 202R — Lab Sample ID: 490-61427-3

Date Collected: 09/11/14 09:39 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 03:58	EML	TAL NSH

Client Sample ID: 203R — Lab Sample ID: 490-61427-4

Date Collected: 09/11/14 11:03 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 04:24	EML	TAL NSH

Client Sample ID: 204R — Lab Sample ID: 490-61427-5

Date Collected: 09/11/14 10:45 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 04:51	EML	TAL NSH

Client Sample ID: 35R — Lab Sample ID: 490-61427-6

Date Collected: 09/11/14 12:05 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 05:17	EML	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Client Sample ID: 201R — Lab Sample ID: 490-61427-7

Date Collected: 09/11/14 13:15 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 05:44	EML	TAL NSH

Client Sample ID: MW-301 (35-45) — Lab Sample ID: 490-61427-8

Date Collected: 09/12/14 08:27 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 06:10	EML	TAL NSH

Client Sample ID: MW-305 (145-155) — Lab Sample ID: 490-61427-9

Date Collected: 09/12/14 08:45 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 06:36	EML	TAL NSH

Client Sample ID: MW-305 (62-72) — Lab Sample ID: 490-61427-10

Date Collected: 09/12/14 08:52 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 07:03	EML	TAL NSH

Client Sample ID: Trip Blank — Lab Sample ID: 490-61427-11

Date Collected: 09/11/14 00:01 — **Matrix: Water**
Date Received: 09/13/14 09:05

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	191296	09/18/14 02:39	EML	TAL NSH
Total/NA	Analysis	8260B	RA	1	10 mL	10 mL	191712	09/19/14 19:41	EML	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-61427-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14 *

* Certification renewal pending - certification considered valid.

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THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-61427 Chain of Custody

Cooler Received/Opened On 9/13/2014 @ 0905

1. Tracking # 3437 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 1.3 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 (Front)

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) CH

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
61427

TestAmerica
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9/24/2014

Client Information

Sampler: Ian Martz
Lab PM: Brown, Shali
C
FORD Site E101274

Client Contact: Chuck Castelluccio
Phone: 978 322 4526
E-Mail: shali.brown@testamericainc.com
Page:

Company: ARCADIS U.S., Inc.
Job #:

Address: 1 Executive Drive Suite 303
Due Date Requested: standard

City: Chelmsford
TAT Requested (days): 7

State, Zip: MA, 01824

Phone: ~~978 322 4526~~ 7812134962
PO #: Purchase Order Requested

Email: chuck.castelluccio@arcadis-us.com
WO #:

Project Name: Tibbetts Road Site E101274
Lab Project #: 49002494

Site:
Client Project #: MA000725.014B.00001

Analysis Requested

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	Total Number of containers	Special Instructions/Note:
				Preservation Code:				A		
1	IW-100	9/11/14	9:00	G	W			✓		
2	IW-103	9/11/14	9:10	G	W			✓		
3	202R	9/11/14	9:39	G	W			✓		
4	203R	9/11/14	11:03	G	W			✓		
5	204R	9/11/14	10:45	G	W			✓		
6	35R	9/11/14	12:05	G	W			✓		
7	201R	9/11/14	13:15	G	W			✓		
8	MW-301 (35-45)	9/12/14	8:27	G	W			✓		
9	MW-305 (145-155)	9/12/14	8:45	G	W			✓		
10	MW-305 (62-72)	9/12/14	8:52	G	W			✓		
11	Trip Blank	—	—	—	W			✓		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	9/12/14 @ 1000		[signature]	9-13-14 0905	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 1.3

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-61427-1

Login Number: 61427

List Source: TestAmerica Nashville

List Number: 1

Creator: Armstrong, Daniel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-62363-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
10/2/2014 1:51:29 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62363-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-62363-1	IW-100	Water	09/25/14 10:29	09/26/14 09:00
490-62363-2	IW-103	Water	09/25/14 10:34	09/26/14 09:00
490-62363-3	Effluent	Water	09/25/14 10:39	09/26/14 09:00
490-62363-4	Trip Blank	Water	09/25/14 00:01	09/26/14 09:00

Job ID: 490-62363-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-62363-1

Comments
No additional comments.

Receipt
The samples were received on 9/26/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 0.1º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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.
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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62363-1

Client Sample ID: IW-100

Date Collected: 09/25/14 10:29
Date Received: 09/26/14 09:00

Lab Sample ID: 490-62363-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/01/14 18:17	1
Benzene	**11.4**		0.500	0.200	ug/L			10/01/14 18:17	1
Bromoform	ND		0.500	0.290	ug/L			10/01/14 18:17	1
Bromomethane	ND		0.500	0.350	ug/L			10/01/14 18:17	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/01/14 18:17	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/01/14 18:17	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/01/14 18:17	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/01/14 18:17	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/01/14 18:17	1
Chloroethane	ND		0.500	0.360	ug/L			10/01/14 18:17	1
Chloroform	ND		0.500	0.230	ug/L			10/01/14 18:17	1
Chloromethane	ND		0.500	0.360	ug/L			10/01/14 18:17	1
cis-1,2-Dichloroethene	**14.3**		0.500	0.210	ug/L			10/01/14 18:17	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/01/14 18:17	1
Dibromomethane	ND		0.500	0.450	ug/L			10/01/14 18:17	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/01/14 18:17	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/01/14 18:17	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/01/14 18:17	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/01/14 18:17	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/01/14 18:17	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/01/14 18:17	1
Ethylbenzene	**2.87**		0.500	0.190	ug/L			10/01/14 18:17	1
2-Hexanone	ND		5.00	1.28	ug/L			10/01/14 18:17	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/01/14 18:17	1
4-Methyl-2-pentanone (MIBK)	**6.05**		5.00	0.810	ug/L			10/01/14 18:17	1
m-Xylene & p-Xylene	**2.21**		0.500	0.380	ug/L			10/01/14 18:17	1
o-Xylene	**0.727**		0.500	0.200	ug/L			10/01/14 18:17	1
Styrene	ND		0.500	0.280	ug/L			10/01/14 18:17	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/01/14 18:17	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/01/14 18:17	1
Toluene	**0.194**	**J**	0.500	0.170	ug/L			10/01/14 18:17	1
trans-1,2-Dichloroethene	**1.46**		0.500	0.230	ug/L			10/01/14 18:17	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/01/14 18:17	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/01/14 18:17	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/01/14 18:17	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/01/14 18:17	1
Trichloroethene	**2.00**		0.500	0.200	ug/L			10/01/14 18:17	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/01/14 18:17	1
Xylenes, Total	**2.94**		1.50	0.580	ug/L			10/01/14 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*10/01/14 18:17*	*1*
Dibromofluoromethane (Surr)	*91*		*70 - 130*		*10/01/14 18:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*10/01/14 18:17*	*1*
Toluene-d8 (Surr)	*90*		*70 - 130*		*10/01/14 18:17*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62363-1

Client Sample ID: IW-103

Date Collected: 09/25/14 10:34
Date Received: 09/26/14 09:00

Lab Sample ID: 490-62363-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/01/14 18:44	1
Benzene	**21.1**		0.500	0.200	ug/L			10/01/14 18:44	1
Bromoform	ND		0.500	0.290	ug/L			10/01/14 18:44	1
Bromomethane	ND		0.500	0.350	ug/L			10/01/14 18:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/01/14 18:44	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/01/14 18:44	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/01/14 18:44	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/01/14 18:44	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/01/14 18:44	1
Chloroethane	ND		0.500	0.360	ug/L			10/01/14 18:44	1
Chloroform	ND		0.500	0.230	ug/L			10/01/14 18:44	1
Chloromethane	ND		0.500	0.360	ug/L			10/01/14 18:44	1
cis-1,2-Dichloroethene	**21.1**		0.500	0.210	ug/L			10/01/14 18:44	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/01/14 18:44	1
Dibromomethane	ND		0.500	0.450	ug/L			10/01/14 18:44	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/01/14 18:44	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/01/14 18:44	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/01/14 18:44	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/01/14 18:44	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/01/14 18:44	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/01/14 18:44	1
Ethylbenzene	**7.85**		0.500	0.190	ug/L			10/01/14 18:44	1
2-Hexanone	ND		5.00	1.28	ug/L			10/01/14 18:44	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/01/14 18:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/01/14 18:44	1
m-Xylene & p-Xylene	**6.67**		0.500	0.380	ug/L			10/01/14 18:44	1
o-Xylene	ND		0.500	0.200	ug/L			10/01/14 18:44	1
Styrene	ND		0.500	0.280	ug/L			10/01/14 18:44	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/01/14 18:44	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/01/14 18:44	1
Toluene	ND		0.500	0.170	ug/L			10/01/14 18:44	1
trans-1,2-Dichloroethene	**0.255**	**J**	0.500	0.230	ug/L			10/01/14 18:44	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/01/14 18:44	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/01/14 18:44	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/01/14 18:44	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/01/14 18:44	1
Trichloroethene	**0.402**	**J**	0.500	0.200	ug/L			10/01/14 18:44	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/01/14 18:44	1
Xylenes, Total	**6.67**		1.50	0.580	ug/L			10/01/14 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*10/01/14 18:44*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*10/01/14 18:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*10/01/14 18:44*	*1*
Toluene-d8 (Surr)	*100*		*70 - 130*		*10/01/14 18:44*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62363-1

Client Sample ID: Effluent

Lab Sample ID: 490-62363-3

Date Collected: 09/25/14 10:39
Date Received: 09/26/14 09:00

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/01/14 19:11	1
Benzene	ND		0.500	0.200	ug/L			10/01/14 19:11	1
Bromoform	ND		0.500	0.290	ug/L			10/01/14 19:11	1
Bromomethane	ND		0.500	0.350	ug/L			10/01/14 19:11	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/01/14 19:11	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/01/14 19:11	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/01/14 19:11	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/01/14 19:11	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/01/14 19:11	1
Chloroethane	ND		0.500	0.360	ug/L			10/01/14 19:11	1
Chloroform	ND		0.500	0.230	ug/L			10/01/14 19:11	1
Chloromethane	ND		0.500	0.360	ug/L			10/01/14 19:11	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/01/14 19:11	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/01/14 19:11	1
Dibromomethane	ND		0.500	0.450	ug/L			10/01/14 19:11	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/01/14 19:11	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/01/14 19:11	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/01/14 19:11	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/01/14 19:11	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/01/14 19:11	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/01/14 19:11	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/01/14 19:11	1
2-Hexanone	ND		5.00	1.28	ug/L			10/01/14 19:11	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/01/14 19:11	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/01/14 19:11	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/01/14 19:11	1
o-Xylene	ND		0.500	0.200	ug/L			10/01/14 19:11	1
Styrene	ND		0.500	0.280	ug/L			10/01/14 19:11	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/01/14 19:11	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/01/14 19:11	1
Toluene	ND		0.500	0.170	ug/L			10/01/14 19:11	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/01/14 19:11	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/01/14 19:11	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/01/14 19:11	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/01/14 19:11	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/01/14 19:11	1
Trichloroethene	ND		0.500	0.200	ug/L			10/01/14 19:11	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/01/14 19:11	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/01/14 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*10/01/14 19:11*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/01/14 19:11*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*10/01/14 19:11*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*10/01/14 19:11*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62363-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-62363-4

Date Collected: 09/25/14 00:01
Matrix: Water
Date Received: 09/26/14 09:00

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/01/14 16:03	1
Benzene	ND		0.500	0.200	ug/L			10/01/14 16:03	1
Bromoform	ND		0.500	0.290	ug/L			10/01/14 16:03	1
Bromomethane	ND		0.500	0.350	ug/L			10/01/14 16:03	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/01/14 16:03	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/01/14 16:03	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/01/14 16:03	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/01/14 16:03	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/01/14 16:03	1
Chloroethane	ND		0.500	0.360	ug/L			10/01/14 16:03	1
Chloroform	ND		0.500	0.230	ug/L			10/01/14 16:03	1
Chloromethane	ND		0.500	0.360	ug/L			10/01/14 16:03	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/01/14 16:03	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/01/14 16:03	1
Dibromomethane	ND		0.500	0.450	ug/L			10/01/14 16:03	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/01/14 16:03	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/01/14 16:03	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/01/14 16:03	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/01/14 16:03	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/01/14 16:03	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/01/14 16:03	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/01/14 16:03	1
2-Hexanone	ND		5.00	1.28	ug/L			10/01/14 16:03	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/01/14 16:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/01/14 16:03	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/01/14 16:03	1
o-Xylene	ND		0.500	0.200	ug/L			10/01/14 16:03	1
Styrene	ND		0.500	0.280	ug/L			10/01/14 16:03	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/01/14 16:03	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/01/14 16:03	1
Toluene	ND		0.500	0.170	ug/L			10/01/14 16:03	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/01/14 16:03	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/01/14 16:03	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/01/14 16:03	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/01/14 16:03	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/01/14 16:03	1
Trichloroethene	ND		0.500	0.200	ug/L			10/01/14 16:03	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/01/14 16:03	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/01/14 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*		*10/01/14 16:03*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/01/14 16:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*70 - 130*		*10/01/14 16:03*	*1*
Toluene-d8 (Surr)	*95*		*70 - 130*		*10/01/14 16:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-194378/7
Matrix: Water
Analysis Batch: 194378

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/01/14 14:42	1
Benzene	ND		0.500	0.200	ug/L			10/01/14 14:42	1
Bromoform	ND		0.500	0.290	ug/L			10/01/14 14:42	1
Bromomethane	ND		0.500	0.350	ug/L			10/01/14 14:42	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/01/14 14:42	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/01/14 14:42	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/01/14 14:42	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/01/14 14:42	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/01/14 14:42	1
Chloroethane	ND		0.500	0.360	ug/L			10/01/14 14:42	1
Chloroform	ND		0.500	0.230	ug/L			10/01/14 14:42	1
Chloromethane	ND		0.500	0.360	ug/L			10/01/14 14:42	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/01/14 14:42	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/01/14 14:42	1
Dibromomethane	ND		0.500	0.450	ug/L			10/01/14 14:42	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/01/14 14:42	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/01/14 14:42	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/01/14 14:42	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/01/14 14:42	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/01/14 14:42	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/01/14 14:42	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/01/14 14:42	1
2-Hexanone	ND		5.00	1.28	ug/L			10/01/14 14:42	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/01/14 14:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/01/14 14:42	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/01/14 14:42	1
o-Xylene	ND		0.500	0.200	ug/L			10/01/14 14:42	1
Styrene	ND		0.500	0.280	ug/L			10/01/14 14:42	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/01/14 14:42	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/01/14 14:42	1
Toluene	ND		0.500	0.170	ug/L			10/01/14 14:42	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/01/14 14:42	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/01/14 14:42	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/01/14 14:42	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/01/14 14:42	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/01/14 14:42	1
Trichloroethene	ND		0.500	0.200	ug/L			10/01/14 14:42	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/01/14 14:42	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/01/14 14:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*		*10/01/14 14:42*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/01/14 14:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*		*10/01/14 14:42*	*1*
Toluene-d8 (Surr)	*99*		*70 - 130*		*10/01/14 14:42*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-194378/3
Matrix: Water
Analysis Batch: 194378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	107.0		ug/L		107	54 - 145
Benzene	20.0	22.15		ug/L		111	80 - 121
Bromoform	20.0	23.29		ug/L		116	46 - 145
Bromomethane	20.0	18.47		ug/L		92	41 - 150
2-Butanone (MEK)	100	101.6		ug/L		102	62 - 133
Carbon disulfide	20.0	21.34		ug/L		107	77 - 126
Carbon tetrachloride	20.0	20.35		ug/L		102	64 - 147
Chlorobenzene	20.0	22.12		ug/L		111	80 - 120
Chlorodibromomethane	20.0	24.94		ug/L		125	69 - 133
Chloroethane	20.0	18.32		ug/L		92	72 - 120
Chloroform	20.0	20.77		ug/L		104	73 - 129
Chloromethane	20.0	21.11		ug/L		106	12 - 150
cis-1,2-Dichloroethene	20.0	21.34		ug/L		107	76 - 125
cis-1,3-Dichloropropene	20.0	23.00		ug/L		115	74 - 140
Dibromomethane	20.0	22.66		ug/L		113	71 - 125
Dichlorobromomethane	20.0	23.84		ug/L		119	75 - 129
1,1-Dichloroethane	20.0	21.19		ug/L		106	78 - 125
1,2-Dichloroethane	20.0	20.14		ug/L		101	77 - 121
1,1-Dichloroethene	20.0	22.71		ug/L		114	79 - 124
1,2-Dichloropropane	20.0	22.72		ug/L		114	75 - 120
1,1-Dichloropropene	20.0	21.92		ug/L		110	80 - 122
Ethylbenzene	20.0	22.35		ug/L		112	80 - 130
2-Hexanone	100	117.8		ug/L		118	60 - 142
Methylene Chloride	20.0	22.50		ug/L		113	79 - 123
4-Methyl-2-pentanone (MIBK)	100	116.4		ug/L		116	60 - 137
m-Xylene & p-Xylene	20.0	22.45		ug/L		112	80 - 141
o-Xylene	20.0	21.78		ug/L		109	80 - 127
Styrene	20.0	21.46		ug/L		107	80 - 127
1,1,1,2-Tetrachloroethane	20.0	21.39		ug/L		107	74 - 135
Tetrachloroethene	20.0	23.26		ug/L		116	80 - 126
Toluene	20.0	23.00		ug/L		115	80 - 126
trans-1,2-Dichloroethene	20.0	22.11		ug/L		111	79 - 126
trans-1,3-Dichloropropene	20.0	21.34		ug/L		107	63 - 134
1,3,5-Trichlorobenzene	20.0	22.05		ug/L		110	70 - 130
1,1,1-Trichloroethane	20.0	20.28		ug/L		101	78 - 135
1,1,2-Trichloroethane	20.0	24.11		ug/L		121	80 - 124
Trichloroethene	20.0	22.58		ug/L		113	80 - 123
Vinyl chloride	20.0	21.98		ug/L		110	68 - 120
Xylenes, Total	40.0	44.23		ug/L		111	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*98*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-62363-3 MS
Matrix: Water
Analysis Batch: 194378

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	222.4		ug/L		89	45 - 141
Benzene	ND		50.0	52.36		ug/L		105	75 - 133
Bromoform	ND		50.0	54.97	E	ug/L		110	42 - 147
Bromomethane	ND		50.0	34.93		ug/L		70	16 - 163
2-Butanone (MEK)	ND		250	234.1		ug/L		94	50 - 138
Carbon disulfide	ND		50.0	48.45		ug/L		97	48 - 152
Carbon tetrachloride	ND		50.0	49.01		ug/L		98	62 - 164
Chlorobenzene	ND		50.0	50.76		ug/L		102	80 - 129
Chlorodibromomethane	ND		50.0	56.18	E	ug/L		112	66 - 140
Chloroethane	ND		50.0	33.66		ug/L		67	58 - 137
Chloroform	ND		50.0	46.63		ug/L		93	66 - 138
Chloromethane	ND		50.0	59.67		ug/L		119	10 - 169
cis-1,2-Dichloroethene	ND		50.0	48.48		ug/L		97	68 - 138
cis-1,3-Dichloropropene	ND		50.0	48.24		ug/L		96	71 - 141
Dibromomethane	ND		50.0	53.34		ug/L		107	58 - 140
Dichlorobromomethane	ND		50.0	55.01		ug/L		110	70 - 140
1,1-Dichloroethane	ND		50.0	50.66		ug/L		101	71 - 139
1,2-Dichloroethane	ND		50.0	44.93		ug/L		90	64 - 136
1,1-Dichloroethene	ND		50.0	56.10		ug/L		112	70 - 142
1,2-Dichloropropane	ND		50.0	54.01		ug/L		108	67 - 131
1,1-Dichloropropene	ND		50.0	54.93		ug/L		110	76 - 139
Ethylbenzene	ND		50.0	52.51		ug/L		105	79 - 139
2-Hexanone	ND		250	278.6		ug/L		111	50 - 150
Methylene Chloride	ND		50.0	52.28		ug/L		105	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	248.7		ug/L		99	50 - 147
m-Xylene & p-Xylene	ND		50.0	52.16		ug/L		104	80 - 153
o-Xylene	ND		50.0	52.22		ug/L		104	74 - 138
Styrene	ND		50.0	52.21		ug/L		104	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	50.46		ug/L		101	73 - 141
Tetrachloroethene	ND		50.0	52.82		ug/L		106	72 - 145
Toluene	ND		50.0	48.22		ug/L		96	75 - 136
trans-1,2-Dichloroethene	ND		50.0	51.79		ug/L		104	66 - 143
trans-1,3-Dichloropropene	ND		50.0	47.58		ug/L		95	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	51.71		ug/L		103	60 - 140
1,1,1-Trichloroethane	ND		50.0	47.73		ug/L		95	76 - 149
1,1,2-Trichloroethane	ND		50.0	52.97		ug/L		106	74 - 134
Trichloroethene	ND		50.0	53.52		ug/L		107	73 - 144
Vinyl chloride	ND		50.0	63.05		ug/L		126	56 - 129
Xylenes, Total	ND		100	104.4		ug/L		104	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*79*		*70 - 130*
Toluene-d8 (Surr)	*88*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-62363-3 MSD
Matrix: Water
Analysis Batch: 194378

Client Sample ID: Effluent
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	221.4		ug/L		89	45 - 141	0	21
Benzene	ND		50.0	49.00		ug/L		98	75 - 133	7	17
Bromoform	ND		50.0	52.16	E	ug/L		104	42 - 147	5	16
Bromomethane	ND		50.0	37.88		ug/L		76	16 - 163	8	50
2-Butanone (MEK)	ND		250	219.0		ug/L		88	50 - 138	7	19
Carbon disulfide	ND		50.0	45.87		ug/L		92	48 - 152	5	21
Carbon tetrachloride	ND		50.0	46.82		ug/L		94	62 - 164	5	19
Chlorobenzene	ND		50.0	48.56		ug/L		97	80 - 129	4	14
Chlorodibromomethane	ND		50.0	54.77	E	ug/L		110	66 - 140	3	15
Chloroethane	ND		50.0	38.50		ug/L		77	58 - 137	13	20
Chloroform	ND		50.0	44.54		ug/L		89	66 - 138	5	18
Chloromethane	ND		50.0	57.94		ug/L		116	10 - 169	3	31
cis-1,2-Dichloroethene	ND		50.0	45.24		ug/L		90	68 - 138	7	17
cis-1,3-Dichloropropene	ND		50.0	48.09		ug/L		96	71 - 141	0	15
Dibromomethane	ND		50.0	50.33		ug/L		101	58 - 140	6	16
Dichlorobromomethane	ND		50.0	52.07		ug/L		104	70 - 140	5	18
1,1-Dichloroethane	ND		50.0	47.92		ug/L		96	71 - 139	6	17
1,2-Dichloroethane	ND		50.0	42.26		ug/L		85	64 - 136	6	17
1,1-Dichloroethene	ND		50.0	52.16		ug/L		104	70 - 142	7	17
1,2-Dichloropropane	ND		50.0	51.79		ug/L		104	67 - 131	4	17
1,1-Dichloropropene	ND		50.0	51.56		ug/L		103	76 - 139	6	17
Ethylbenzene	ND		50.0	49.91		ug/L		100	79 - 139	5	15
2-Hexanone	ND		250	253.5		ug/L		101	50 - 150	9	15
Methylene Chloride	ND		50.0	48.30		ug/L		97	64 - 139	8	17
4-Methyl-2-pentanone (MIBK)	ND		250	252.0		ug/L		101	50 - 147	1	17
m-Xylene & p-Xylene	ND		50.0	48.56		ug/L		97	80 - 153	7	16
o-Xylene	ND		50.0	48.08		ug/L		96	74 - 138	8	14
Styrene	ND		50.0	49.34		ug/L		99	61 - 148	6	24
1,1,1,2-Tetrachloroethane	ND		50.0	47.90		ug/L		96	73 - 141	5	16
Tetrachloroethene	ND		50.0	51.03		ug/L		102	72 - 145	3	16
Toluene	ND		50.0	49.76		ug/L		100	75 - 136	3	15
trans-1,2-Dichloroethene	ND		50.0	48.47		ug/L		97	66 - 143	7	16
trans-1,3-Dichloropropene	ND		50.0	47.99		ug/L		96	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	49.99		ug/L		100	60 - 140	3	30
1,1,1-Trichloroethane	ND		50.0	45.90		ug/L		92	76 - 149	4	17
1,1,2-Trichloroethane	ND		50.0	51.20		ug/L		102	74 - 134	3	15
Trichloroethene	ND		50.0	50.90		ug/L		102	73 - 144	5	17
Vinyl chloride	ND		50.0	57.66		ug/L		115	56 - 129	9	17
Xylenes, Total	ND		100	96.64		ug/L		97	74 - 141	8	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*82*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62363-1

GC/MS VOA

Analysis Batch: 194378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-62363-1	IW-100	Total/NA	Water	8260B	
490-62363-2	IW-103	Total/NA	Water	8260B	
490-62363-3	Effluent	Total/NA	Water	8260B	
490-62363-3 MS	Effluent	Total/NA	Water	8260B	
490-62363-3 MSD	Effluent	Total/NA	Water	8260B	
490-62363-4	Trip Blank	Total/NA	Water	8260B	
LCS 490-194378/3	Lab Control Sample	Total/NA	Water	8260B	
MB 490-194378/7	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62363-1

Client Sample ID: IW-100

Lab Sample ID: 490-62363-1

Date Collected: 09/25/14 10:29
Matrix: Water
Date Received: 09/26/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	194378	10/01/14 18:17	JJR	TAL NSH

Client Sample ID: IW-103

Lab Sample ID: 490-62363-2

Date Collected: 09/25/14 10:34
Matrix: Water
Date Received: 09/26/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	194378	10/01/14 18:44	JJR	TAL NSH

Client Sample ID: Effluent

Lab Sample ID: 490-62363-3

Date Collected: 09/25/14 10:39
Matrix: Water
Date Received: 09/26/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	194378	10/01/14 19:11	JJR	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-62363-4

Date Collected: 09/25/14 00:01
Matrix: Water
Date Received: 09/26/14 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	194378	10/01/14 16:03	JJR	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62363-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-62363-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-14 *

* Certification renewal pending - certification considered valid.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-62363 Chain of Custody

Cooler Received/Opened On : 9/26/2014 @ 0900

1. Tracking # 6668 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 18290455

2. Temperature of rep. sample or temp blank when opened: 0.1 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) mdm

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) mdm

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) mdm

I certify that I attached a label with the unique LIMS number to each container (intial) mdm

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
62363

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

10/2/2014

Client Information	Sampler: Ian Martz	Lab PM: Brown, Shali	Carrier T	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 781 213 4962	E-Mail: shali.brown@testamericainc.com		Page:
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested: standard			
City: Chelmsford	TAT Requested (days): standard			
State, Zip: MA, 01824				
Phone: 781 213 4962	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #: MA000725.014B.00002			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A		
IW-100	9/25/14	1029	G	W			✓		-1
IW-103	↓	1034	G	W			✓		2
Effluent	↓	1039	G	W			✓		3
Trip Blank	—	—	—	W			✓		4

Possible Hazard Identification
☒ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☒ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 9/25/14 @ 1400	Company	Received by:	Date/Time: 9-26-14 @ 0900	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 0-1c

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-62363-1

Login Number: 62363
List Number: 1
Creator: McBride, Mike

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-63522-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
10/21/2014 5:15:38 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-63522-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-63522-1	IW-100	Water	10/09/14 11:00	10/10/14 08:45
490-63522-2	IW-103	Water	10/09/14 11:10	10/10/14 08:45
490-63522-3	Effluent	Water	10/09/14 11:15	10/10/14 08:45
490-63522-4	Trip Blank	Water	10/09/14 00:01	10/10/14 08:45

Job ID: 490-63522-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-63522-1

Comments
No additional comments.

Receipt
The samples were received on 10/10/2014 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-63522-1

Client Sample ID: IW-100

Date Collected: 10/09/14 11:00
Date Received: 10/10/14 08:45

Lab Sample ID: 490-63522-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/16/14 03:18	1
Benzene	**9.17**		0.500	0.200	ug/L			10/16/14 03:18	1
Bromoform	ND		0.500	0.290	ug/L			10/16/14 03:18	1
Bromomethane	ND		0.500	0.350	ug/L			10/16/14 03:18	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/16/14 03:18	1
Carbon disulfide	**0.353**	**J**	0.500	0.220	ug/L			10/16/14 03:18	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/16/14 03:18	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/16/14 03:18	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/16/14 03:18	1
Chloroethane	ND		0.500	0.360	ug/L			10/16/14 03:18	1
Chloroform	ND		0.500	0.230	ug/L			10/16/14 03:18	1
Chloromethane	ND		0.500	0.360	ug/L			10/16/14 03:18	1
cis-1,2-Dichloroethene	**14.4**		0.500	0.210	ug/L			10/16/14 03:18	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/16/14 03:18	1
Dibromomethane	ND		0.500	0.450	ug/L			10/16/14 03:18	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/16/14 03:18	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/16/14 03:18	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/16/14 03:18	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/16/14 03:18	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/16/14 03:18	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/16/14 03:18	1
Ethylbenzene	**1.77**		0.500	0.190	ug/L			10/16/14 03:18	1
2-Hexanone	ND		5.00	1.28	ug/L			10/16/14 03:18	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/16/14 03:18	1
4-Methyl-2-pentanone (MIBK)	**6.36**		5.00	0.810	ug/L			10/16/14 03:18	1
m-Xylene & p-Xylene	**1.31**		0.500	0.380	ug/L			10/16/14 03:18	1
o-Xylene	**0.449**	**J**	0.500	0.200	ug/L			10/16/14 03:18	1
Styrene	ND		0.500	0.280	ug/L			10/16/14 03:18	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/16/14 03:18	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/16/14 03:18	1
Toluene	ND		0.500	0.170	ug/L			10/16/14 03:18	1
trans-1,2-Dichloroethene	**1.59**		0.500	0.230	ug/L			10/16/14 03:18	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/16/14 03:18	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/16/14 03:18	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/16/14 03:18	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/16/14 03:18	1
Trichloroethene	**1.89**		0.500	0.200	ug/L			10/16/14 03:18	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/16/14 03:18	1
Xylenes, Total	**1.76**		1.50	0.580	ug/L			10/16/14 03:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*10/16/14 03:18*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*10/16/14 03:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*10/16/14 03:18*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*10/16/14 03:18*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-63522-1

Client Sample ID: IW-103

Date Collected: 10/09/14 11:10
Date Received: 10/10/14 08:45

Lab Sample ID: 490-63522-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/16/14 03:44	1
Benzene	**22.7**		0.500	0.200	ug/L			10/16/14 03:44	1
Bromoform	ND		0.500	0.290	ug/L			10/16/14 03:44	1
Bromomethane	ND		0.500	0.350	ug/L			10/16/14 03:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/16/14 03:44	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/16/14 03:44	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/16/14 03:44	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/16/14 03:44	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/16/14 03:44	1
Chloroethane	ND		0.500	0.360	ug/L			10/16/14 03:44	1
Chloroform	ND		0.500	0.230	ug/L			10/16/14 03:44	1
Chloromethane	ND		0.500	0.360	ug/L			10/16/14 03:44	1
cis-1,2-Dichloroethene	**26.8**		0.500	0.210	ug/L			10/16/14 03:44	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/16/14 03:44	1
Dibromomethane	ND		0.500	0.450	ug/L			10/16/14 03:44	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/16/14 03:44	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/16/14 03:44	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/16/14 03:44	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/16/14 03:44	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/16/14 03:44	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/16/14 03:44	1
Ethylbenzene	**7.73**		0.500	0.190	ug/L			10/16/14 03:44	1
2-Hexanone	ND		5.00	1.28	ug/L			10/16/14 03:44	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/16/14 03:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/16/14 03:44	1
m-Xylene & p-Xylene	**6.95**		0.500	0.380	ug/L			10/16/14 03:44	1
o-Xylene	ND		0.500	0.200	ug/L			10/16/14 03:44	1
Styrene	ND		0.500	0.280	ug/L			10/16/14 03:44	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/16/14 03:44	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/16/14 03:44	1
Toluene	ND		0.500	0.170	ug/L			10/16/14 03:44	1
trans-1,2-Dichloroethene	**0.302**	**J**	0.500	0.230	ug/L			10/16/14 03:44	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/16/14 03:44	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/16/14 03:44	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/16/14 03:44	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/16/14 03:44	1
Trichloroethene	**0.470**	**J**	0.500	0.200	ug/L			10/16/14 03:44	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/16/14 03:44	1
Xylenes, Total	**7.01**		1.50	0.580	ug/L			10/16/14 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/16/14 03:44*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*10/16/14 03:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*		*10/16/14 03:44*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*10/16/14 03:44*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-63522-1

Client Sample ID: Effluent

Lab Sample ID: 490-63522-3

Date Collected: 10/09/14 11:15
Date Received: 10/10/14 08:45

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/16/14 04:10	1
Benzene	ND		0.500	0.200	ug/L			10/16/14 04:10	1
Bromoform	ND		0.500	0.290	ug/L			10/16/14 04:10	1
Bromomethane	ND		0.500	0.350	ug/L			10/16/14 04:10	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/16/14 04:10	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/16/14 04:10	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/16/14 04:10	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/16/14 04:10	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/16/14 04:10	1
Chloroethane	ND		0.500	0.360	ug/L			10/16/14 04:10	1
Chloroform	ND		0.500	0.230	ug/L			10/16/14 04:10	1
Chloromethane	ND		0.500	0.360	ug/L			10/16/14 04:10	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/16/14 04:10	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/16/14 04:10	1
Dibromomethane	ND		0.500	0.450	ug/L			10/16/14 04:10	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/16/14 04:10	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/16/14 04:10	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/16/14 04:10	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/16/14 04:10	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/16/14 04:10	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/16/14 04:10	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/16/14 04:10	1
2-Hexanone	ND		5.00	1.28	ug/L			10/16/14 04:10	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/16/14 04:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/16/14 04:10	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/16/14 04:10	1
o-Xylene	ND		0.500	0.200	ug/L			10/16/14 04:10	1
Styrene	ND		0.500	0.280	ug/L			10/16/14 04:10	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/16/14 04:10	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/16/14 04:10	1
Toluene	ND		0.500	0.170	ug/L			10/16/14 04:10	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/16/14 04:10	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/16/14 04:10	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/16/14 04:10	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/16/14 04:10	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/16/14 04:10	1
Trichloroethene	ND		0.500	0.200	ug/L			10/16/14 04:10	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/16/14 04:10	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/16/14 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/16/14 04:10*	*1*
Dibromofluoromethane (Surr)	*102*		*70 - 130*		*10/16/14 04:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 130*		*10/16/14 04:10*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*10/16/14 04:10*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-63522-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-63522-4

Date Collected: 10/09/14 00:01
Matrix: Water
Date Received: 10/10/14 08:45

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/16/14 02:51	1
Benzene	ND		0.500	0.200	ug/L			10/16/14 02:51	1
Bromoform	ND		0.500	0.290	ug/L			10/16/14 02:51	1
Bromomethane	ND		0.500	0.350	ug/L			10/16/14 02:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/16/14 02:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/16/14 02:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/16/14 02:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/16/14 02:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/16/14 02:51	1
Chloroethane	ND		0.500	0.360	ug/L			10/16/14 02:51	1
Chloroform	ND		0.500	0.230	ug/L			10/16/14 02:51	1
Chloromethane	ND		0.500	0.360	ug/L			10/16/14 02:51	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/16/14 02:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/16/14 02:51	1
Dibromomethane	ND		0.500	0.450	ug/L			10/16/14 02:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/16/14 02:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/16/14 02:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/16/14 02:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/16/14 02:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/16/14 02:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/16/14 02:51	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/16/14 02:51	1
2-Hexanone	ND		5.00	1.28	ug/L			10/16/14 02:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/16/14 02:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/16/14 02:51	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/16/14 02:51	1
o-Xylene	ND		0.500	0.200	ug/L			10/16/14 02:51	1
Styrene	ND		0.500	0.280	ug/L			10/16/14 02:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/16/14 02:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/16/14 02:51	1
Toluene	ND		0.500	0.170	ug/L			10/16/14 02:51	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/16/14 02:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/16/14 02:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/16/14 02:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/16/14 02:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/16/14 02:51	1
Trichloroethene	ND		0.500	0.200	ug/L			10/16/14 02:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/16/14 02:51	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/16/14 02:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*		*10/16/14 02:51*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*10/16/14 02:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*10/16/14 02:51*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*10/16/14 02:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-198265/7
Matrix: Water
Analysis Batch: 198265

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/16/14 01:59	1
Benzene	ND		0.500	0.200	ug/L			10/16/14 01:59	1
Bromoform	ND		0.500	0.290	ug/L			10/16/14 01:59	1
Bromomethane	ND		0.500	0.350	ug/L			10/16/14 01:59	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/16/14 01:59	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/16/14 01:59	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/16/14 01:59	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/16/14 01:59	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/16/14 01:59	1
Chloroethane	ND		0.500	0.360	ug/L			10/16/14 01:59	1
Chloroform	ND		0.500	0.230	ug/L			10/16/14 01:59	1
Chloromethane	ND		0.500	0.360	ug/L			10/16/14 01:59	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/16/14 01:59	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/16/14 01:59	1
Dibromomethane	ND		0.500	0.450	ug/L			10/16/14 01:59	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/16/14 01:59	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/16/14 01:59	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/16/14 01:59	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/16/14 01:59	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/16/14 01:59	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/16/14 01:59	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/16/14 01:59	1
2-Hexanone	ND		5.00	1.28	ug/L			10/16/14 01:59	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/16/14 01:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/16/14 01:59	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/16/14 01:59	1
o-Xylene	ND		0.500	0.200	ug/L			10/16/14 01:59	1
Styrene	ND		0.500	0.280	ug/L			10/16/14 01:59	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/16/14 01:59	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/16/14 01:59	1
Toluene	ND		0.500	0.170	ug/L			10/16/14 01:59	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/16/14 01:59	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/16/14 01:59	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/16/14 01:59	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/16/14 01:59	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/16/14 01:59	1
Trichloroethene	ND		0.500	0.200	ug/L			10/16/14 01:59	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/16/14 01:59	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/16/14 01:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*		*10/16/14 01:59*	*1*
Dibromofluoromethane (Surr)	*101*		*70 - 130*		*10/16/14 01:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 130*		*10/16/14 01:59*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*10/16/14 01:59*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-198265/3
Matrix: Water
Analysis Batch: 198265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	257.1		ug/L		103	54 - 145
Benzene	50.0	49.63		ug/L		99	80 - 121
Bromoform	50.0	47.58		ug/L		95	46 - 145
Bromomethane	50.0	43.35		ug/L		87	41 - 150
2-Butanone (MEK)	250	246.3		ug/L		99	62 - 133
Carbon disulfide	50.0	52.49		ug/L		105	77 - 126
Carbon tetrachloride	50.0	47.68		ug/L		95	64 - 147
Chlorobenzene	50.0	48.31		ug/L		97	80 - 120
Chlorodibromomethane	50.0	50.41		ug/L		101	69 - 133
Chloroethane	50.0	48.69		ug/L		97	72 - 120
Chloroform	50.0	48.34		ug/L		97	73 - 129
Chloromethane	50.0	47.10		ug/L		94	12 - 150
cis-1,2-Dichloroethene	50.0	49.65		ug/L		99	76 - 125
cis-1,3-Dichloropropene	50.0	48.90		ug/L		98	74 - 140
Dibromomethane	50.0	48.16		ug/L		96	71 - 125
Dichlorobromomethane	50.0	47.95		ug/L		96	75 - 129
1,1-Dichloroethane	50.0	49.48		ug/L		99	78 - 125
1,2-Dichloroethane	50.0	49.70		ug/L		99	77 - 121
1,1-Dichloroethene	50.0	48.73		ug/L		97	79 - 124
1,2-Dichloropropane	50.0	48.91		ug/L		98	75 - 120
1,1-Dichloropropene	50.0	48.07		ug/L		96	80 - 122
Ethylbenzene	50.0	48.35		ug/L		97	80 - 130
2-Hexanone	250	262.0		ug/L		105	60 - 142
Methylene Chloride	50.0	51.49		ug/L		103	79 - 123
4-Methyl-2-pentanone (MIBK)	250	253.7		ug/L		101	60 - 137
m-Xylene & p-Xylene	50.0	47.85		ug/L		96	80 - 141
o-Xylene	50.0	47.88		ug/L		96	80 - 127
Styrene	50.0	50.06		ug/L		100	80 - 127
1,1,1,2-Tetrachloroethane	50.0	48.28		ug/L		97	74 - 135
Tetrachloroethene	50.0	48.27		ug/L		97	80 - 126
Toluene	50.0	49.81		ug/L		100	80 - 126
trans-1,2-Dichloroethene	50.0	49.66		ug/L		99	79 - 126
trans-1,3-Dichloropropene	50.0	47.02		ug/L		94	63 - 134
1,3,5-Trichlorobenzene	50.0	50.46		ug/L		101	70 - 130
1,1,1-Trichloroethane	50.0	48.21		ug/L		96	78 - 135
1,1,2-Trichloroethane	50.0	47.90		ug/L		96	80 - 124
Trichloroethene	50.0	48.84		ug/L		98	80 - 123
Vinyl chloride	50.0	48.90		ug/L		98	68 - 120
Xylenes, Total	100	95.73		ug/L		96	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*99*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-198265/4
Matrix: Water
Analysis Batch: 198265

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
Acetone	250	260.1		ug/L		104	54 - 145	1	21
Benzene	50.0	51.29		ug/L		103	80 - 121	3	17
Bromoform	50.0	49.23		ug/L		98	46 - 145	3	16
Bromomethane	50.0	45.76		ug/L		92	41 - 150	5	50
2-Butanone (MEK)	250	259.1		ug/L		104	62 - 133	5	19
Carbon disulfide	50.0	53.72		ug/L		107	77 - 126	2	21
Carbon tetrachloride	50.0	49.47		ug/L		99	64 - 147	4	19
Chlorobenzene	50.0	49.47		ug/L		99	80 - 120	2	14
Chlorodibromomethane	50.0	50.78		ug/L		102	69 - 133	1	15
Chloroethane	50.0	50.40		ug/L		101	72 - 120	3	20
Chloroform	50.0	49.72		ug/L		99	73 - 129	3	18
Chloromethane	50.0	48.69		ug/L		97	12 - 150	3	31
cis-1,2-Dichloroethene	50.0	50.90		ug/L		102	76 - 125	2	17
cis-1,3-Dichloropropene	50.0	49.73		ug/L		99	74 - 140	2	15
Dibromomethane	50.0	49.69		ug/L		99	71 - 125	3	16
Dichlorobromomethane	50.0	49.14		ug/L		98	75 - 129	2	18
1,1-Dichloroethane	50.0	50.56		ug/L		101	78 - 125	2	17
1,2-Dichloroethane	50.0	50.88		ug/L		102	77 - 121	2	17
1,1-Dichloroethene	50.0	50.47		ug/L		101	79 - 124	4	17
1,2-Dichloropropane	50.0	51.24		ug/L		102	75 - 120	5	17
1,1-Dichloropropene	50.0	49.67		ug/L		99	80 - 122	3	17
Ethylbenzene	50.0	49.60		ug/L		99	80 - 130	3	15
2-Hexanone	250	270.0		ug/L		108	60 - 142	3	15
Methylene Chloride	50.0	53.13		ug/L		106	79 - 123	3	17
4-Methyl-2-pentanone (MIBK)	250	261.6		ug/L		105	60 - 137	3	17
m-Xylene & p-Xylene	50.0	49.02		ug/L		98	80 - 141	2	16
o-Xylene	50.0	48.88		ug/L		98	80 - 127	2	14
Styrene	50.0	51.02		ug/L		102	80 - 127	2	24
1,1,1,2-Tetrachloroethane	50.0	49.55		ug/L		99	74 - 135	3	16
Tetrachloroethene	50.0	49.40		ug/L		99	80 - 126	2	16
Toluene	50.0	50.95		ug/L		102	80 - 126	2	15
trans-1,2-Dichloroethene	50.0	51.71		ug/L		103	79 - 126	4	16
trans-1,3-Dichloropropene	50.0	48.06		ug/L		96	63 - 134	2	14
1,3,5-Trichlorobenzene	50.0	52.96		ug/L		106	70 - 130	5	30
1,1,1-Trichloroethane	50.0	49.80		ug/L		100	78 - 135	3	17
1,1,2-Trichloroethane	50.0	48.71		ug/L		97	80 - 124	2	15
Trichloroethene	50.0	51.26		ug/L		103	80 - 123	5	17
Vinyl chloride	50.0	51.01		ug/L		102	68 - 120	4	17
Xylenes, Total	100	97.90		ug/L		98	80 - 132	2	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
Dibromofluoromethane (Surr)	*101*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-63659-B-1 MS
Matrix: Water
Analysis Batch: 198265

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	278.7		ug/L		111	45 - 141
Benzene	ND		50.0	52.90		ug/L		106	75 - 133
Bromoform	ND		50.0	48.07		ug/L		96	42 - 147
Bromomethane	ND		50.0	36.61		ug/L		73	16 - 163
2-Butanone (MEK)	ND		250	267.5		ug/L		107	50 - 138
Carbon disulfide	ND		50.0	55.91		ug/L		112	48 - 152
Carbon tetrachloride	ND		50.0	53.73		ug/L		107	62 - 164
Chlorobenzene	ND		50.0	50.68		ug/L		101	80 - 129
Chlorodibromomethane	ND		50.0	50.79		ug/L		102	66 - 140
Chloroethane	ND		50.0	55.22		ug/L		110	58 - 137
Chloroform	ND		50.0	51.21		ug/L		102	66 - 138
Chloromethane	ND		50.0	52.45		ug/L		105	10 - 169
cis-1,2-Dichloroethene	ND		50.0	59.85		ug/L		120	68 - 138
cis-1,3-Dichloropropene	ND		50.0	51.53		ug/L		103	71 - 141
Dibromomethane	ND		50.0	49.29		ug/L		99	58 - 140
Dichlorobromomethane	ND		50.0	50.41		ug/L		101	70 - 140
1,1-Dichloroethane	ND		50.0	53.19		ug/L		106	71 - 139
1,2-Dichloroethane	ND		50.0	52.87		ug/L		106	64 - 136
1,1-Dichloroethene	ND		50.0	54.49		ug/L		109	70 - 142
1,2-Dichloropropane	ND		50.0	51.50		ug/L		103	67 - 131
1,1-Dichloropropene	ND		50.0	54.07		ug/L		108	76 - 139
Ethylbenzene	ND		50.0	51.75		ug/L		104	79 - 139
2-Hexanone	ND		250	304.1		ug/L		122	50 - 150
Methylene Chloride	ND		50.0	57.50		ug/L		115	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	291.1		ug/L		116	50 - 147
m-Xylene & p-Xylene	ND		50.0	51.63		ug/L		103	80 - 153
o-Xylene	ND		50.0	50.02		ug/L		100	74 - 138
Styrene	ND		50.0	52.58		ug/L		105	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	50.17		ug/L		100	73 - 141
Tetrachloroethene	ND		50.0	67.16		ug/L		134	72 - 145
Toluene	ND		50.0	53.17		ug/L		106	75 - 136
trans-1,2-Dichloroethene	ND		50.0	54.78		ug/L		110	66 - 143
trans-1,3-Dichloropropene	ND		50.0	48.93		ug/L		98	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	50.11		ug/L		100	60 - 140
1,1,1-Trichloroethane	ND		50.0	57.14		ug/L		114	76 - 149
1,1,2-Trichloroethane	ND		50.0	49.76		ug/L		100	74 - 134
Trichloroethene	ND		50.0	56.84		ug/L		114	73 - 144
Vinyl chloride	ND		50.0	54.85		ug/L		110	56 - 129
Xylenes, Total	ND		100	101.6		ug/L		102	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-63659-C-1 MSD
Matrix: Water
Analysis Batch: 198265

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	308.1		ug/L		123	45 - 141	10	21
Benzene	ND		50.0	54.99		ug/L		110	75 - 133	4	17
Bromoform	ND		50.0	51.42		ug/L		103	42 - 147	7	16
Bromomethane	ND		50.0	44.07		ug/L		88	16 - 163	18	50
2-Butanone (MEK)	ND		250	285.3		ug/L		114	50 - 138	6	19
Carbon disulfide	ND		50.0	57.33		ug/L		115	48 - 152	3	21
Carbon tetrachloride	ND		50.0	55.75		ug/L		111	62 - 164	4	19
Chlorobenzene	ND		50.0	51.62		ug/L		103	80 - 129	2	14
Chlorodibromomethane	ND		50.0	54.10		ug/L		108	66 - 140	6	15
Chloroethane	ND		50.0	54.92		ug/L		110	58 - 137	1	20
Chloroform	ND		50.0	53.22		ug/L		106	66 - 138	4	18
Chloromethane	ND		50.0	53.70		ug/L		107	10 - 169	2	31
cis-1,2-Dichloroethene	ND		50.0	57.31		ug/L		115	68 - 138	4	17
cis-1,3-Dichloropropene	ND		50.0	53.51		ug/L		107	71 - 141	4	15
Dibromomethane	ND		50.0	53.14		ug/L		106	58 - 140	8	16
Dichlorobromomethane	ND		50.0	53.33		ug/L		107	70 - 140	6	18
1,1-Dichloroethane	ND		50.0	54.83		ug/L		110	71 - 139	3	17
1,2-Dichloroethane	ND		50.0	55.57		ug/L		111	64 - 136	5	17
1,1-Dichloroethene	ND		50.0	56.66		ug/L		113	70 - 142	4	17
1,2-Dichloropropane	ND		50.0	53.81		ug/L		108	67 - 131	4	17
1,1-Dichloropropene	ND		50.0	56.07		ug/L		112	76 - 139	4	17
Ethylbenzene	ND		50.0	52.88		ug/L		106	79 - 139	2	15
2-Hexanone	ND		250	326.3		ug/L		131	50 - 150	7	15
Methylene Chloride	ND		50.0	57.39		ug/L		115	64 - 139	0	17
4-Methyl-2-pentanone (MIBK)	ND		250	313.8		ug/L		126	50 - 147	8	17
m-Xylene & p-Xylene	ND		50.0	52.49		ug/L		105	80 - 153	2	16
o-Xylene	ND		50.0	51.78		ug/L		104	74 - 138	3	14
Styrene	ND		50.0	54.41		ug/L		109	61 - 148	3	24
1,1,1,2-Tetrachloroethane	ND		50.0	51.82		ug/L		104	73 - 141	3	16
Tetrachloroethene	ND		50.0	56.43	F2	ug/L		113	72 - 145	17	16
Toluene	ND		50.0	54.13		ug/L		108	75 - 136	2	15
trans-1,2-Dichloroethene	ND		50.0	56.13		ug/L		112	66 - 143	2	16
trans-1,3-Dichloropropene	ND		50.0	52.41		ug/L		105	59 - 135	7	14
1,3,5-Trichlorobenzene	ND		50.0	53.76		ug/L		108	60 - 140	7	30
1,1,1-Trichloroethane	ND		50.0	56.30		ug/L		113	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	52.50		ug/L		105	74 - 134	5	15
Trichloroethene	ND		50.0	54.63		ug/L		109	73 - 144	4	17
Vinyl chloride	ND		50.0	56.66		ug/L		113	56 - 129	3	17
Xylenes, Total	ND		100	104.3		ug/L		104	74 - 141	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
Dibromofluoromethane (Surr)	*103*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-63522-1

GC/MS VOA

Analysis Batch: 198265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-63522-1	IW-100	Total/NA	Water	8260B	
490-63522-2	IW-103	Total/NA	Water	8260B	
490-63522-3	Effluent	Total/NA	Water	8260B	
490-63522-4	Trip Blank	Total/NA	Water	8260B	
490-63659-B-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-63659-C-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-198265/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-198265/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-198265/7	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-63522-1

Client Sample ID: IW-100

Lab Sample ID: 490-63522-1
Date Collected: 10/09/14 11:00
Matrix: Water
Date Received: 10/10/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	198265	10/16/14 03:18	EML	TAL NSH

Client Sample ID: IW-103

Lab Sample ID: 490-63522-2
Date Collected: 10/09/14 11:10
Matrix: Water
Date Received: 10/10/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	198265	10/16/14 03:44	EML	TAL NSH

Client Sample ID: Effluent

Lab Sample ID: 490-63522-3
Date Collected: 10/09/14 11:15
Matrix: Water
Date Received: 10/10/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	198265	10/16/14 04:10	EML	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-63522-4
Date Collected: 10/09/14 00:01
Matrix: Water
Date Received: 10/10/14 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	198265	10/16/14 02:51	EML	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-63522-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-63522-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-63522 Chain of Custody

Cooler Received/Opened On 10/10/2014 @ 0845

1. Tracking # 3862 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 18290455

2. Temperature of rep. sample or temp blank when opened: 4.5 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) [illegible]

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #_____

I certify that I unloaded the cooler and answered questions 7-14 (intial) DA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) DA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) DA

I certify that I attached a label with the unique LIMS number to each container (intial) DA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

10/21/2014

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

Loc: 490
63522

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

10/21/2014

Client Information	Sampler: T Zukan	Lab PM: Brown, Shali	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com	Page: 1 of 1
Company: ARCADIS U.S., Inc.			Job #: 49002494
Address: 1 Executive Drive Suite 303	Due Date Requested: STD		
City: Chelmsford	TAT Requested (days):		
State, Zip: MA, 01824			
Phone: 978-937-9999	PO #: Purchase Order Requested		
Email: chuck.castelluccio@arcadis-us.com	WO #:		
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494		
Site:	Client Project #: MA000725		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

	Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:
				Preservation Code:				A	D		
1	IW-100	10/9/14	1100	G	W			3			
2	IW-103	10/9/14	1110	G	W			3			
3	Effluent	10/9/14	1115	G	W			3			
4	Trip Blank	—	—	~~G~~	~~W~~			2			

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
T Zukan	10/9/14 1500	ARCADIS	[illegible]	10/10/14 0845	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 4.5

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-63522-1

Login Number: 63522

List Source: TestAmerica Nashville

List Number: 1

Creator: Armstrong, Daniel

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-64080-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
10/30/2014 3:15:58 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-64080-1	205R	Water	10/15/14 14:25	10/17/14 08:30
490-64080-2	169R	Water	10/15/14 12:20	10/17/14 08:30
490-64080-3	203R	Water	10/15/14 10:50	10/17/14 08:30
490-64080-4	403R	Water	10/15/14 10:45	10/17/14 08:30
490-64080-5	IW-100	Water	10/15/14 11:45	10/17/14 08:30
490-64080-6	IW-103	Water	10/15/14 11:40	10/17/14 08:30
490-64080-7	202R	Water	10/15/14 11:15	10/17/14 08:30
490-64080-8	204R	Water	10/15/14 14:40	10/17/14 08:30
490-64080-9	35R	Water	10/15/14 15:40	10/17/14 08:30
490-64080-10	TRIP BLANK	Water	10/15/14 00:01	10/17/14 08:30
490-64080-11	103R	Water	10/16/14 11:15	10/17/14 08:30
490-64080-12	69R	Water	10/16/14 13:00	10/17/14 08:30
490-64080-13	108R	Water	10/16/14 12:40	10/17/14 08:30
490-64080-14	201R	Water	10/16/14 15:25	10/17/14 08:30
490-64080-15	MW-301 (35-45)	Water	10/16/14 09:50	10/17/14 08:30
490-64080-16	MW-301 (115-125)	Water	10/16/14 10:00	10/17/14 08:30
490-64080-17	MW-301 (145-155)	Water	10/16/14 10:20	10/17/14 08:30
490-64080-18	MW-305 (35-45)	Water	10/16/14 11:15	10/17/14 08:30
490-64080-19	MW-305 (62-72)	Water	10/16/14 11:45	10/17/14 08:30
490-64080-20	MW-305 (145-155)	Water	10/16/14 12:00	10/17/14 08:30

Job ID: 490-64080-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-64080-1

Comments
No additional comments.

Receipt
The samples were received on 10/17/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8º C.

GC/MS VOA
Method(s) 8260B: The following sample ran from a vial containing headspace: 201R (490-64080-14). All vials were received with headspace.

Method(s) 8260B: The method blank for batch 200148 contained methylene chloride 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 was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 205R

Date Collected: 10/15/14 14:25
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/21/14 20:30	1
Benzene	**70.1**		0.500	0.200	ug/L			10/21/14 20:30	1
Bromoform	ND		0.500	0.290	ug/L			10/21/14 20:30	1
Bromomethane	ND		0.500	0.350	ug/L			10/21/14 20:30	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/21/14 20:30	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/21/14 20:30	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/21/14 20:30	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/21/14 20:30	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/21/14 20:30	1
Chloroethane	ND		0.500	0.360	ug/L			10/21/14 20:30	1
Chloroform	ND		0.500	0.230	ug/L			10/21/14 20:30	1
Chloromethane	ND		0.500	0.360	ug/L			10/21/14 20:30	1
cis-1,2-Dichloroethene	**29.9**		0.500	0.210	ug/L			10/21/14 20:30	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/21/14 20:30	1
Dibromomethane	ND		0.500	0.450	ug/L			10/21/14 20:30	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/21/14 20:30	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/21/14 20:30	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/21/14 20:30	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/21/14 20:30	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/21/14 20:30	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/21/14 20:30	1
Ethylbenzene	**17.9**		0.500	0.190	ug/L			10/21/14 20:30	1
2-Hexanone	ND		5.00	1.28	ug/L			10/21/14 20:30	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/21/14 20:30	1
4-Methyl-2-pentanone (MIBK)	**40.2**		5.00	0.810	ug/L			10/21/14 20:30	1
m-Xylene & p-Xylene	**11.9**		0.500	0.380	ug/L			10/21/14 20:30	1
o-Xylene	**0.241**	**J**	0.500	0.200	ug/L			10/21/14 20:30	1
Styrene	ND		0.500	0.280	ug/L			10/21/14 20:30	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/21/14 20:30	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/21/14 20:30	1
Toluene	ND		0.500	0.170	ug/L			10/21/14 20:30	1
trans-1,2-Dichloroethene	**4.08**		0.500	0.230	ug/L			10/21/14 20:30	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/21/14 20:30	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/21/14 20:30	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/21/14 20:30	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/21/14 20:30	1
Trichloroethene	**1.61**		0.500	0.200	ug/L			10/21/14 20:30	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/21/14 20:30	1
Xylenes, Total	**12.2**		1.50	0.580	ug/L			10/21/14 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*		*10/21/14 20:30*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*10/21/14 20:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*10/21/14 20:30*	*1*
Toluene-d8 (Surr)	*97*		*70 - 130*		*10/21/14 20:30*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 169R

Date Collected: 10/15/14 12:20
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/21/14 20:57	1
Benzene	**39.6**		0.500	0.200	ug/L			10/21/14 20:57	1
Bromoform	ND		0.500	0.290	ug/L			10/21/14 20:57	1
Bromomethane	ND		0.500	0.350	ug/L			10/21/14 20:57	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/21/14 20:57	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/21/14 20:57	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/21/14 20:57	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/21/14 20:57	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/21/14 20:57	1
Chloroethane	ND		0.500	0.360	ug/L			10/21/14 20:57	1
Chloroform	ND		0.500	0.230	ug/L			10/21/14 20:57	1
Chloromethane	ND		0.500	0.360	ug/L			10/21/14 20:57	1
cis-1,2-Dichloroethene	**41.2**		0.500	0.210	ug/L			10/21/14 20:57	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/21/14 20:57	1
Dibromomethane	ND		0.500	0.450	ug/L			10/21/14 20:57	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/21/14 20:57	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/21/14 20:57	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/21/14 20:57	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/21/14 20:57	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/21/14 20:57	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/21/14 20:57	1
Ethylbenzene	**15.2**		0.500	0.190	ug/L			10/21/14 20:57	1
2-Hexanone	ND		5.00	1.28	ug/L			10/21/14 20:57	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/21/14 20:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/21/14 20:57	1
m-Xylene & p-Xylene	**13.5**		0.500	0.380	ug/L			10/21/14 20:57	1
o-Xylene	ND		0.500	0.200	ug/L			10/21/14 20:57	1
Styrene	ND		0.500	0.280	ug/L			10/21/14 20:57	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/21/14 20:57	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/21/14 20:57	1
Toluene	**0.268**	**J**	0.500	0.170	ug/L			10/21/14 20:57	1
trans-1,2-Dichloroethene	**0.271**	**J**	0.500	0.230	ug/L			10/21/14 20:57	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/21/14 20:57	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/21/14 20:57	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/21/14 20:57	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/21/14 20:57	1
Trichloroethene	**0.484**	**J**	0.500	0.200	ug/L			10/21/14 20:57	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/21/14 20:57	1
Xylenes, Total	**13.7**		1.50	0.580	ug/L			10/21/14 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*		*10/21/14 20:57*	*1*
Dibromofluoromethane (Surr)	*100*		*70 - 130*		*10/21/14 20:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 130*		*10/21/14 20:57*	*1*
Toluene-d8 (Surr)	*91*		*70 - 130*		*10/21/14 20:57*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 203R

Date Collected: 10/15/14 10:50
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/22/14 19:51	1
Benzene	**129**		0.500	0.200	ug/L			10/22/14 19:51	1
Bromoform	ND		0.500	0.290	ug/L			10/22/14 19:51	1
Bromomethane	ND		0.500	0.350	ug/L			10/22/14 19:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/22/14 19:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/22/14 19:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/22/14 19:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/22/14 19:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/22/14 19:51	1
Chloroethane	ND		0.500	0.360	ug/L			10/22/14 19:51	1
Chloroform	ND		0.500	0.230	ug/L			10/22/14 19:51	1
Chloromethane	ND		0.500	0.360	ug/L			10/22/14 19:51	1
cis-1,2-Dichloroethene	**99.0**		0.500	0.210	ug/L			10/22/14 19:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 19:51	1
Dibromomethane	ND		0.500	0.450	ug/L			10/22/14 19:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/22/14 19:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/22/14 19:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/22/14 19:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/22/14 19:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/22/14 19:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/22/14 19:51	1
Ethylbenzene	**48.3**		0.500	0.190	ug/L			10/22/14 19:51	1
2-Hexanone	ND		5.00	1.28	ug/L			10/22/14 19:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/22/14 19:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/22/14 19:51	1
m-Xylene & p-Xylene	**38.9**		0.500	0.380	ug/L			10/22/14 19:51	1
o-Xylene	**0.796**		0.500	0.200	ug/L			10/22/14 19:51	1
Styrene	ND		0.500	0.280	ug/L			10/22/14 19:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/22/14 19:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/22/14 19:51	1
Toluene	**0.799**		0.500	0.170	ug/L			10/22/14 19:51	1
trans-1,2-Dichloroethene	**0.607**		0.500	0.230	ug/L			10/22/14 19:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 19:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/22/14 19:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 19:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 19:51	1
Trichloroethene	**0.504**		0.500	0.200	ug/L			10/22/14 19:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/22/14 19:51	1
Xylenes, Total	**39.7**		1.50	0.580	ug/L			10/22/14 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/22/14 19:51*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*10/22/14 19:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*10/22/14 19:51*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*10/22/14 19:51*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 403R

Date Collected: 10/15/14 10:45
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/22/14 20:18	1
Benzene	**128**		0.500	0.200	ug/L			10/22/14 20:18	1
Bromoform	ND		0.500	0.290	ug/L			10/22/14 20:18	1
Bromomethane	ND		0.500	0.350	ug/L			10/22/14 20:18	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/22/14 20:18	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/22/14 20:18	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/22/14 20:18	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/22/14 20:18	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/22/14 20:18	1
Chloroethane	ND		0.500	0.360	ug/L			10/22/14 20:18	1
Chloroform	ND		0.500	0.230	ug/L			10/22/14 20:18	1
Chloromethane	ND		0.500	0.360	ug/L			10/22/14 20:18	1
cis-1,2-Dichloroethene	**98.9**		0.500	0.210	ug/L			10/22/14 20:18	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 20:18	1
Dibromomethane	ND		0.500	0.450	ug/L			10/22/14 20:18	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/22/14 20:18	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/22/14 20:18	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/22/14 20:18	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/22/14 20:18	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/22/14 20:18	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/22/14 20:18	1
Ethylbenzene	**48.1**		0.500	0.190	ug/L			10/22/14 20:18	1
2-Hexanone	ND		5.00	1.28	ug/L			10/22/14 20:18	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/22/14 20:18	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/22/14 20:18	1
m-Xylene & p-Xylene	**39.1**		0.500	0.380	ug/L			10/22/14 20:18	1
o-Xylene	**0.700**		0.500	0.200	ug/L			10/22/14 20:18	1
Styrene	ND		0.500	0.280	ug/L			10/22/14 20:18	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/22/14 20:18	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/22/14 20:18	1
Toluene	**0.805**		0.500	0.170	ug/L			10/22/14 20:18	1
trans-1,2-Dichloroethene	**0.523**		0.500	0.230	ug/L			10/22/14 20:18	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 20:18	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/22/14 20:18	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 20:18	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 20:18	1
Trichloroethene	**0.481**	**J**	0.500	0.200	ug/L			10/22/14 20:18	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/22/14 20:18	1
Xylenes, Total	**39.8**		1.50	0.580	ug/L			10/22/14 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*10/22/14 20:18*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*10/22/14 20:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*10/22/14 20:18*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*10/22/14 20:18*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: IW-100

Date Collected: 10/15/14 11:45
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/22/14 19:25	1
Benzene	**37.2**		0.500	0.200	ug/L			10/22/14 19:25	1
Bromoform	ND		0.500	0.290	ug/L			10/22/14 19:25	1
Bromomethane	ND		0.500	0.350	ug/L			10/22/14 19:25	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/22/14 19:25	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/22/14 19:25	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/22/14 19:25	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/22/14 19:25	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/22/14 19:25	1
Chloroethane	ND		0.500	0.360	ug/L			10/22/14 19:25	1
Chloroform	ND		0.500	0.230	ug/L			10/22/14 19:25	1
Chloromethane	ND		0.500	0.360	ug/L			10/22/14 19:25	1
cis-1,2-Dichloroethene	**77.8**		0.500	0.210	ug/L			10/22/14 19:25	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 19:25	1
Dibromomethane	ND		0.500	0.450	ug/L			10/22/14 19:25	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/22/14 19:25	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/22/14 19:25	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/22/14 19:25	1
1,1-Dichloroethene	**0.253**	**J**	0.500	0.250	ug/L			10/22/14 19:25	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/22/14 19:25	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/22/14 19:25	1
Ethylbenzene	**12.6**		0.500	0.190	ug/L			10/22/14 19:25	1
2-Hexanone	ND		5.00	1.28	ug/L			10/22/14 19:25	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/22/14 19:25	1
4-Methyl-2-pentanone (MIBK)	**16.6**		5.00	0.810	ug/L			10/22/14 19:25	1
m-Xylene & p-Xylene	**11.1**		0.500	0.380	ug/L			10/22/14 19:25	1
o-Xylene	**1.37**		0.500	0.200	ug/L			10/22/14 19:25	1
Styrene	ND		0.500	0.280	ug/L			10/22/14 19:25	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/22/14 19:25	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/22/14 19:25	1
Toluene	**0.822**		0.500	0.170	ug/L			10/22/14 19:25	1
trans-1,2-Dichloroethene	**3.27**		0.500	0.230	ug/L			10/22/14 19:25	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 19:25	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/22/14 19:25	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 19:25	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 19:25	1
Trichloroethene	**3.08**		0.500	0.200	ug/L			10/22/14 19:25	1
Vinyl chloride	**0.325**	**J**	0.500	0.180	ug/L			10/22/14 19:25	1
Xylenes, Total	**12.5**		1.50	0.580	ug/L			10/22/14 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/22/14 19:25*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*10/22/14 19:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*10/22/14 19:25*	*1*
Toluene-d8 (Surr)	*116*		*70 - 130*		*10/22/14 19:25*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: IW-103

Date Collected: 10/15/14 11:40
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-6

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/22/14 20:44	1
Benzene	**20.3**		0.500	0.200	ug/L			10/22/14 20:44	1
Bromoform	ND		0.500	0.290	ug/L			10/22/14 20:44	1
Bromomethane	ND		0.500	0.350	ug/L			10/22/14 20:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/22/14 20:44	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/22/14 20:44	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/22/14 20:44	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/22/14 20:44	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/22/14 20:44	1
Chloroethane	ND		0.500	0.360	ug/L			10/22/14 20:44	1
Chloroform	ND		0.500	0.230	ug/L			10/22/14 20:44	1
Chloromethane	ND		0.500	0.360	ug/L			10/22/14 20:44	1
cis-1,2-Dichloroethene	**25.5**		0.500	0.210	ug/L			10/22/14 20:44	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 20:44	1
Dibromomethane	ND		0.500	0.450	ug/L			10/22/14 20:44	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/22/14 20:44	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/22/14 20:44	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/22/14 20:44	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/22/14 20:44	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/22/14 20:44	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/22/14 20:44	1
Ethylbenzene	**6.00**		0.500	0.190	ug/L			10/22/14 20:44	1
2-Hexanone	ND		5.00	1.28	ug/L			10/22/14 20:44	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/22/14 20:44	1
4-Methyl-2-pentanone (MIBK)	**6.75**		5.00	0.810	ug/L			10/22/14 20:44	1
m-Xylene & p-Xylene	**5.76**		0.500	0.380	ug/L			10/22/14 20:44	1
o-Xylene	**0.625**		0.500	0.200	ug/L			10/22/14 20:44	1
Styrene	ND		0.500	0.280	ug/L			10/22/14 20:44	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/22/14 20:44	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/22/14 20:44	1
Toluene	**0.295**	**J**	0.500	0.170	ug/L			10/22/14 20:44	1
trans-1,2-Dichloroethene	**0.336**	**J**	0.500	0.230	ug/L			10/22/14 20:44	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 20:44	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/22/14 20:44	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 20:44	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 20:44	1
Trichloroethene	**0.530**		0.500	0.200	ug/L			10/22/14 20:44	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/22/14 20:44	1
Xylenes, Total	**6.39**		1.50	0.580	ug/L			10/22/14 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/22/14 20:44*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*10/22/14 20:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 130*		*10/22/14 20:44*	*1*
Toluene-d8 (Surr)	*113*		*70 - 130*		*10/22/14 20:44*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 202R

Date Collected: 10/15/14 11:15
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/23/14 01:06	1
Benzene	**0.301**	**J**	0.500	0.200	ug/L			10/23/14 01:06	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 01:06	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 01:06	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 01:06	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/23/14 01:06	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 01:06	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 01:06	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 01:06	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 01:06	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 01:06	1
Chloromethane	ND		0.500	0.360	ug/L			10/23/14 01:06	1
cis-1,2-Dichloroethene	**2.75**		0.500	0.210	ug/L			10/23/14 01:06	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 01:06	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 01:06	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 01:06	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 01:06	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 01:06	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 01:06	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 01:06	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 01:06	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/23/14 01:06	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 01:06	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 01:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 01:06	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 01:06	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 01:06	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 01:06	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 01:06	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 01:06	1
Toluene	ND		0.500	0.170	ug/L			10/23/14 01:06	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/23/14 01:06	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 01:06	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 01:06	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 01:06	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 01:06	1
Trichloroethene	**0.292**	**J**	0.500	0.200	ug/L			10/23/14 01:06	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 01:06	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/23/14 01:06*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*10/23/14 01:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*10/23/14 01:06*	*1*
Toluene-d8 (Surr)	*114*		*70 - 130*		*10/23/14 01:06*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 204R

Date Collected: 10/15/14 14:40
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/23/14 01:33	1
Benzene	ND		0.500	0.200	ug/L			10/23/14 01:33	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 01:33	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 01:33	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 01:33	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/23/14 01:33	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 01:33	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 01:33	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 01:33	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 01:33	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 01:33	1
Chloromethane	ND		0.500	0.360	ug/L			10/23/14 01:33	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/23/14 01:33	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 01:33	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 01:33	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 01:33	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 01:33	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 01:33	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 01:33	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 01:33	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 01:33	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/23/14 01:33	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 01:33	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 01:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 01:33	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 01:33	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 01:33	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 01:33	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 01:33	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 01:33	1
Toluene	ND		0.500	0.170	ug/L			10/23/14 01:33	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/23/14 01:33	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 01:33	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 01:33	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 01:33	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 01:33	1
Trichloroethene	ND		0.500	0.200	ug/L			10/23/14 01:33	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 01:33	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 01:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*10/23/14 01:33*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*10/23/14 01:33*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*10/23/14 01:33*	*1*
Toluene-d8 (Surr)	*113*		*70 - 130*		*10/23/14 01:33*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 35R

Date Collected: 10/15/14 15:40
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-9

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/23/14 01:59	1
Benzene	ND		0.500	0.200	ug/L			10/23/14 01:59	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 01:59	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 01:59	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 01:59	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/23/14 01:59	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 01:59	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 01:59	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 01:59	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 01:59	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 01:59	1
Chloromethane	ND		0.500	0.360	ug/L			10/23/14 01:59	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/23/14 01:59	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 01:59	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 01:59	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 01:59	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 01:59	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 01:59	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 01:59	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 01:59	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 01:59	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/23/14 01:59	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 01:59	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 01:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 01:59	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 01:59	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 01:59	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 01:59	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 01:59	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 01:59	1
Toluene	ND		0.500	0.170	ug/L			10/23/14 01:59	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/23/14 01:59	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 01:59	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 01:59	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 01:59	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 01:59	1
Trichloroethene	ND		0.500	0.200	ug/L			10/23/14 01:59	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 01:59	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 01:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*		*10/23/14 01:59*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*10/23/14 01:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*10/23/14 01:59*	*1*
Toluene-d8 (Surr)	*115*		*70 - 130*		*10/23/14 01:59*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 490-64080-10

Date Collected: 10/15/14 00:01
Date Received: 10/17/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/21/14 16:59	1
Benzene	ND		0.500	0.200	ug/L			10/21/14 16:59	1
Bromoform	ND		0.500	0.290	ug/L			10/21/14 16:59	1
Bromomethane	ND		0.500	0.350	ug/L			10/21/14 16:59	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/21/14 16:59	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/21/14 16:59	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/21/14 16:59	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/21/14 16:59	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/21/14 16:59	1
Chloroethane	ND		0.500	0.360	ug/L			10/21/14 16:59	1
Chloroform	ND		0.500	0.230	ug/L			10/21/14 16:59	1
Chloromethane	ND		0.500	0.360	ug/L			10/21/14 16:59	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/21/14 16:59	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/21/14 16:59	1
Dibromomethane	ND		0.500	0.450	ug/L			10/21/14 16:59	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/21/14 16:59	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/21/14 16:59	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/21/14 16:59	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/21/14 16:59	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/21/14 16:59	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/21/14 16:59	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/21/14 16:59	1
2-Hexanone	ND		5.00	1.28	ug/L			10/21/14 16:59	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/21/14 16:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/21/14 16:59	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/21/14 16:59	1
o-Xylene	ND		0.500	0.200	ug/L			10/21/14 16:59	1
Styrene	ND		0.500	0.280	ug/L			10/21/14 16:59	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/21/14 16:59	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/21/14 16:59	1
Toluene	**0.213**	**J**	0.500	0.170	ug/L			10/21/14 16:59	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/21/14 16:59	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/21/14 16:59	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/21/14 16:59	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/21/14 16:59	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/21/14 16:59	1
Trichloroethene	ND		0.500	0.200	ug/L			10/21/14 16:59	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/21/14 16:59	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/21/14 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*		*10/21/14 16:59*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*10/21/14 16:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*10/21/14 16:59*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*10/21/14 16:59*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 103R

Date Collected: 10/16/14 11:15
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/23/14 02:25	1
Benzene	**16.5**		0.500	0.200	ug/L			10/23/14 02:25	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 02:25	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 02:25	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 02:25	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/23/14 02:25	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 02:25	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 02:25	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 02:25	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 02:25	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 02:25	1
Chloromethane	ND		0.500	0.360	ug/L			10/23/14 02:25	1
cis-1,2-Dichloroethene	**18.3**		0.500	0.210	ug/L			10/23/14 02:25	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 02:25	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 02:25	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 02:25	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 02:25	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 02:25	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 02:25	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 02:25	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 02:25	1
Ethylbenzene	**1.17**		0.500	0.190	ug/L			10/23/14 02:25	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 02:25	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 02:25	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 02:25	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 02:25	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 02:25	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 02:25	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 02:25	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 02:25	1
Toluene	ND		0.500	0.170	ug/L			10/23/14 02:25	1
trans-1,2-Dichloroethene	**1.53**		0.500	0.230	ug/L			10/23/14 02:25	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 02:25	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 02:25	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 02:25	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 02:25	1
Trichloroethene	**0.524**		0.500	0.200	ug/L			10/23/14 02:25	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 02:25	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 02:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/23/14 02:25*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*10/23/14 02:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*10/23/14 02:25*	*1*
Toluene-d8 (Surr)	*114*		*70 - 130*		*10/23/14 02:25*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 69R

Date Collected: 10/16/14 13:00
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/23/14 02:51	1
Benzene	**2.17**		0.500	0.200	ug/L			10/23/14 02:51	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 02:51	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 02:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 02:51	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/23/14 02:51	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 02:51	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 02:51	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 02:51	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 02:51	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 02:51	1
Chloromethane	ND		0.500	0.360	ug/L			10/23/14 02:51	1
cis-1,2-Dichloroethene	**8.00**		0.500	0.210	ug/L			10/23/14 02:51	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 02:51	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 02:51	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 02:51	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 02:51	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 02:51	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 02:51	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 02:51	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 02:51	1
Ethylbenzene	**0.967**		0.500	0.190	ug/L			10/23/14 02:51	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 02:51	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 02:51	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 02:51	1
m-Xylene & p-Xylene	**0.746**		0.500	0.380	ug/L			10/23/14 02:51	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 02:51	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 02:51	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 02:51	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 02:51	1
Toluene	ND		0.500	0.170	ug/L			10/23/14 02:51	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/23/14 02:51	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 02:51	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 02:51	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 02:51	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 02:51	1
Trichloroethene	**0.429**	**J**	0.500	0.200	ug/L			10/23/14 02:51	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 02:51	1
Xylenes, Total	**0.819**	**J**	1.50	0.580	ug/L			10/23/14 02:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/23/14 02:51*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*10/23/14 02:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*10/23/14 02:51*	*1*
Toluene-d8 (Surr)	*114*		*70 - 130*		*10/23/14 02:51*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 108R

Date Collected: 10/16/14 12:40
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-13

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/23/14 03:17	1
Benzene	ND		0.500	0.200	ug/L			10/23/14 03:17	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 03:17	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 03:17	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 03:17	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/23/14 03:17	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 03:17	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 03:17	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 03:17	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 03:17	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 03:17	1
Chloromethane	ND		0.500	0.360	ug/L			10/23/14 03:17	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/23/14 03:17	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 03:17	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 03:17	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 03:17	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 03:17	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 03:17	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 03:17	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 03:17	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 03:17	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/23/14 03:17	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 03:17	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 03:17	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 03:17	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 03:17	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 03:17	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 03:17	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 03:17	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 03:17	1
Toluene	ND		0.500	0.170	ug/L			10/23/14 03:17	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/23/14 03:17	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 03:17	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 03:17	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 03:17	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 03:17	1
Trichloroethene	ND		0.500	0.200	ug/L			10/23/14 03:17	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 03:17	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 03:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*10/23/14 03:17*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/23/14 03:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*10/23/14 03:17*	*1*
Toluene-d8 (Surr)	*113*		*70 - 130*		*10/23/14 03:17*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 201R

Date Collected: 10/16/14 15:25
Date Received: 10/17/14 08:30

Lab Sample ID: 490-64080-14

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/22/14 18:59	1
Benzene	**4.01**		0.500	0.200	ug/L			10/22/14 18:59	1
Bromoform	ND		0.500	0.290	ug/L			10/22/14 18:59	1
Bromomethane	ND		0.500	0.350	ug/L			10/22/14 18:59	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/22/14 18:59	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/22/14 18:59	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/22/14 18:59	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/22/14 18:59	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/22/14 18:59	1
Chloroethane	ND		0.500	0.360	ug/L			10/22/14 18:59	1
Chloroform	ND		0.500	0.230	ug/L			10/22/14 18:59	1
Chloromethane	ND		0.500	0.360	ug/L			10/22/14 18:59	1
cis-1,2-Dichloroethene	**29.2**		0.500	0.210	ug/L			10/22/14 18:59	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 18:59	1
Dibromomethane	ND		0.500	0.450	ug/L			10/22/14 18:59	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/22/14 18:59	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/22/14 18:59	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/22/14 18:59	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/22/14 18:59	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/22/14 18:59	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/22/14 18:59	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/22/14 18:59	1
2-Hexanone	ND		5.00	1.28	ug/L			10/22/14 18:59	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/22/14 18:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/22/14 18:59	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/22/14 18:59	1
o-Xylene	ND		0.500	0.200	ug/L			10/22/14 18:59	1
Styrene	ND		0.500	0.280	ug/L			10/22/14 18:59	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/22/14 18:59	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/22/14 18:59	1
Toluene	ND		0.500	0.170	ug/L			10/22/14 18:59	1
trans-1,2-Dichloroethene	**2.43**		0.500	0.230	ug/L			10/22/14 18:59	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 18:59	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/22/14 18:59	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 18:59	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 18:59	1
Trichloroethene	**0.551**		0.500	0.200	ug/L			10/22/14 18:59	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/22/14 18:59	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/22/14 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/22/14 18:59*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/22/14 18:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*10/22/14 18:59*	*1*
Toluene-d8 (Surr)	*114*		*70 - 130*		*10/22/14 18:59*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: MW-301 (35-45)

Lab Sample ID: 490-64080-15

Date Collected: 10/16/14 09:50
Date Received: 10/17/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/23/14 03:44	1
Benzene	**20.6**		0.500	0.200	ug/L			10/23/14 03:44	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 03:44	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 03:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 03:44	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/23/14 03:44	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 03:44	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 03:44	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 03:44	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 03:44	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 03:44	1
Chloromethane	ND		0.500	0.360	ug/L			10/23/14 03:44	1
cis-1,2-Dichloroethene	**9.45**		0.500	0.210	ug/L			10/23/14 03:44	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 03:44	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 03:44	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 03:44	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 03:44	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 03:44	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 03:44	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 03:44	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 03:44	1
Ethylbenzene	**12.4**		0.500	0.190	ug/L			10/23/14 03:44	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 03:44	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 03:44	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 03:44	1
m-Xylene & p-Xylene	**10.6**		0.500	0.380	ug/L			10/23/14 03:44	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 03:44	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 03:44	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 03:44	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 03:44	1
Toluene	**0.323**	**J**	0.500	0.170	ug/L			10/23/14 03:44	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/23/14 03:44	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 03:44	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 03:44	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 03:44	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 03:44	1
Trichloroethene	ND		0.500	0.200	ug/L			10/23/14 03:44	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 03:44	1
Xylenes, Total	**10.8**		1.50	0.580	ug/L			10/23/14 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*10/23/14 03:44*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*10/23/14 03:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*10/23/14 03:44*	*1*
Toluene-d8 (Surr)	*113*		*70 - 130*		*10/23/14 03:44*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: MW-301 (115-125)

Lab Sample ID: 490-64080-16

Date Collected: 10/16/14 10:00
Date Received: 10/17/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**95.4**		5.00	2.66	ug/L			10/23/14 04:10	1
Benzene	**1.92**		0.500	0.200	ug/L			10/23/14 04:10	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 04:10	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 04:10	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 04:10	1
Carbon disulfide	**2.44**		0.500	0.220	ug/L			10/23/14 04:10	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 04:10	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 04:10	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 04:10	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 04:10	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 04:10	1
Chloromethane	**0.815**		0.500	0.360	ug/L			10/23/14 04:10	1
cis-1,2-Dichloroethene	**9.76**		0.500	0.210	ug/L			10/23/14 04:10	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 04:10	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 04:10	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 04:10	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 04:10	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 04:10	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 04:10	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 04:10	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 04:10	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/23/14 04:10	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 04:10	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 04:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 04:10	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 04:10	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 04:10	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 04:10	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 04:10	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 04:10	1
Toluene	**0.546**		0.500	0.170	ug/L			10/23/14 04:10	1
trans-1,2-Dichloroethene	**0.288**	**J**	0.500	0.230	ug/L			10/23/14 04:10	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 04:10	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 04:10	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 04:10	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 04:10	1
Trichloroethene	**0.538**		0.500	0.200	ug/L			10/23/14 04:10	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 04:10	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*10/23/14 04:10*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/23/14 04:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*10/23/14 04:10*	*1*
Toluene-d8 (Surr)	*115*		*70 - 130*		*10/23/14 04:10*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: MW-301 (145-155)

Lab Sample ID: 490-64080-17

Date Collected: 10/16/14 10:20
Matrix: Water
Date Received: 10/17/14 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**12.1**		5.00	2.66	ug/L			10/23/14 04:36	1
Benzene	**9.48**		0.500	0.200	ug/L			10/23/14 04:36	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 04:36	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 04:36	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 04:36	1
Carbon disulfide	**1.63**		0.500	0.220	ug/L			10/23/14 04:36	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 04:36	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 04:36	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 04:36	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 04:36	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 04:36	1
Chloromethane	**0.590**		0.500	0.360	ug/L			10/23/14 04:36	1
cis-1,2-Dichloroethene	**26.1**		0.500	0.210	ug/L			10/23/14 04:36	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 04:36	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 04:36	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 04:36	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 04:36	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 04:36	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 04:36	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 04:36	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 04:36	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/23/14 04:36	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 04:36	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 04:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 04:36	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 04:36	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 04:36	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 04:36	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 04:36	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 04:36	1
Toluene	**1.20**		0.500	0.170	ug/L			10/23/14 04:36	1
trans-1,2-Dichloroethene	**0.407**	**J**	0.500	0.230	ug/L			10/23/14 04:36	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 04:36	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 04:36	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 04:36	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 04:36	1
Trichloroethene	**0.344**	**J**	0.500	0.200	ug/L			10/23/14 04:36	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 04:36	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 04:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*		*10/23/14 04:36*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/23/14 04:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*		*10/23/14 04:36*	*1*
Toluene-d8 (Surr)	*116*		*70 - 130*		*10/23/14 04:36*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: MW-305 (35-45)

Lab Sample ID: 490-64080-18

Date Collected: 10/16/14 11:15
Date Received: 10/17/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.06**	**J**	5.00	2.66	ug/L			10/23/14 05:02	1
Benzene	**1.36**		0.500	0.200	ug/L			10/23/14 05:02	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 05:02	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 05:02	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 05:02	1
Carbon disulfide	**0.367**	**J**	0.500	0.220	ug/L			10/23/14 05:02	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 05:02	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 05:02	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 05:02	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 05:02	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 05:02	1
Chloromethane	ND		0.500	0.360	ug/L			10/23/14 05:02	1
cis-1,2-Dichloroethene	**2.97**		0.500	0.210	ug/L			10/23/14 05:02	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 05:02	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 05:02	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 05:02	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 05:02	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 05:02	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 05:02	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 05:02	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 05:02	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/23/14 05:02	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 05:02	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 05:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 05:02	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 05:02	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 05:02	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 05:02	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 05:02	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 05:02	1
Toluene	**1.52**		0.500	0.170	ug/L			10/23/14 05:02	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/23/14 05:02	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 05:02	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 05:02	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 05:02	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 05:02	1
Trichloroethene	ND		0.500	0.200	ug/L			10/23/14 05:02	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 05:02	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 05:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*		*10/23/14 05:02*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*10/23/14 05:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*10/23/14 05:02*	*1*
Toluene-d8 (Surr)	*115*		*70 - 130*		*10/23/14 05:02*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: MW-305 (62-72)

Lab Sample ID: 490-64080-19

Date Collected: 10/16/14 11:45
Matrix: Water
Date Received: 10/17/14 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/23/14 05:28	1
Benzene	**2.44**		0.500	0.200	ug/L			10/23/14 05:28	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 05:28	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 05:28	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 05:28	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/23/14 05:28	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 05:28	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 05:28	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 05:28	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 05:28	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 05:28	1
Chloromethane	ND		0.500	0.360	ug/L			10/23/14 05:28	1
cis-1,2-Dichloroethene	**1.23**		0.500	0.210	ug/L			10/23/14 05:28	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 05:28	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 05:28	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 05:28	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 05:28	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 05:28	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 05:28	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 05:28	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 05:28	1
Ethylbenzene	**0.306**	**J**	0.500	0.190	ug/L			10/23/14 05:28	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 05:28	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 05:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 05:28	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 05:28	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 05:28	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 05:28	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 05:28	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 05:28	1
Toluene	**0.818**		0.500	0.170	ug/L			10/23/14 05:28	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/23/14 05:28	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 05:28	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 05:28	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 05:28	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 05:28	1
Trichloroethene	ND		0.500	0.200	ug/L			10/23/14 05:28	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 05:28	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 05:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*10/23/14 05:28*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*10/23/14 05:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*		*10/23/14 05:28*	*1*
Toluene-d8 (Surr)	*114*		*70 - 130*		*10/23/14 05:28*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: MW-305 (145-155)

Lab Sample ID: 490-64080-20

Date Collected: 10/16/14 12:00
Date Received: 10/17/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.20**		5.00	2.66	ug/L			10/23/14 05:54	1
Benzene	**0.200**	**J**	0.500	0.200	ug/L			10/23/14 05:54	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 05:54	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 05:54	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 05:54	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/23/14 05:54	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 05:54	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 05:54	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 05:54	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 05:54	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 05:54	1
Chloromethane	**0.413**	**J**	0.500	0.360	ug/L			10/23/14 05:54	1
cis-1,2-Dichloroethene	**0.691**		0.500	0.210	ug/L			10/23/14 05:54	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 05:54	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 05:54	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 05:54	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 05:54	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 05:54	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 05:54	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 05:54	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 05:54	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/23/14 05:54	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 05:54	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/23/14 05:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 05:54	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 05:54	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 05:54	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 05:54	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 05:54	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 05:54	1
Toluene	**1.04**		0.500	0.170	ug/L			10/23/14 05:54	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/23/14 05:54	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 05:54	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 05:54	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 05:54	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 05:54	1
Trichloroethene	ND		0.500	0.200	ug/L			10/23/14 05:54	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 05:54	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 05:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*		*10/23/14 05:54*	*1*
Dibromofluoromethane (Surr)	*96*		*70 - 130*		*10/23/14 05:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*10/23/14 05:54*	*1*
Toluene-d8 (Surr)	*115*		*70 - 130*		*10/23/14 05:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-199582/7
Matrix: Water
Analysis Batch: 199582

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/21/14 13:02	1
Benzene	ND		0.500	0.200	ug/L			10/21/14 13:02	1
Bromoform	ND		0.500	0.290	ug/L			10/21/14 13:02	1
Bromomethane	ND		0.500	0.350	ug/L			10/21/14 13:02	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/21/14 13:02	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/21/14 13:02	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/21/14 13:02	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/21/14 13:02	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/21/14 13:02	1
Chloroethane	ND		0.500	0.360	ug/L			10/21/14 13:02	1
Chloroform	ND		0.500	0.230	ug/L			10/21/14 13:02	1
Chloromethane	ND		0.500	0.360	ug/L			10/21/14 13:02	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/21/14 13:02	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/21/14 13:02	1
Dibromomethane	ND		0.500	0.450	ug/L			10/21/14 13:02	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/21/14 13:02	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/21/14 13:02	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/21/14 13:02	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/21/14 13:02	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/21/14 13:02	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/21/14 13:02	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/21/14 13:02	1
2-Hexanone	ND		5.00	1.28	ug/L			10/21/14 13:02	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/21/14 13:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/21/14 13:02	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/21/14 13:02	1
o-Xylene	ND		0.500	0.200	ug/L			10/21/14 13:02	1
Styrene	ND		0.500	0.280	ug/L			10/21/14 13:02	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/21/14 13:02	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/21/14 13:02	1
Toluene	ND		0.500	0.170	ug/L			10/21/14 13:02	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/21/14 13:02	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/21/14 13:02	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/21/14 13:02	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/21/14 13:02	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/21/14 13:02	1
Trichloroethene	ND		0.500	0.200	ug/L			10/21/14 13:02	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/21/14 13:02	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/21/14 13:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*		*10/21/14 13:02*	*1*
Dibromofluoromethane (Surr)	*98*		*70 - 130*		*10/21/14 13:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*10/21/14 13:02*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*10/21/14 13:02*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-199582/3
Matrix: Water
Analysis Batch: 199582

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	252.0		ug/L		101	54 - 145
Benzene	50.0	44.41		ug/L		89	80 - 121
Bromoform	50.0	48.58		ug/L		97	46 - 145
Bromomethane	50.0	44.91		ug/L		90	41 - 150
2-Butanone (MEK)	250	249.1		ug/L		100	62 - 133
Carbon disulfide	50.0	46.97		ug/L		94	77 - 126
Carbon tetrachloride	50.0	43.22		ug/L		86	64 - 147
Chlorobenzene	50.0	45.95		ug/L		92	80 - 120
Chlorodibromomethane	50.0	49.61		ug/L		99	69 - 133
Chloroethane	50.0	43.32		ug/L		87	72 - 120
Chloroform	50.0	43.75		ug/L		87	73 - 129
Chloromethane	50.0	40.58		ug/L		81	12 - 150
cis-1,2-Dichloroethene	50.0	44.80		ug/L		90	76 - 125
cis-1,3-Dichloropropene	50.0	47.28		ug/L		95	74 - 140
Dibromomethane	50.0	45.78		ug/L		92	71 - 125
Dichlorobromomethane	50.0	44.55		ug/L		89	75 - 129
1,1-Dichloroethane	50.0	43.94		ug/L		88	78 - 125
1,2-Dichloroethane	50.0	45.71		ug/L		91	77 - 121
1,1-Dichloroethene	50.0	43.82		ug/L		88	79 - 124
1,2-Dichloropropane	50.0	44.70		ug/L		89	75 - 120
1,1-Dichloropropene	50.0	43.13		ug/L		86	80 - 122
Ethylbenzene	50.0	45.28		ug/L		91	80 - 130
2-Hexanone	250	273.2		ug/L		109	60 - 142
Methylene Chloride	50.0	47.56		ug/L		95	79 - 123
4-Methyl-2-pentanone (MIBK)	250	259.7		ug/L		104	60 - 137
m-Xylene & p-Xylene	50.0	45.35		ug/L		91	80 - 141
o-Xylene	50.0	45.30		ug/L		91	80 - 127
Styrene	50.0	47.82		ug/L		96	80 - 127
1,1,1,2-Tetrachloroethane	50.0	46.08		ug/L		92	74 - 135
Tetrachloroethene	50.0	45.23		ug/L		90	80 - 126
Toluene	50.0	46.16		ug/L		92	80 - 126
trans-1,2-Dichloroethene	50.0	43.83		ug/L		88	79 - 126
trans-1,3-Dichloropropene	50.0	46.52		ug/L		93	63 - 134
1,3,5-Trichlorobenzene	50.0	49.62		ug/L		99	70 - 130
1,1,1-Trichloroethane	50.0	42.70		ug/L		85	78 - 135
1,1,2-Trichloroethane	50.0	46.73		ug/L		93	80 - 124
Trichloroethene	50.0	43.87		ug/L		88	80 - 123
Vinyl chloride	50.0	43.00		ug/L		86	68 - 120
Xylenes, Total	100	90.65		ug/L		91	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*97*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*99*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-199582/4
Matrix: Water
Analysis Batch: 199582

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
Acetone	250	241.0		ug/L		96	54 - 145	4	21
Benzene	50.0	47.49		ug/L		95	80 - 121	7	17
Bromoform	50.0	48.69		ug/L		97	46 - 145	0	16
Bromomethane	50.0	49.74		ug/L		99	41 - 150	10	50
2-Butanone (MEK)	250	235.4		ug/L		94	62 - 133	6	19
Carbon disulfide	50.0	50.88		ug/L		102	77 - 126	8	21
Carbon tetrachloride	50.0	45.72		ug/L		91	64 - 147	6	19
Chlorobenzene	50.0	48.61		ug/L		97	80 - 120	6	14
Chlorodibromomethane	50.0	50.63		ug/L		101	69 - 133	2	15
Chloroethane	50.0	45.90		ug/L		92	72 - 120	6	20
Chloroform	50.0	45.93		ug/L		92	73 - 129	5	18
Chloromethane	50.0	42.75		ug/L		86	12 - 150	5	31
cis-1,2-Dichloroethene	50.0	47.04		ug/L		94	76 - 125	5	17
cis-1,3-Dichloropropene	50.0	49.15		ug/L		98	74 - 140	4	15
Dibromomethane	50.0	45.57		ug/L		91	71 - 125	0	16
Dichlorobromomethane	50.0	45.66		ug/L		91	75 - 129	2	18
1,1-Dichloroethane	50.0	46.55		ug/L		93	78 - 125	6	17
1,2-Dichloroethane	50.0	46.36		ug/L		93	77 - 121	1	17
1,1-Dichloroethene	50.0	47.29		ug/L		95	79 - 124	8	17
1,2-Dichloropropane	50.0	46.52		ug/L		93	75 - 120	4	17
1,1-Dichloropropene	50.0	45.80		ug/L		92	80 - 122	6	17
Ethylbenzene	50.0	48.43		ug/L		97	80 - 130	7	15
2-Hexanone	250	261.0		ug/L		104	60 - 142	5	15
Methylene Chloride	50.0	49.56		ug/L		99	79 - 123	4	17
4-Methyl-2-pentanone (MIBK)	250	249.8		ug/L		100	60 - 137	4	17
m-Xylene & p-Xylene	50.0	48.36		ug/L		97	80 - 141	6	16
o-Xylene	50.0	47.36		ug/L		95	80 - 127	4	14
Styrene	50.0	50.38		ug/L		101	80 - 127	5	24
1,1,1,2-Tetrachloroethane	50.0	49.23		ug/L		98	74 - 135	7	16
Tetrachloroethene	50.0	49.04		ug/L		98	80 - 126	8	16
Toluene	50.0	50.15		ug/L		100	80 - 126	8	15
trans-1,2-Dichloroethene	50.0	46.81		ug/L		94	79 - 126	7	16
trans-1,3-Dichloropropene	50.0	47.78		ug/L		96	63 - 134	3	14
1,3,5-Trichlorobenzene	50.0	52.29		ug/L		105	70 - 130	5	30
1,1,1-Trichloroethane	50.0	45.70		ug/L		91	78 - 135	7	17
1,1,2-Trichloroethane	50.0	47.75		ug/L		95	80 - 124	2	15
Trichloroethene	50.0	46.83		ug/L		94	80 - 123	7	17
Vinyl chloride	50.0	46.34		ug/L		93	68 - 120	7	17
Xylenes, Total	100	95.72		ug/L		96	80 - 132	5	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-63940-B-4 MS
Matrix: Water
Analysis Batch: 199582

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	240.0		ug/L		96	45 - 141
Benzene	ND		50.0	46.97		ug/L		94	75 - 133
Bromoform	ND		50.0	48.25		ug/L		97	42 - 147
Bromomethane	ND		50.0	30.70		ug/L		61	16 - 163
2-Butanone (MEK)	ND		250	230.8		ug/L		92	50 - 138
Carbon disulfide	ND		50.0	52.15		ug/L		104	48 - 152
Carbon tetrachloride	ND		50.0	45.38		ug/L		91	62 - 164
Chlorobenzene	ND		50.0	49.83		ug/L		100	80 - 129
Chlorodibromomethane	ND		50.0	51.10		ug/L		102	66 - 140
Chloroethane	ND		50.0	48.49		ug/L		97	58 - 137
Chloroform	ND		50.0	46.19		ug/L		92	66 - 138
Chloromethane	ND		50.0	44.02		ug/L		88	10 - 169
cis-1,2-Dichloroethene	ND		50.0	47.40		ug/L		95	68 - 138
cis-1,3-Dichloropropene	ND		50.0	43.27		ug/L		87	71 - 141
Dibromomethane	ND		50.0	45.13		ug/L		90	58 - 140
Dichlorobromomethane	ND		50.0	45.13		ug/L		90	70 - 140
1,1-Dichloroethane	ND		50.0	47.53		ug/L		95	71 - 139
1,2-Dichloroethane	ND		50.0	45.57		ug/L		91	64 - 136
1,1-Dichloroethene	ND		50.0	51.14		ug/L		102	70 - 142
1,2-Dichloropropane	ND		50.0	44.90		ug/L		90	67 - 131
1,1-Dichloropropene	ND		50.0	44.86		ug/L		90	76 - 139
Ethylbenzene	ND		50.0	50.49		ug/L		101	79 - 139
2-Hexanone	ND		250	259.1		ug/L		104	50 - 150
Methylene Chloride	ND		50.0	52.34		ug/L		105	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	225.5		ug/L		90	50 - 147
m-Xylene & p-Xylene	ND		50.0	49.85		ug/L		100	80 - 153
o-Xylene	ND		50.0	48.67		ug/L		97	74 - 138
Styrene	ND		50.0	51.02		ug/L		102	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	50.08		ug/L		100	73 - 141
Tetrachloroethene	ND		50.0	47.17		ug/L		94	72 - 145
Toluene	ND		50.0	46.68		ug/L		93	75 - 136
trans-1,2-Dichloroethene	ND		50.0	50.08		ug/L		100	66 - 143
trans-1,3-Dichloropropene	ND		50.0	44.48		ug/L		89	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	51.90		ug/L		104	60 - 140
1,1,1-Trichloroethane	ND		50.0	43.87		ug/L		88	76 - 149
1,1,2-Trichloroethane	ND		50.0	43.90		ug/L		88	74 - 134
Trichloroethene	ND		50.0	46.45		ug/L		93	73 - 144
Vinyl chloride	ND		50.0	48.67		ug/L		97	56 - 129
Xylenes, Total	ND		100	98.52		ug/L		99	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
Dibromofluoromethane (Surr)	*88*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*92*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-63940-C-4 MSD
Matrix: Water
Analysis Batch: 199582

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	280.5		ug/L		112	45 - 141	16	21
Benzene	ND		50.0	51.61		ug/L		103	75 - 133	9	17
Bromoform	ND		50.0	46.71		ug/L		93	42 - 147	3	16
Bromomethane	ND		50.0	43.99		ug/L		88	16 - 163	36	50
2-Butanone (MEK)	ND		250	240.9		ug/L		96	50 - 138	4	19
Carbon disulfide	ND		50.0	56.05		ug/L		112	48 - 152	7	21
Carbon tetrachloride	ND		50.0	51.50		ug/L		103	62 - 164	13	19
Chlorobenzene	ND		50.0	48.29		ug/L		97	80 - 129	3	14
Chlorodibromomethane	ND		50.0	42.49	F2	ug/L		85	66 - 140	18	15
Chloroethane	ND		50.0	53.05		ug/L		106	58 - 137	9	20
Chloroform	ND		50.0	50.34		ug/L		101	66 - 138	9	18
Chloromethane	ND		50.0	47.69		ug/L		95	10 - 169	8	31
cis-1,2-Dichloroethene	ND		50.0	52.15		ug/L		104	68 - 138	10	17
cis-1,3-Dichloropropene	ND		50.0	40.96		ug/L		82	71 - 141	5	15
Dibromomethane	ND		50.0	48.43		ug/L		97	58 - 140	7	16
Dichlorobromomethane	ND		50.0	50.14		ug/L		100	70 - 140	11	18
1,1-Dichloroethane	ND		50.0	52.00		ug/L		104	71 - 139	9	17
1,2-Dichloroethane	ND		50.0	47.82		ug/L		96	64 - 136	5	17
1,1-Dichloroethene	ND		50.0	55.85		ug/L		112	70 - 142	9	17
1,2-Dichloropropane	ND		50.0	47.25		ug/L		95	67 - 131	5	17
1,1-Dichloropropene	ND		50.0	50.86		ug/L		102	76 - 139	13	17
Ethylbenzene	ND		50.0	48.61		ug/L		97	79 - 139	4	15
2-Hexanone	ND		250	216.7	F2	ug/L		87	50 - 150	18	15
Methylene Chloride	ND		50.0	57.97		ug/L		116	64 - 139	10	17
4-Methyl-2-pentanone (MIBK)	ND		250	211.2		ug/L		84	50 - 147	7	17
m-Xylene & p-Xylene	ND		50.0	47.71		ug/L		95	80 - 153	4	16
o-Xylene	ND		50.0	47.24		ug/L		94	74 - 138	3	14
Styrene	ND		50.0	49.81		ug/L		100	61 - 148	2	24
1,1,1,2-Tetrachloroethane	ND		50.0	48.09		ug/L		96	73 - 141	4	16
Tetrachloroethene	ND		50.0	41.89		ug/L		84	72 - 145	12	16
Toluene	ND		50.0	44.51		ug/L		89	75 - 136	5	15
trans-1,2-Dichloroethene	ND		50.0	54.72		ug/L		109	66 - 143	9	16
trans-1,3-Dichloropropene	ND		50.0	42.24		ug/L		84	59 - 135	5	14
1,3,5-Trichlorobenzene	ND		50.0	52.41		ug/L		105	60 - 140	1	30
1,1,1-Trichloroethane	ND		50.0	50.56		ug/L		101	76 - 149	14	17
1,1,2-Trichloroethane	ND		50.0	38.30		ug/L		77	74 - 134	14	15
Trichloroethene	ND		50.0	50.30		ug/L		101	73 - 144	8	17
Vinyl chloride	ND		50.0	52.57		ug/L		105	56 - 129	8	17
Xylenes, Total	ND		100	94.95		ug/L		95	74 - 141	4	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
Dibromofluoromethane (Surr)	*104*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 130*
Toluene-d8 (Surr)	*88*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-199921/7
Matrix: Water
Analysis Batch: 199921

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/22/14 12:50	1
Benzene	ND		0.500	0.200	ug/L			10/22/14 12:50	1
Bromoform	ND		0.500	0.290	ug/L			10/22/14 12:50	1
Bromomethane	ND		0.500	0.350	ug/L			10/22/14 12:50	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/22/14 12:50	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/22/14 12:50	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/22/14 12:50	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/22/14 12:50	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/22/14 12:50	1
Chloroethane	ND		0.500	0.360	ug/L			10/22/14 12:50	1
Chloroform	ND		0.500	0.230	ug/L			10/22/14 12:50	1
Chloromethane	ND		0.500	0.360	ug/L			10/22/14 12:50	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/22/14 12:50	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 12:50	1
Dibromomethane	ND		0.500	0.450	ug/L			10/22/14 12:50	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/22/14 12:50	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/22/14 12:50	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/22/14 12:50	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/22/14 12:50	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/22/14 12:50	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/22/14 12:50	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/22/14 12:50	1
2-Hexanone	ND		5.00	1.28	ug/L			10/22/14 12:50	1
Methylene Chloride	ND		5.00	0.220	ug/L			10/22/14 12:50	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/22/14 12:50	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/22/14 12:50	1
o-Xylene	ND		0.500	0.200	ug/L			10/22/14 12:50	1
Styrene	ND		0.500	0.280	ug/L			10/22/14 12:50	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/22/14 12:50	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/22/14 12:50	1
Toluene	ND		0.500	0.170	ug/L			10/22/14 12:50	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/22/14 12:50	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/22/14 12:50	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/22/14 12:50	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 12:50	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/22/14 12:50	1
Trichloroethene	ND		0.500	0.200	ug/L			10/22/14 12:50	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/22/14 12:50	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/22/14 12:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*10/22/14 12:50*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*10/22/14 12:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*10/22/14 12:50*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*10/22/14 12:50*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-199921/3
Matrix: Water
Analysis Batch: 199921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	228.4		ug/L		91	54 - 145
Benzene	50.0	44.75		ug/L		89	80 - 121
Bromoform	50.0	43.10		ug/L		86	46 - 145
Bromomethane	50.0	40.68		ug/L		81	41 - 150
2-Butanone (MEK)	250	226.7		ug/L		91	62 - 133
Carbon disulfide	50.0	48.15		ug/L		96	77 - 126
Carbon tetrachloride	50.0	39.57		ug/L		79	64 - 147
Chlorobenzene	50.0	47.83		ug/L		96	80 - 120
Chlorodibromomethane	50.0	49.24		ug/L		98	69 - 133
Chloroethane	50.0	46.70		ug/L		93	72 - 120
Chloroform	50.0	41.80		ug/L		84	73 - 129
Chloromethane	50.0	41.94		ug/L		84	12 - 150
cis-1,2-Dichloroethene	50.0	44.56		ug/L		89	76 - 125
cis-1,3-Dichloropropene	50.0	53.69		ug/L		107	74 - 140
Dibromomethane	50.0	44.17		ug/L		88	71 - 125
Dichlorobromomethane	50.0	42.26		ug/L		85	75 - 129
1,1-Dichloroethane	50.0	45.17		ug/L		90	78 - 125
1,2-Dichloroethane	50.0	43.52		ug/L		87	77 - 121
1,1-Dichloroethene	50.0	42.71		ug/L		85	79 - 124
1,2-Dichloropropane	50.0	46.28		ug/L		93	75 - 120
1,1-Dichloropropene	50.0	44.05		ug/L		88	80 - 122
Ethylbenzene	50.0	46.32		ug/L		93	80 - 130
2-Hexanone	250	269.1		ug/L		108	60 - 142
Methylene Chloride	50.0	46.39		ug/L		93	79 - 123
4-Methyl-2-pentanone (MIBK)	250	264.6		ug/L		106	60 - 137
m-Xylene & p-Xylene	50.0	46.04		ug/L		92	80 - 141
o-Xylene	50.0	45.44		ug/L		91	80 - 127
Styrene	50.0	48.21		ug/L		96	80 - 127
1,1,1,2-Tetrachloroethane	50.0	45.90		ug/L		92	74 - 135
Tetrachloroethene	50.0	45.78		ug/L		92	80 - 126
Toluene	50.0	50.78		ug/L		102	80 - 126
trans-1,2-Dichloroethene	50.0	43.91		ug/L		88	79 - 126
trans-1,3-Dichloropropene	50.0	51.30		ug/L		103	63 - 134
1,3,5-Trichlorobenzene	50.0	45.16		ug/L		90	70 - 130
1,1,1-Trichloroethane	50.0	39.69		ug/L		79	78 - 135
1,1,2-Trichloroethane	50.0	49.97		ug/L		100	80 - 124
Trichloroethene	50.0	42.47		ug/L		85	80 - 123
Vinyl chloride	50.0	45.16		ug/L		90	68 - 120
Xylenes, Total	100	91.48		ug/L		91	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*
Toluene-d8 (Surr)	*114*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-199921/4
Matrix: Water
Analysis Batch: 199921

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
Acetone	250	223.3		ug/L		89	54 - 145	2	21
Benzene	50.0	46.88		ug/L		94	80 - 121	5	17
Bromoform	50.0	42.79		ug/L		86	46 - 145	1	16
Bromomethane	50.0	43.85		ug/L		88	41 - 150	8	50
2-Butanone (MEK)	250	225.9		ug/L		90	62 - 133	0	19
Carbon disulfide	50.0	51.17		ug/L		102	77 - 126	6	21
Carbon tetrachloride	50.0	42.11		ug/L		84	64 - 147	6	19
Chlorobenzene	50.0	49.32		ug/L		99	80 - 120	3	14
Chlorodibromomethane	50.0	49.74		ug/L		99	69 - 133	1	15
Chloroethane	50.0	46.98		ug/L		94	72 - 120	1	20
Chloroform	50.0	43.86		ug/L		88	73 - 129	5	18
Chloromethane	50.0	44.16		ug/L		88	12 - 150	5	31
cis-1,2-Dichloroethene	50.0	46.29		ug/L		93	76 - 125	4	17
cis-1,3-Dichloropropene	50.0	54.19		ug/L		108	74 - 140	1	15
Dibromomethane	50.0	44.68		ug/L		89	71 - 125	1	16
Dichlorobromomethane	50.0	43.37		ug/L		87	75 - 129	3	18
1,1-Dichloroethane	50.0	47.29		ug/L		95	78 - 125	5	17
1,2-Dichloroethane	50.0	44.99		ug/L		90	77 - 121	3	17
1,1-Dichloroethene	50.0	45.33		ug/L		91	79 - 124	6	17
1,2-Dichloropropane	50.0	48.03		ug/L		96	75 - 120	4	17
1,1-Dichloropropene	50.0	47.21		ug/L		94	80 - 122	7	17
Ethylbenzene	50.0	48.41		ug/L		97	80 - 130	4	15
2-Hexanone	250	269.9		ug/L		108	60 - 142	0	15
Methylene Chloride	50.0	48.34		ug/L		97	79 - 123	4	17
4-Methyl-2-pentanone (MIBK)	250	255.4		ug/L		102	60 - 137	4	17
m-Xylene & p-Xylene	50.0	48.01		ug/L		96	80 - 141	4	16
o-Xylene	50.0	47.10		ug/L		94	80 - 127	4	14
Styrene	50.0	49.13		ug/L		98	80 - 127	2	24
1,1,1,2-Tetrachloroethane	50.0	46.69		ug/L		93	74 - 135	2	16
Tetrachloroethene	50.0	47.21		ug/L		94	80 - 126	3	16
Toluene	50.0	52.64		ug/L		105	80 - 126	4	15
trans-1,2-Dichloroethene	50.0	46.56		ug/L		93	79 - 126	6	16
trans-1,3-Dichloropropene	50.0	51.58		ug/L		103	63 - 134	1	14
1,3,5-Trichlorobenzene	50.0	47.03		ug/L		94	70 - 130	4	30
1,1,1-Trichloroethane	50.0	41.78		ug/L		84	78 - 135	5	17
1,1,2-Trichloroethane	50.0	49.22		ug/L		98	80 - 124	2	15
Trichloroethene	50.0	44.80		ug/L		90	80 - 123	5	17
Vinyl chloride	50.0	48.73		ug/L		97	68 - 120	8	17
Xylenes, Total	100	95.12		ug/L		95	80 - 132	4	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*111*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-69746-C-1 MS
Matrix: Water
Analysis Batch: 199921

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	229.3		ug/L		92	45 - 141
Benzene	ND		50.0	47.57		ug/L		95	75 - 133
Bromoform	ND		50.0	41.66		ug/L		83	42 - 147
Bromomethane	ND		50.0	31.97		ug/L		64	16 - 163
2-Butanone (MEK)	ND		250	222.8		ug/L		89	50 - 138
Carbon disulfide	ND		50.0	47.84		ug/L		96	48 - 152
Carbon tetrachloride	ND		50.0	44.74		ug/L		89	62 - 164
Chlorobenzene	ND		50.0	50.25		ug/L		100	80 - 129
Chlorodibromomethane	ND		50.0	49.00		ug/L		98	66 - 140
Chloroethane	ND		50.0	47.63		ug/L		95	58 - 137
Chloroform	ND		50.0	45.21		ug/L		90	66 - 138
Chloromethane	ND		50.0	39.97		ug/L		80	10 - 169
cis-1,2-Dichloroethene	ND		50.0	48.33		ug/L		97	68 - 138
cis-1,3-Dichloropropene	ND		50.0	54.11		ug/L		108	71 - 141
Dibromomethane	ND		50.0	44.54		ug/L		89	58 - 140
Dichlorobromomethane	ND		50.0	44.38		ug/L		89	70 - 140
1,1-Dichloroethane	ND		50.0	49.10		ug/L		98	71 - 139
1,2-Dichloroethane	ND		50.0	46.15		ug/L		92	64 - 136
1,1-Dichloroethene	ND		50.0	46.37		ug/L		93	70 - 142
1,2-Dichloropropane	ND		50.0	49.09		ug/L		98	67 - 131
1,1-Dichloropropene	ND		50.0	48.79		ug/L		98	76 - 139
Ethylbenzene	ND		50.0	49.43		ug/L		99	79 - 139
2-Hexanone	ND		250	257.3		ug/L		103	50 - 150
Methylene Chloride	ND		50.0	48.18		ug/L		96	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	253.7		ug/L		101	50 - 147
m-Xylene & p-Xylene	ND		50.0	48.63		ug/L		97	80 - 153
o-Xylene	ND		50.0	47.68		ug/L		95	74 - 138
Styrene	ND		50.0	49.94		ug/L		100	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	46.87		ug/L		94	73 - 141
Tetrachloroethene	ND		50.0	48.77		ug/L		98	72 - 145
Toluene	ND		50.0	52.95		ug/L		106	75 - 136
trans-1,2-Dichloroethene	ND		50.0	47.31		ug/L		95	66 - 143
trans-1,3-Dichloropropene	ND		50.0	50.85		ug/L		102	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	48.04		ug/L		96	60 - 140
1,1,1-Trichloroethane	ND		50.0	44.11		ug/L		88	76 - 149
1,1,2-Trichloroethane	ND		50.0	49.48		ug/L		99	74 - 134
Trichloroethene	ND		50.0	45.58		ug/L		91	73 - 144
Vinyl chloride	ND		50.0	47.44		ug/L		95	56 - 129
Xylenes, Total	ND		100	96.32		ug/L		96	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*96*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
Toluene-d8 (Surr)	*111*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-69746-E-1 MSD
Matrix: Water
Analysis Batch: 199921

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	226.6		ug/L		91	45 - 141	1	21
Benzene	ND		50.0	46.45		ug/L		93	75 - 133	2	17
Bromoform	ND		50.0	41.14		ug/L		82	42 - 147	1	16
Bromomethane	ND		50.0	39.59		ug/L		79	16 - 163	21	50
2-Butanone (MEK)	ND		250	220.0		ug/L		88	50 - 138	1	19
Carbon disulfide	ND		50.0	46.86		ug/L		94	48 - 152	2	21
Carbon tetrachloride	ND		50.0	43.58		ug/L		87	62 - 164	3	19
Chlorobenzene	ND		50.0	49.04		ug/L		98	80 - 129	2	14
Chlorodibromomethane	ND		50.0	48.11		ug/L		96	66 - 140	2	15
Chloroethane	ND		50.0	47.04		ug/L		94	58 - 137	1	20
Chloroform	ND		50.0	43.92		ug/L		88	66 - 138	3	18
Chloromethane	ND		50.0	39.23		ug/L		78	10 - 169	2	31
cis-1,2-Dichloroethene	ND		50.0	46.97		ug/L		94	68 - 138	3	17
cis-1,3-Dichloropropene	ND		50.0	53.75		ug/L		107	71 - 141	1	15
Dibromomethane	ND		50.0	43.40		ug/L		87	58 - 140	3	16
Dichlorobromomethane	ND		50.0	43.51		ug/L		87	70 - 140	2	18
1,1-Dichloroethane	ND		50.0	47.90		ug/L		96	71 - 139	2	17
1,2-Dichloroethane	ND		50.0	44.10		ug/L		88	64 - 136	5	17
1,1-Dichloroethene	ND		50.0	45.73		ug/L		91	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	48.09		ug/L		96	67 - 131	2	17
1,1-Dichloropropene	ND		50.0	47.55		ug/L		95	76 - 139	3	17
Ethylbenzene	ND		50.0	49.00		ug/L		98	79 - 139	1	15
2-Hexanone	ND		250	251.4		ug/L		101	50 - 150	2	15
Methylene Chloride	ND		50.0	47.12		ug/L		94	64 - 139	2	17
4-Methyl-2-pentanone (MIBK)	ND		250	250.5		ug/L		100	50 - 147	1	17
m-Xylene & p-Xylene	ND		50.0	48.55		ug/L		97	80 - 153	0	16
o-Xylene	ND		50.0	47.32		ug/L		95	74 - 138	1	14
Styrene	ND		50.0	49.49		ug/L		99	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	45.94		ug/L		92	73 - 141	2	16
Tetrachloroethene	ND		50.0	48.49		ug/L		97	72 - 145	1	16
Toluene	ND		50.0	52.40		ug/L		105	75 - 136	1	15
trans-1,2-Dichloroethene	ND		50.0	45.83		ug/L		92	66 - 143	3	16
trans-1,3-Dichloropropene	ND		50.0	49.89		ug/L		100	59 - 135	2	14
1,3,5-Trichlorobenzene	ND		50.0	47.97		ug/L		96	60 - 140	0	30
1,1,1-Trichloroethane	ND		50.0	43.52		ug/L		87	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	49.01		ug/L		98	74 - 134	1	15
Trichloroethene	ND		50.0	44.86		ug/L		90	73 - 144	2	17
Vinyl chloride	ND		50.0	46.60		ug/L		93	56 - 129	2	17
Xylenes, Total	ND		100	95.87		ug/L		96	74 - 141	0	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*94*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*111*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-200148/7
Matrix: Water
Analysis Batch: 200148

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			10/23/14 00:40	1
Benzene	ND		0.500	0.200	ug/L			10/23/14 00:40	1
Bromoform	ND		0.500	0.290	ug/L			10/23/14 00:40	1
Bromomethane	ND		0.500	0.350	ug/L			10/23/14 00:40	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			10/23/14 00:40	1
Carbon disulfide	ND		0.500	0.220	ug/L			10/23/14 00:40	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			10/23/14 00:40	1
Chlorobenzene	ND		0.500	0.180	ug/L			10/23/14 00:40	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			10/23/14 00:40	1
Chloroethane	ND		0.500	0.360	ug/L			10/23/14 00:40	1
Chloroform	ND		0.500	0.230	ug/L			10/23/14 00:40	1
Chloromethane	ND		0.500	0.360	ug/L			10/23/14 00:40	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			10/23/14 00:40	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 00:40	1
Dibromomethane	ND		0.500	0.450	ug/L			10/23/14 00:40	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			10/23/14 00:40	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			10/23/14 00:40	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			10/23/14 00:40	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			10/23/14 00:40	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			10/23/14 00:40	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			10/23/14 00:40	1
Ethylbenzene	ND		0.500	0.190	ug/L			10/23/14 00:40	1
2-Hexanone	ND		5.00	1.28	ug/L			10/23/14 00:40	1
Methylene Chloride	0.4552	J	5.00	0.220	ug/L			10/23/14 00:40	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			10/23/14 00:40	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			10/23/14 00:40	1
o-Xylene	ND		0.500	0.200	ug/L			10/23/14 00:40	1
Styrene	ND		0.500	0.280	ug/L			10/23/14 00:40	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			10/23/14 00:40	1
Tetrachloroethene	ND		0.500	0.140	ug/L			10/23/14 00:40	1
Toluene	ND		0.500	0.170	ug/L			10/23/14 00:40	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			10/23/14 00:40	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			10/23/14 00:40	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			10/23/14 00:40	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 00:40	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			10/23/14 00:40	1
Trichloroethene	ND		0.500	0.200	ug/L			10/23/14 00:40	1
Vinyl chloride	ND		0.500	0.180	ug/L			10/23/14 00:40	1
Xylenes, Total	ND		1.50	0.580	ug/L			10/23/14 00:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*		*10/23/14 00:40*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*10/23/14 00:40*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*		*10/23/14 00:40*	*1*
Toluene-d8 (Surr)	*112*		*70 - 130*		*10/23/14 00:40*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-200148/3
Matrix: Water
Analysis Batch: 200148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	250	248.7		ug/L		99	54 - 145
Benzene	50.0	46.84		ug/L		94	80 - 121
Bromoform	50.0	43.96		ug/L		88	46 - 145
Bromomethane	50.0	44.96		ug/L		90	41 - 150
2-Butanone (MEK)	250	234.9		ug/L		94	62 - 133
Carbon disulfide	50.0	49.25		ug/L		98	77 - 126
Carbon tetrachloride	50.0	41.56		ug/L		83	64 - 147
Chlorobenzene	50.0	49.79		ug/L		100	80 - 120
Chlorodibromomethane	50.0	50.57		ug/L		101	69 - 133
Chloroethane	50.0	49.92		ug/L		100	72 - 120
Chloroform	50.0	43.80		ug/L		88	73 - 129
Chloromethane	50.0	43.40		ug/L		87	12 - 150
cis-1,2-Dichloroethene	50.0	46.66		ug/L		93	76 - 125
cis-1,3-Dichloropropene	50.0	54.97		ug/L		110	74 - 140
Dibromomethane	50.0	45.57		ug/L		91	71 - 125
Dichlorobromomethane	50.0	44.21		ug/L		88	75 - 129
1,1-Dichloroethane	50.0	47.24		ug/L		94	78 - 125
1,2-Dichloroethane	50.0	46.42		ug/L		93	77 - 121
1,1-Dichloroethene	50.0	44.92		ug/L		90	79 - 124
1,2-Dichloropropane	50.0	48.84		ug/L		98	75 - 120
1,1-Dichloropropene	50.0	47.03		ug/L		94	80 - 122
Ethylbenzene	50.0	48.67		ug/L		97	80 - 130
2-Hexanone	250	271.5		ug/L		109	60 - 142
Methylene Chloride	50.0	48.93		ug/L		98	79 - 123
4-Methyl-2-pentanone (MIBK)	250	272.5		ug/L		109	60 - 137
m-Xylene & p-Xylene	50.0	47.88		ug/L		96	80 - 141
o-Xylene	50.0	47.33		ug/L		95	80 - 127
Styrene	50.0	50.44		ug/L		101	80 - 127
1,1,1,2-Tetrachloroethane	50.0	47.03		ug/L		94	74 - 135
Tetrachloroethene	50.0	48.09		ug/L		96	80 - 126
Toluene	50.0	53.01		ug/L		106	80 - 126
trans-1,2-Dichloroethene	50.0	46.80		ug/L		94	79 - 126
trans-1,3-Dichloropropene	50.0	52.32		ug/L		105	63 - 134
1,3,5-Trichlorobenzene	50.0	48.34		ug/L		97	70 - 130
1,1,1-Trichloroethane	50.0	41.92		ug/L		84	78 - 135
1,1,2-Trichloroethane	50.0	50.79		ug/L		102	80 - 124
Trichloroethene	50.0	45.65		ug/L		91	80 - 123
Vinyl chloride	50.0	49.95		ug/L		100	68 - 120
Xylenes, Total	100	95.21		ug/L		95	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*113*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-200148/4
Matrix: Water
Analysis Batch: 200148

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
Acetone	250	232.0		ug/L		93	54 - 145	7	21
Benzene	50.0	47.18		ug/L		94	80 - 121	1	17
Bromoform	50.0	42.55		ug/L		85	46 - 145	3	16
Bromomethane	50.0	46.86		ug/L		94	41 - 150	4	50
2-Butanone (MEK)	250	228.6		ug/L		91	62 - 133	3	19
Carbon disulfide	50.0	50.97		ug/L		102	77 - 126	3	21
Carbon tetrachloride	50.0	42.02		ug/L		84	64 - 147	1	19
Chlorobenzene	50.0	50.54		ug/L		101	80 - 120	2	14
Chlorodibromomethane	50.0	49.34		ug/L		99	69 - 133	2	15
Chloroethane	50.0	50.18		ug/L		100	72 - 120	1	20
Chloroform	50.0	44.24		ug/L		88	73 - 129	1	18
Chloromethane	50.0	44.07		ug/L		88	12 - 150	2	31
cis-1,2-Dichloroethene	50.0	47.03		ug/L		94	76 - 125	1	17
cis-1,3-Dichloropropene	50.0	54.74		ug/L		109	74 - 140	0	15
Dibromomethane	50.0	45.10		ug/L		90	71 - 125	1	16
Dichlorobromomethane	50.0	43.51		ug/L		87	75 - 129	2	18
1,1-Dichloroethane	50.0	47.71		ug/L		95	78 - 125	1	17
1,2-Dichloroethane	50.0	45.29		ug/L		91	77 - 121	2	17
1,1-Dichloroethene	50.0	45.37		ug/L		91	79 - 124	1	17
1,2-Dichloropropane	50.0	48.22		ug/L		96	75 - 120	1	17
1,1-Dichloropropene	50.0	46.98		ug/L		94	80 - 122	0	17
Ethylbenzene	50.0	49.04		ug/L		98	80 - 130	1	15
2-Hexanone	250	267.8		ug/L		107	60 - 142	1	15
Methylene Chloride	50.0	48.68		ug/L		97	79 - 123	1	17
4-Methyl-2-pentanone (MIBK)	250	260.3		ug/L		104	60 - 137	5	17
m-Xylene & p-Xylene	50.0	48.39		ug/L		97	80 - 141	1	16
o-Xylene	50.0	48.02		ug/L		96	80 - 127	1	14
Styrene	50.0	50.44		ug/L		101	80 - 127	0	24
1,1,1,2-Tetrachloroethane	50.0	47.23		ug/L		94	74 - 135	0	16
Tetrachloroethene	50.0	48.05		ug/L		96	80 - 126	0	16
Toluene	50.0	53.29		ug/L		107	80 - 126	1	15
trans-1,2-Dichloroethene	50.0	47.30		ug/L		95	79 - 126	1	16
trans-1,3-Dichloropropene	50.0	51.13		ug/L		102	63 - 134	2	14
1,3,5-Trichlorobenzene	50.0	47.80		ug/L		96	70 - 130	1	30
1,1,1-Trichloroethane	50.0	42.13		ug/L		84	78 - 135	1	17
1,1,2-Trichloroethane	50.0	49.95		ug/L		100	80 - 124	2	15
Trichloroethene	50.0	46.03		ug/L		92	80 - 123	1	17
Vinyl chloride	50.0	50.12		ug/L		100	68 - 120	0	17
Xylenes, Total	100	96.41		ug/L		96	80 - 132	1	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*
Toluene-d8 (Surr)	*112*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-64180-B-5 MS
Matrix: Water
Analysis Batch: 200148

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	195.6		ug/L		78	45 - 141
Benzene	ND		50.0	44.28		ug/L		89	75 - 133
Bromoform	ND		50.0	37.64		ug/L		75	42 - 147
Bromomethane	ND		50.0	21.64		ug/L		43	16 - 163
2-Butanone (MEK)	ND		250	197.8		ug/L		79	50 - 138
Carbon disulfide	ND		50.0	39.45		ug/L		79	48 - 152
Carbon tetrachloride	ND		50.0	41.80		ug/L		84	62 - 164
Chlorobenzene	ND		50.0	47.52		ug/L		95	80 - 129
Chlorodibromomethane	ND		50.0	45.63		ug/L		91	66 - 140
Chloroethane	ND		50.0	42.79		ug/L		86	58 - 137
Chloroform	ND		50.0	42.20		ug/L		84	66 - 138
Chloromethane	ND		50.0	36.48		ug/L		73	10 - 169
cis-1,2-Dichloroethene	ND		50.0	45.48		ug/L		91	68 - 138
cis-1,3-Dichloropropene	ND		50.0	51.24		ug/L		102	71 - 141
Dibromomethane	ND		50.0	39.33		ug/L		79	58 - 140
Dichlorobromomethane	ND		50.0	41.08		ug/L		82	70 - 140
1,1-Dichloroethane	ND		50.0	46.12		ug/L		92	71 - 139
1,2-Dichloroethane	ND		50.0	41.73		ug/L		83	64 - 136
1,1-Dichloroethene	ND		50.0	41.63		ug/L		83	70 - 142
1,2-Dichloropropane	ND		50.0	45.20		ug/L		90	67 - 131
1,1-Dichloropropene	ND		50.0	45.03		ug/L		90	76 - 139
Ethylbenzene	ND		50.0	47.44		ug/L		95	79 - 139
2-Hexanone	ND		250	238.5		ug/L		95	50 - 150
Methylene Chloride	ND		50.0	43.40		ug/L		87	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	241.0		ug/L		96	50 - 147
m-Xylene & p-Xylene	ND		50.0	46.37		ug/L		93	80 - 153
o-Xylene	ND		50.0	45.57		ug/L		91	74 - 138
Styrene	ND		50.0	24.63	F1	ug/L		49	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	44.16		ug/L		88	73 - 141
Tetrachloroethene	ND		50.0	46.22		ug/L		92	72 - 145
Toluene	ND		50.0	50.55		ug/L		101	75 - 136
trans-1,2-Dichloroethene	ND		50.0	43.04		ug/L		86	66 - 143
trans-1,3-Dichloropropene	ND		50.0	48.20		ug/L		96	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	45.49		ug/L		91	60 - 140
1,1,1-Trichloroethane	ND		50.0	42.03		ug/L		84	76 - 149
1,1,2-Trichloroethane	ND		50.0	45.85		ug/L		92	74 - 134
Trichloroethene	ND		50.0	41.63		ug/L		83	73 - 144
Vinyl chloride	ND		50.0	41.50		ug/L		83	56 - 129
Xylenes, Total	ND		100	91.94		ug/L		92	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
Dibromofluoromethane (Surr)	*93*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*94*		*70 - 130*
Toluene-d8 (Surr)	*112*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-64180-C-5 MSD
Matrix: Water
Analysis Batch: 200148

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	221.3		ug/L		89	45 - 141	12	21
Benzene	ND		50.0	46.00		ug/L		92	75 - 133	4	17
Bromoform	ND		50.0	41.96		ug/L		84	42 - 147	11	16
Bromomethane	ND		50.0	31.37		ug/L		63	16 - 163	37	50
2-Butanone (MEK)	ND		250	215.0		ug/L		86	50 - 138	8	19
Carbon disulfide	ND		50.0	39.56		ug/L		79	48 - 152	0	21
Carbon tetrachloride	ND		50.0	43.64		ug/L		87	62 - 164	4	19
Chlorobenzene	ND		50.0	49.34		ug/L		99	80 - 129	4	14
Chlorodibromomethane	ND		50.0	49.19		ug/L		98	66 - 140	8	15
Chloroethane	ND		50.0	43.83		ug/L		88	58 - 137	2	20
Chloroform	ND		50.0	43.95		ug/L		88	66 - 138	4	18
Chloromethane	ND		50.0	37.16		ug/L		74	10 - 169	2	31
cis-1,2-Dichloroethene	ND		50.0	46.54		ug/L		93	68 - 138	2	17
cis-1,3-Dichloropropene	ND		50.0	54.67		ug/L		109	71 - 141	6	15
Dibromomethane	ND		50.0	43.50		ug/L		87	58 - 140	10	16
Dichlorobromomethane	ND		50.0	44.29		ug/L		89	70 - 140	8	18
1,1-Dichloroethane	ND		50.0	47.92		ug/L		96	71 - 139	4	17
1,2-Dichloroethane	ND		50.0	44.45		ug/L		89	64 - 136	6	17
1,1-Dichloroethene	ND		50.0	43.46		ug/L		87	70 - 142	4	17
1,2-Dichloropropane	ND		50.0	48.00		ug/L		96	67 - 131	6	17
1,1-Dichloropropene	ND		50.0	46.31		ug/L		93	76 - 139	3	17
Ethylbenzene	ND		50.0	49.08		ug/L		98	79 - 139	3	15
2-Hexanone	ND		250	268.7		ug/L		107	50 - 150	12	15
Methylene Chloride	ND		50.0	45.95		ug/L		92	64 - 139	6	17
4-Methyl-2-pentanone (MIBK)	ND		250	271.6		ug/L		109	50 - 147	12	17
m-Xylene & p-Xylene	ND		50.0	48.52		ug/L		97	80 - 153	5	16
o-Xylene	ND		50.0	47.50		ug/L		95	74 - 138	4	14
Styrene	ND		50.0	8.954	F1 F2	ug/L		18	61 - 148	93	24
1,1,1,2-Tetrachloroethane	ND		50.0	47.39		ug/L		95	73 - 141	7	16
Tetrachloroethene	ND		50.0	48.11		ug/L		96	72 - 145	4	16
Toluene	ND		50.0	52.68		ug/L		105	75 - 136	4	15
trans-1,2-Dichloroethene	ND		50.0	44.50		ug/L		89	66 - 143	3	16
trans-1,3-Dichloropropene	ND		50.0	51.85		ug/L		104	59 - 135	7	14
1,3,5-Trichlorobenzene	ND		50.0	47.11		ug/L		94	60 - 140	4	30
1,1,1-Trichloroethane	ND		50.0	42.96		ug/L		86	76 - 149	2	17
1,1,2-Trichloroethane	ND		50.0	50.12		ug/L		100	74 - 134	9	15
Trichloroethene	ND		50.0	43.74		ug/L		87	73 - 144	5	17
Vinyl chloride	ND		50.0	42.83		ug/L		86	56 - 129	3	17
Xylenes, Total	ND		100	96.02		ug/L		96	74 - 141	4	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
Dibromofluoromethane (Surr)	*95*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*
Toluene-d8 (Surr)	*112*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

GC/MS VOA

Analysis Batch: 199582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-63940-B-4 MS	Matrix Spike	Total/NA	Water	8260B	
490-63940-C-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-64080-1	205R	Total/NA	Water	8260B	
490-64080-2	169R	Total/NA	Water	8260B	
490-64080-10	TRIP BLANK	Total/NA	Water	8260B	
LCS 490-199582/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-199582/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-199582/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 199921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-69746-C-1 MS	Matrix Spike	Total/NA	Water	8260B	
480-69746-E-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-64080-3	203R	Total/NA	Water	8260B	
490-64080-4	403R	Total/NA	Water	8260B	
490-64080-5	IW-100	Total/NA	Water	8260B	
490-64080-6	IW-103	Total/NA	Water	8260B	
490-64080-14	201R	Total/NA	Water	8260B	
LCS 490-199921/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-199921/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-199921/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 200148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-64080-7	202R	Total/NA	Water	8260B	
490-64080-8	204R	Total/NA	Water	8260B	
490-64080-9	35R	Total/NA	Water	8260B	
490-64080-11	103R	Total/NA	Water	8260B	
490-64080-12	69R	Total/NA	Water	8260B	
490-64080-13	108R	Total/NA	Water	8260B	
490-64080-15	MW-301 (35-45)	Total/NA	Water	8260B	
490-64080-16	MW-301 (115-125)	Total/NA	Water	8260B	
490-64080-17	MW-301 (145-155)	Total/NA	Water	8260B	
490-64080-18	MW-305 (35-45)	Total/NA	Water	8260B	
490-64080-19	MW-305 (62-72)	Total/NA	Water	8260B	
490-64080-20	MW-305 (145-155)	Total/NA	Water	8260B	
490-64180-B-5 MS	Matrix Spike	Total/NA	Water	8260B	
490-64180-C-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
LCS 490-200148/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-200148/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-200148/7	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 205R — Lab Sample ID: 490-64080-1

Date Collected: 10/15/14 14:25 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	199582	10/21/14 20:30	EML	TAL NSH

Client Sample ID: 169R — Lab Sample ID: 490-64080-2

Date Collected: 10/15/14 12:20 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	199582	10/21/14 20:57	EML	TAL NSH

Client Sample ID: 203R — Lab Sample ID: 490-64080-3

Date Collected: 10/15/14 10:50 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	199921	10/22/14 19:51	EML	TAL NSH

Client Sample ID: 403R — Lab Sample ID: 490-64080-4

Date Collected: 10/15/14 10:45 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	199921	10/22/14 20:18	EML	TAL NSH

Client Sample ID: IW-100 — Lab Sample ID: 490-64080-5

Date Collected: 10/15/14 11:45 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	199921	10/22/14 19:25	EML	TAL NSH

Client Sample ID: IW-103 — Lab Sample ID: 490-64080-6

Date Collected: 10/15/14 11:40 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	199921	10/22/14 20:44	EML	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 202R — Lab Sample ID: 490-64080-7

Date Collected: 10/15/14 11:15 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 01:06	EML	TAL NSH

Client Sample ID: 204R — Lab Sample ID: 490-64080-8

Date Collected: 10/15/14 14:40 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 01:33	EML	TAL NSH

Client Sample ID: 35R — Lab Sample ID: 490-64080-9

Date Collected: 10/15/14 15:40 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 01:59	EML	TAL NSH

Client Sample ID: TRIP BLANK — Lab Sample ID: 490-64080-10

Date Collected: 10/15/14 00:01 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	199582	10/21/14 16:59	EML	TAL NSH

Client Sample ID: 103R — Lab Sample ID: 490-64080-11

Date Collected: 10/16/14 11:15 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 02:25	EML	TAL NSH

Client Sample ID: 69R — Lab Sample ID: 490-64080-12

Date Collected: 10/16/14 13:00 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 02:51	EML	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: 108R — Lab Sample ID: 490-64080-13

Date Collected: 10/16/14 12:40 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 03:17	EML	TAL NSH

Client Sample ID: 201R — Lab Sample ID: 490-64080-14

Date Collected: 10/16/14 15:25 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	199921	10/22/14 18:59	EML	TAL NSH

Client Sample ID: MW-301 (35-45) — Lab Sample ID: 490-64080-15

Date Collected: 10/16/14 09:50 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 03:44	EML	TAL NSH

Client Sample ID: MW-301 (115-125) — Lab Sample ID: 490-64080-16

Date Collected: 10/16/14 10:00 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 04:10	EML	TAL NSH

Client Sample ID: MW-301 (145-155) — Lab Sample ID: 490-64080-17

Date Collected: 10/16/14 10:20 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 04:36	EML	TAL NSH

Client Sample ID: MW-305 (35-45) — Lab Sample ID: 490-64080-18

Date Collected: 10/16/14 11:15 — **Matrix: Water**
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 05:02	EML	TAL NSH

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Client Sample ID: MW-305 (62-72)

Lab Sample ID: 490-64080-19

Date Collected: 10/16/14 11:45
Matrix: Water
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 05:28	EML	TAL NSH

Client Sample ID: MW-305 (145-155)

Lab Sample ID: 490-64080-20

Date Collected: 10/16/14 12:00
Matrix: Water
Date Received: 10/17/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	10 mL	10 mL	200148	10/23/14 05:54	EML	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-64080-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-64080 Chain of Custody

Cooler Received/Opened On : 10/17/2014 @ 0830

1. Tracking # 7724 (last 4 digits, FedEx)

Courier: Fed-ex IR Gun: 18290455

2. Temperature of rep. sample or temp blank when opened: 4.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 2 Front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES NO NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (intial) ELA

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) ELA

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) ELA

I certify that I attached a label with the unique LIMS number to each container (intial) ELA

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#_____

BIS = Broken in shipment

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

10/30/2014

Client Information
Client Contact: Chuck Castelluccio
Company: ARCADIS U.S., Inc.
Address: 1 Executive Drive Suite 303
City: Chelmsford
State, Zip: MA, 01824
Phone:
Email: chuck.castelluccio@arcadis-us.com
Project Name: Tibbetts Road Site E101274
Site:

Sampler: T Zakarian
Phone: 781-258-6748
Due Date Requested: STD
TAT Requested (days):
PO #: Purchase Order Requested
WO #:
Lab Project #: 49002494
Client Project #:

Lab PM: Brown, Shali
E-Mail: shali.brown@testamericainc.com
Carrier Tracking No(s):

FORD Site E101274
Page: 1 of 2
Job #: MA000725.0148.00102

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
205R	10/15/14	1425	G	W			X			Level II Reporting
169R		1220	G	W			X			
203R		1050	G	W			X			
403R		1045	G	W			X			ENOVIS Project
IW-100		1145	G	W			X			#E101274
IW-103		1140	G	W			X			
202R		1115	G	W			X			
204R		1440	G	W			X			
35R		1540	G	W			X			
TRIP BLANK	N/A						X			
103R	10/16/14	1115	G	W			X			

Loc: 490
64080

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Level II

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	10/16/14 1930		[signature]	10-17-14 8:30	TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks: 4.8

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

10/30/2014

Client Information	Sampler: T ZaKarian	Lab PM: Brown, Shali	Carrier Tracking No(s):	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 781-258-6748	E-Mail: shali.brown@testamericainc.com		Page: 2 of 2
Company: ARCADIS U.S., Inc.				Job #: MA000725.04B.00002
Address: 1 Executive Drive Suite 303	Due Date Requested: STD			
City: Chelmsford	TAT Requested (days):			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
69R	10/16/14	1300	G	W			X			Level II Reporting
108R		1240	G	W			X			
201R		1525	G	W			X			
MW-301(35-45)		0950	G	W			X			ENOVIS Project Reporting #E101274
MW-301(115-125)		1000	G	W			X			
MW-301(145-155)		1020	G	W			X			
MW-305(35-45)		1115	G	W			X			
MW-305(62-72)		1145	G	W			X			
MW-305(145-155)		1200	G	W			X			

Loc: 490
64080

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Level II

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 10/16/14 1730	Company	Received by:	Date/Time: 10-17-14 8:30	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 4.8

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-64080-1

Login Number: 64080

List Number: 1

Creator: Abernathy, Eric

List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Refer to Job Narrative for details.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-67817-1
Client Project/Site: FORD Tibbetts Road Site E101274

For:
ARCADIS U.S., Inc.
1 Executive Drive
Suite 303
Chelmsford, Massachusetts 01824

Attn: Chuck Castelluccio

Authorized for release by:
12/10/2014 12:42:22 PM

Shali Brown, Project Manager II
(615)301-5031
shali.brown@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-67817-1	IW-100	Water	12/03/14 11:40	12/04/14 08:30
490-67817-2	IW-103	Water	12/03/14 11:45	12/04/14 08:30
490-67817-3	Effluent	Water	12/03/14 11:50	12/04/14 08:30
490-67817-4	GAC 1 OUT	Water	12/03/14 11:55	12/04/14 08:30
490-67817-5	GAC 2 OUT	Water	12/03/14 12:00	12/04/14 08:30
490-67817-6	Trip Blank	Water	12/03/14 00:01	12/04/14 08:30

Job ID: 490-67817-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-67817-1

Comments
No additional comments.

Receipt
The samples were received on 12/4/2014 8:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 5.8º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
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
CFL	Contains Free Liquid
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)

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

Client Sample ID: IW-100

Date Collected: 12/03/14 11:40
Date Received: 12/04/14 08:30

Lab Sample ID: 490-67817-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			12/09/14 13:15	1
Benzene	**20.4**		0.500	0.200	ug/L			12/09/14 13:15	1
Bromoform	ND		0.500	0.290	ug/L			12/09/14 13:15	1
Bromomethane	ND		0.500	0.350	ug/L			12/09/14 13:15	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			12/09/14 13:15	1
Carbon disulfide	ND		0.500	0.220	ug/L			12/09/14 13:15	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			12/09/14 13:15	1
Chlorobenzene	ND		0.500	0.180	ug/L			12/09/14 13:15	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			12/09/14 13:15	1
Chloroethane	ND		0.500	0.360	ug/L			12/09/14 13:15	1
Chloroform	ND		0.500	0.230	ug/L			12/09/14 13:15	1
Chloromethane	ND		0.500	0.360	ug/L			12/09/14 13:15	1
cis-1,2-Dichloroethene	**49.9**		0.500	0.210	ug/L			12/09/14 13:15	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/09/14 13:15	1
Dibromomethane	ND		0.500	0.450	ug/L			12/09/14 13:15	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			12/09/14 13:15	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			12/09/14 13:15	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			12/09/14 13:15	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			12/09/14 13:15	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			12/09/14 13:15	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			12/09/14 13:15	1
Ethylbenzene	**6.52**		0.500	0.190	ug/L			12/09/14 13:15	1
2-Hexanone	ND		5.00	1.28	ug/L			12/09/14 13:15	1
Methylene Chloride	ND		5.00	0.220	ug/L			12/09/14 13:15	1
4-Methyl-2-pentanone (MIBK)	**8.20**		5.00	0.810	ug/L			12/09/14 13:15	1
m-Xylene & p-Xylene	**5.24**		0.500	0.380	ug/L			12/09/14 13:15	1
o-Xylene	**0.578**		0.500	0.200	ug/L			12/09/14 13:15	1
Styrene	ND		0.500	0.280	ug/L			12/09/14 13:15	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			12/09/14 13:15	1
Tetrachloroethene	ND		0.500	0.140	ug/L			12/09/14 13:15	1
Toluene	**0.455**	**J**	0.500	0.170	ug/L			12/09/14 13:15	1
trans-1,2-Dichloroethene	**2.96**		0.500	0.230	ug/L			12/09/14 13:15	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/09/14 13:15	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			12/09/14 13:15	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			12/09/14 13:15	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			12/09/14 13:15	1
Trichloroethene	**3.41**		0.500	0.200	ug/L			12/09/14 13:15	1
Vinyl chloride	**0.230**	**J**	0.500	0.180	ug/L			12/09/14 13:15	1
Xylenes, Total	**5.82**		1.50	0.580	ug/L			12/09/14 13:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*12/09/14 13:15*	*1*
Dibromofluoromethane (Surr)	*90*		*70 - 130*		*12/09/14 13:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*12/09/14 13:15*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/09/14 13:15*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

Client Sample ID: IW-103

Date Collected: 12/03/14 11:45
Date Received: 12/04/14 08:30

Lab Sample ID: 490-67817-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			12/09/14 13:42	1
Benzene	**12.7**		0.500	0.200	ug/L			12/09/14 13:42	1
Bromoform	ND		0.500	0.290	ug/L			12/09/14 13:42	1
Bromomethane	ND		0.500	0.350	ug/L			12/09/14 13:42	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			12/09/14 13:42	1
Carbon disulfide	ND		0.500	0.220	ug/L			12/09/14 13:42	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			12/09/14 13:42	1
Chlorobenzene	ND		0.500	0.180	ug/L			12/09/14 13:42	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			12/09/14 13:42	1
Chloroethane	ND		0.500	0.360	ug/L			12/09/14 13:42	1
Chloroform	ND		0.500	0.230	ug/L			12/09/14 13:42	1
Chloromethane	ND		0.500	0.360	ug/L			12/09/14 13:42	1
cis-1,2-Dichloroethene	**19.5**		0.500	0.210	ug/L			12/09/14 13:42	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/09/14 13:42	1
Dibromomethane	ND		0.500	0.450	ug/L			12/09/14 13:42	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			12/09/14 13:42	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			12/09/14 13:42	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			12/09/14 13:42	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			12/09/14 13:42	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			12/09/14 13:42	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			12/09/14 13:42	1
Ethylbenzene	**3.61**		0.500	0.190	ug/L			12/09/14 13:42	1
2-Hexanone	ND		5.00	1.28	ug/L			12/09/14 13:42	1
Methylene Chloride	ND		5.00	0.220	ug/L			12/09/14 13:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			12/09/14 13:42	1
m-Xylene & p-Xylene	**2.85**		0.500	0.380	ug/L			12/09/14 13:42	1
o-Xylene	ND		0.500	0.200	ug/L			12/09/14 13:42	1
Styrene	ND		0.500	0.280	ug/L			12/09/14 13:42	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			12/09/14 13:42	1
Tetrachloroethene	ND		0.500	0.140	ug/L			12/09/14 13:42	1
Toluene	ND		0.500	0.170	ug/L			12/09/14 13:42	1
trans-1,2-Dichloroethene	**0.475**	**J**	0.500	0.230	ug/L			12/09/14 13:42	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/09/14 13:42	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			12/09/14 13:42	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			12/09/14 13:42	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			12/09/14 13:42	1
Trichloroethene	**0.557**		0.500	0.200	ug/L			12/09/14 13:42	1
Vinyl chloride	ND		0.500	0.180	ug/L			12/09/14 13:42	1
Xylenes, Total	**2.85**		1.50	0.580	ug/L			12/09/14 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*12/09/14 13:42*	*1*
Dibromofluoromethane (Surr)	*91*		*70 - 130*		*12/09/14 13:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*		*12/09/14 13:42*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*12/09/14 13:42*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

Client Sample ID: Effluent

Lab Sample ID: 490-67817-3

Date Collected: 12/03/14 11:50
Date Received: 12/04/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			12/06/14 20:59	1
Benzene	ND		0.500	0.200	ug/L			12/06/14 20:59	1
Bromoform	ND		0.500	0.290	ug/L			12/06/14 20:59	1
Bromomethane	ND		0.500	0.350	ug/L			12/06/14 20:59	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			12/06/14 20:59	1
Carbon disulfide	ND		0.500	0.220	ug/L			12/06/14 20:59	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			12/06/14 20:59	1
Chlorobenzene	ND		0.500	0.180	ug/L			12/06/14 20:59	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			12/06/14 20:59	1
Chloroethane	ND		0.500	0.360	ug/L			12/06/14 20:59	1
Chloroform	ND		0.500	0.230	ug/L			12/06/14 20:59	1
Chloromethane	ND		0.500	0.360	ug/L			12/06/14 20:59	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			12/06/14 20:59	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/06/14 20:59	1
Dibromomethane	ND		0.500	0.450	ug/L			12/06/14 20:59	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			12/06/14 20:59	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			12/06/14 20:59	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			12/06/14 20:59	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			12/06/14 20:59	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			12/06/14 20:59	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			12/06/14 20:59	1
Ethylbenzene	ND		0.500	0.190	ug/L			12/06/14 20:59	1
2-Hexanone	ND		5.00	1.28	ug/L			12/06/14 20:59	1
Methylene Chloride	ND		5.00	0.220	ug/L			12/06/14 20:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			12/06/14 20:59	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			12/06/14 20:59	1
o-Xylene	ND		0.500	0.200	ug/L			12/06/14 20:59	1
Styrene	ND		0.500	0.280	ug/L			12/06/14 20:59	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			12/06/14 20:59	1
Tetrachloroethene	ND		0.500	0.140	ug/L			12/06/14 20:59	1
Toluene	ND		0.500	0.170	ug/L			12/06/14 20:59	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			12/06/14 20:59	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/06/14 20:59	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			12/06/14 20:59	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			12/06/14 20:59	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			12/06/14 20:59	1
Trichloroethene	ND		0.500	0.200	ug/L			12/06/14 20:59	1
Vinyl chloride	ND		0.500	0.180	ug/L			12/06/14 20:59	1
Xylenes, Total	ND		1.50	0.580	ug/L			12/06/14 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*		*12/06/14 20:59*	*1*
Dibromofluoromethane (Surr)	*89*		*70 - 130*		*12/06/14 20:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*12/06/14 20:59*	*1*
Toluene-d8 (Surr)	*105*		*70 - 130*		*12/06/14 20:59*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

Client Sample ID: GAC 1 OUT

Lab Sample ID: 490-67817-4

Date Collected: 12/03/14 11:55
Matrix: Water
Date Received: 12/04/14 08:30

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			12/09/14 14:09	1
Benzene	ND		0.500	0.200	ug/L			12/09/14 14:09	1
Bromoform	ND		0.500	0.290	ug/L			12/09/14 14:09	1
Bromomethane	ND		0.500	0.350	ug/L			12/09/14 14:09	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			12/09/14 14:09	1
Carbon disulfide	ND		0.500	0.220	ug/L			12/09/14 14:09	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			12/09/14 14:09	1
Chlorobenzene	ND		0.500	0.180	ug/L			12/09/14 14:09	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			12/09/14 14:09	1
Chloroethane	ND		0.500	0.360	ug/L			12/09/14 14:09	1
Chloroform	ND		0.500	0.230	ug/L			12/09/14 14:09	1
Chloromethane	ND		0.500	0.360	ug/L			12/09/14 14:09	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			12/09/14 14:09	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/09/14 14:09	1
Dibromomethane	ND		0.500	0.450	ug/L			12/09/14 14:09	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			12/09/14 14:09	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			12/09/14 14:09	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			12/09/14 14:09	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			12/09/14 14:09	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			12/09/14 14:09	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			12/09/14 14:09	1
Ethylbenzene	ND		0.500	0.190	ug/L			12/09/14 14:09	1
2-Hexanone	ND		5.00	1.28	ug/L			12/09/14 14:09	1
Methylene Chloride	ND		5.00	0.220	ug/L			12/09/14 14:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			12/09/14 14:09	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			12/09/14 14:09	1
o-Xylene	ND		0.500	0.200	ug/L			12/09/14 14:09	1
Styrene	ND		0.500	0.280	ug/L			12/09/14 14:09	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			12/09/14 14:09	1
Tetrachloroethene	ND		0.500	0.140	ug/L			12/09/14 14:09	1
Toluene	ND		0.500	0.170	ug/L			12/09/14 14:09	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			12/09/14 14:09	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/09/14 14:09	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			12/09/14 14:09	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			12/09/14 14:09	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			12/09/14 14:09	1
Trichloroethene	ND		0.500	0.200	ug/L			12/09/14 14:09	1
Vinyl chloride	ND		0.500	0.180	ug/L			12/09/14 14:09	1
Xylenes, Total	ND		1.50	0.580	ug/L			12/09/14 14:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*12/09/14 14:09*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*12/09/14 14:09*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*12/09/14 14:09*	*1*
Toluene-d8 (Surr)	*106*		*70 - 130*		*12/09/14 14:09*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

Client Sample ID: GAC 2 OUT

Lab Sample ID: 490-67817-5

Date Collected: 12/03/14 12:00
Date Received: 12/04/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			12/09/14 14:36	1
Benzene	ND		0.500	0.200	ug/L			12/09/14 14:36	1
Bromoform	ND		0.500	0.290	ug/L			12/09/14 14:36	1
Bromomethane	ND		0.500	0.350	ug/L			12/09/14 14:36	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			12/09/14 14:36	1
Carbon disulfide	ND		0.500	0.220	ug/L			12/09/14 14:36	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			12/09/14 14:36	1
Chlorobenzene	ND		0.500	0.180	ug/L			12/09/14 14:36	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			12/09/14 14:36	1
Chloroethane	ND		0.500	0.360	ug/L			12/09/14 14:36	1
Chloroform	ND		0.500	0.230	ug/L			12/09/14 14:36	1
Chloromethane	ND		0.500	0.360	ug/L			12/09/14 14:36	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			12/09/14 14:36	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/09/14 14:36	1
Dibromomethane	ND		0.500	0.450	ug/L			12/09/14 14:36	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			12/09/14 14:36	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			12/09/14 14:36	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			12/09/14 14:36	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			12/09/14 14:36	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			12/09/14 14:36	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			12/09/14 14:36	1
Ethylbenzene	ND		0.500	0.190	ug/L			12/09/14 14:36	1
2-Hexanone	ND		5.00	1.28	ug/L			12/09/14 14:36	1
Methylene Chloride	ND		5.00	0.220	ug/L			12/09/14 14:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			12/09/14 14:36	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			12/09/14 14:36	1
o-Xylene	ND		0.500	0.200	ug/L			12/09/14 14:36	1
Styrene	ND		0.500	0.280	ug/L			12/09/14 14:36	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			12/09/14 14:36	1
Tetrachloroethene	ND		0.500	0.140	ug/L			12/09/14 14:36	1
Toluene	ND		0.500	0.170	ug/L			12/09/14 14:36	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			12/09/14 14:36	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/09/14 14:36	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			12/09/14 14:36	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			12/09/14 14:36	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			12/09/14 14:36	1
Trichloroethene	ND		0.500	0.200	ug/L			12/09/14 14:36	1
Vinyl chloride	ND		0.500	0.180	ug/L			12/09/14 14:36	1
Xylenes, Total	ND		1.50	0.580	ug/L			12/09/14 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*12/09/14 14:36*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*12/09/14 14:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*		*12/09/14 14:36*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*12/09/14 14:36*	*1*

Client Sample Results

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

Client Sample ID: Trip Blank

Lab Sample ID: 490-67817-6

Date Collected: 12/03/14 00:01
Date Received: 12/04/14 08:30

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			12/06/14 18:39	1
Benzene	ND		0.500	0.200	ug/L			12/06/14 18:39	1
Bromoform	ND		0.500	0.290	ug/L			12/06/14 18:39	1
Bromomethane	ND		0.500	0.350	ug/L			12/06/14 18:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			12/06/14 18:39	1
Carbon disulfide	ND		0.500	0.220	ug/L			12/06/14 18:39	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			12/06/14 18:39	1
Chlorobenzene	ND		0.500	0.180	ug/L			12/06/14 18:39	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			12/06/14 18:39	1
Chloroethane	ND		0.500	0.360	ug/L			12/06/14 18:39	1
Chloroform	ND		0.500	0.230	ug/L			12/06/14 18:39	1
Chloromethane	ND		0.500	0.360	ug/L			12/06/14 18:39	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			12/06/14 18:39	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/06/14 18:39	1
Dibromomethane	ND		0.500	0.450	ug/L			12/06/14 18:39	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			12/06/14 18:39	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			12/06/14 18:39	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			12/06/14 18:39	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			12/06/14 18:39	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			12/06/14 18:39	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			12/06/14 18:39	1
Ethylbenzene	ND		0.500	0.190	ug/L			12/06/14 18:39	1
2-Hexanone	ND		5.00	1.28	ug/L			12/06/14 18:39	1
Methylene Chloride	ND		5.00	0.220	ug/L			12/06/14 18:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			12/06/14 18:39	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			12/06/14 18:39	1
o-Xylene	ND		0.500	0.200	ug/L			12/06/14 18:39	1
Styrene	ND		0.500	0.280	ug/L			12/06/14 18:39	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			12/06/14 18:39	1
Tetrachloroethene	ND		0.500	0.140	ug/L			12/06/14 18:39	1
Toluene	ND		0.500	0.170	ug/L			12/06/14 18:39	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			12/06/14 18:39	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/06/14 18:39	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			12/06/14 18:39	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			12/06/14 18:39	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			12/06/14 18:39	1
Trichloroethene	ND		0.500	0.200	ug/L			12/06/14 18:39	1
Vinyl chloride	ND		0.500	0.180	ug/L			12/06/14 18:39	1
Xylenes, Total	ND		1.50	0.580	ug/L			12/06/14 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*		*12/06/14 18:39*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*12/06/14 18:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*70 - 130*		*12/06/14 18:39*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*12/06/14 18:39*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-211874/7
Matrix: Water
Analysis Batch: 211874

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			12/06/14 14:03	1
Benzene	ND		0.500	0.200	ug/L			12/06/14 14:03	1
Bromoform	ND		0.500	0.290	ug/L			12/06/14 14:03	1
Bromomethane	ND		0.500	0.350	ug/L			12/06/14 14:03	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			12/06/14 14:03	1
Carbon disulfide	ND		0.500	0.220	ug/L			12/06/14 14:03	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			12/06/14 14:03	1
Chlorobenzene	ND		0.500	0.180	ug/L			12/06/14 14:03	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			12/06/14 14:03	1
Chloroethane	ND		0.500	0.360	ug/L			12/06/14 14:03	1
Chloroform	ND		0.500	0.230	ug/L			12/06/14 14:03	1
Chloromethane	ND		0.500	0.360	ug/L			12/06/14 14:03	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			12/06/14 14:03	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/06/14 14:03	1
Dibromomethane	ND		0.500	0.450	ug/L			12/06/14 14:03	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			12/06/14 14:03	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			12/06/14 14:03	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			12/06/14 14:03	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			12/06/14 14:03	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			12/06/14 14:03	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			12/06/14 14:03	1
Ethylbenzene	ND		0.500	0.190	ug/L			12/06/14 14:03	1
2-Hexanone	ND		5.00	1.28	ug/L			12/06/14 14:03	1
Methylene Chloride	ND		5.00	0.220	ug/L			12/06/14 14:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			12/06/14 14:03	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			12/06/14 14:03	1
o-Xylene	ND		0.500	0.200	ug/L			12/06/14 14:03	1
Styrene	ND		0.500	0.280	ug/L			12/06/14 14:03	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			12/06/14 14:03	1
Tetrachloroethene	ND		0.500	0.140	ug/L			12/06/14 14:03	1
Toluene	ND		0.500	0.170	ug/L			12/06/14 14:03	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			12/06/14 14:03	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/06/14 14:03	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			12/06/14 14:03	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			12/06/14 14:03	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			12/06/14 14:03	1
Trichloroethene	ND		0.500	0.200	ug/L			12/06/14 14:03	1
Vinyl chloride	ND		0.500	0.180	ug/L			12/06/14 14:03	1
Xylenes, Total	ND		1.50	0.580	ug/L			12/06/14 14:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*		*12/06/14 14:03*	*1*
Dibromofluoromethane (Surr)	*92*		*70 - 130*		*12/06/14 14:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*		*12/06/14 14:03*	*1*
Toluene-d8 (Surr)	*98*		*70 - 130*		*12/06/14 14:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-211874/3
Matrix: Water
Analysis Batch: 211874

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	90.35		ug/L		90	54 - 145
Benzene	20.0	20.29		ug/L		101	80 - 121
Bromoform	20.0	17.19		ug/L		86	46 - 145
Bromomethane	20.0	13.15		ug/L		66	41 - 150
2-Butanone (MEK)	100	89.63		ug/L		90	62 - 133
Carbon disulfide	20.0	19.35		ug/L		97	77 - 126
Carbon tetrachloride	20.0	16.53		ug/L		83	64 - 147
Chlorobenzene	20.0	19.30		ug/L		97	80 - 120
Chlorodibromomethane	20.0	19.34		ug/L		97	69 - 133
Chloroethane	20.0	20.77		ug/L		104	72 - 120
Chloroform	20.0	17.37		ug/L		87	73 - 129
Chloromethane	20.0	16.10		ug/L		80	12 - 150
cis-1,2-Dichloroethene	20.0	19.54		ug/L		98	76 - 125
cis-1,3-Dichloropropene	20.0	19.63		ug/L		98	74 - 140
Dibromomethane	20.0	19.71		ug/L		99	71 - 125
Dichlorobromomethane	20.0	20.27		ug/L		101	75 - 129
1,1-Dichloroethane	20.0	19.99		ug/L		100	78 - 125
1,2-Dichloroethane	20.0	17.72		ug/L		89	77 - 121
1,1-Dichloroethene	20.0	20.01		ug/L		100	79 - 124
1,2-Dichloropropane	20.0	22.05		ug/L		110	75 - 120
1,1-Dichloropropene	20.0	19.98		ug/L		100	80 - 122
Ethylbenzene	20.0	19.21		ug/L		96	80 - 130
2-Hexanone	100	94.59		ug/L		95	60 - 142
Methylene Chloride	20.0	19.37		ug/L		97	79 - 123
4-Methyl-2-pentanone (MIBK)	100	102.7		ug/L		103	60 - 137
m-Xylene & p-Xylene	20.0	18.53		ug/L		93	80 - 141
o-Xylene	20.0	18.27		ug/L		91	80 - 127
Styrene	20.0	18.62		ug/L		93	80 - 127
1,1,1,2-Tetrachloroethane	20.0	17.57		ug/L		88	74 - 135
Tetrachloroethene	20.0	18.62		ug/L		93	80 - 126
Toluene	20.0	19.40		ug/L		97	80 - 126
trans-1,2-Dichloroethene	20.0	19.99		ug/L		100	79 - 126
trans-1,3-Dichloropropene	20.0	17.59		ug/L		88	63 - 134
1,3,5-Trichlorobenzene	20.0	19.25		ug/L		96	70 - 130
1,1,1-Trichloroethane	20.0	16.67		ug/L		83	78 - 135
1,1,2-Trichloroethane	20.0	19.41		ug/L		97	80 - 124
Trichloroethene	20.0	18.49		ug/L		92	80 - 123
Vinyl chloride	20.0	21.94		ug/L		110	68 - 120
Xylenes, Total	40.0	36.80		ug/L		92	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-211874/4
Matrix: Water
Analysis Batch: 211874

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
Acetone	100	88.55		ug/L		89	54 - 145	2	21
Benzene	20.0	20.66		ug/L		103	80 - 121	2	17
Bromoform	20.0	17.68		ug/L		88	46 - 145	3	16
Bromomethane	20.0	13.39		ug/L		67	41 - 150	2	50
2-Butanone (MEK)	100	86.83		ug/L		87	62 - 133	3	19
Carbon disulfide	20.0	19.97		ug/L		100	77 - 126	3	21
Carbon tetrachloride	20.0	17.18		ug/L		86	64 - 147	4	19
Chlorobenzene	20.0	19.70		ug/L		98	80 - 120	2	14
Chlorodibromomethane	20.0	19.66		ug/L		98	69 - 133	2	15
Chloroethane	20.0	17.70		ug/L		89	72 - 120	16	20
Chloroform	20.0	17.86		ug/L		89	73 - 129	3	18
Chloromethane	20.0	14.88		ug/L		74	12 - 150	8	31
cis-1,2-Dichloroethene	20.0	19.60		ug/L		98	76 - 125	0	17
cis-1,3-Dichloropropene	20.0	20.31		ug/L		102	74 - 140	3	15
Dibromomethane	20.0	20.79		ug/L		104	71 - 125	5	16
Dichlorobromomethane	20.0	20.90		ug/L		105	75 - 129	3	18
1,1-Dichloroethane	20.0	20.21		ug/L		101	78 - 125	1	17
1,2-Dichloroethane	20.0	17.90		ug/L		89	77 - 121	1	17
1,1-Dichloroethene	20.0	20.53		ug/L		103	79 - 124	3	17
1,2-Dichloropropane	20.0	22.71		ug/L		114	75 - 120	3	17
1,1-Dichloropropene	20.0	20.72		ug/L		104	80 - 122	4	17
Ethylbenzene	20.0	19.80		ug/L		99	80 - 130	3	15
2-Hexanone	100	98.70		ug/L		99	60 - 142	4	15
Methylene Chloride	20.0	19.84		ug/L		99	79 - 123	2	17
4-Methyl-2-pentanone (MIBK)	100	98.41		ug/L		98	60 - 137	4	17
m-Xylene & p-Xylene	20.0	19.27		ug/L		96	80 - 141	4	16
o-Xylene	20.0	18.74		ug/L		94	80 - 127	3	14
Styrene	20.0	19.24		ug/L		96	80 - 127	3	24
1,1,1,2-Tetrachloroethane	20.0	18.47		ug/L		92	74 - 135	5	16
Tetrachloroethene	20.0	17.61		ug/L		88	80 - 126	6	16
Toluene	20.0	20.16		ug/L		101	80 - 126	4	15
trans-1,2-Dichloroethene	20.0	21.14		ug/L		106	79 - 126	6	16
trans-1,3-Dichloropropene	20.0	18.23		ug/L		91	63 - 134	4	14
1,3,5-Trichlorobenzene	20.0	19.61		ug/L		98	70 - 130	2	30
1,1,1-Trichloroethane	20.0	16.93		ug/L		85	78 - 135	2	17
1,1,2-Trichloroethane	20.0	19.92		ug/L		100	80 - 124	3	15
Trichloroethene	20.0	18.94		ug/L		95	80 - 123	2	17
Vinyl chloride	20.0	20.28		ug/L		101	68 - 120	8	17
Xylenes, Total	40.0	38.01		ug/L		95	80 - 132	3	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*85*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-67671-C-2 MS
Matrix: Water
Analysis Batch: 211874

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	181.2		ug/L		72	45 - 141
Benzene	0.407	J	50.0	49.43		ug/L		98	75 - 133
Bromoform	ND		50.0	44.73		ug/L		89	42 - 147
Bromomethane	ND		50.0	32.50		ug/L		65	16 - 163
2-Butanone (MEK)	ND		250	185.5		ug/L		74	50 - 138
Carbon disulfide	ND		50.0	46.26		ug/L		93	48 - 152
Carbon tetrachloride	ND		50.0	42.78		ug/L		86	62 - 164
Chlorobenzene	ND		50.0	48.95		ug/L		98	80 - 129
Chlorodibromomethane	ND		50.0	49.15		ug/L		98	66 - 140
Chloroethane	ND		50.0	48.71		ug/L		97	58 - 137
Chloroform	ND		50.0	42.06		ug/L		84	66 - 138
Chloromethane	ND		50.0	39.50		ug/L		79	10 - 169
cis-1,2-Dichloroethene	ND		50.0	45.79		ug/L		92	68 - 138
cis-1,3-Dichloropropene	ND		50.0	49.68		ug/L		99	71 - 141
Dibromomethane	ND		50.0	46.52		ug/L		93	58 - 140
Dichlorobromomethane	ND		50.0	50.34		ug/L		101	70 - 140
1,1-Dichloroethane	ND		50.0	48.18		ug/L		96	71 - 139
1,2-Dichloroethane	ND		50.0	41.17		ug/L		82	64 - 136
1,1-Dichloroethene	ND		50.0	48.92		ug/L		98	70 - 142
1,2-Dichloropropane	ND		50.0	52.81		ug/L		106	67 - 131
1,1-Dichloropropene	ND		50.0	49.96		ug/L		100	76 - 139
Ethylbenzene	0.274	J	50.0	49.50		ug/L		98	79 - 139
2-Hexanone	ND		250	230.0		ug/L		92	50 - 150
Methylene Chloride	ND		50.0	45.49		ug/L		91	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	241.4		ug/L		97	50 - 147
m-Xylene & p-Xylene	0.515		50.0	47.88		ug/L		95	80 - 153
o-Xylene	0.268	J	50.0	47.33		ug/L		94	74 - 138
Styrene	ND		50.0	47.61		ug/L		95	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	45.40		ug/L		91	73 - 141
Tetrachloroethene	ND		50.0	44.97		ug/L		90	72 - 145
Toluene	0.851		50.0	49.55		ug/L		97	75 - 136
trans-1,2-Dichloroethene	ND		50.0	50.00		ug/L		100	66 - 143
trans-1,3-Dichloropropene	ND		50.0	44.77		ug/L		90	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	46.00		ug/L		92	60 - 140
1,1,1-Trichloroethane	ND		50.0	41.54		ug/L		83	76 - 149
1,1,2-Trichloroethane	ND		50.0	46.81		ug/L		94	74 - 134
Trichloroethene	ND		50.0	46.31		ug/L		93	73 - 144
Vinyl chloride	ND		50.0	56.13		ug/L		112	56 - 129
Xylenes, Total	0.783	J	100	95.21		ug/L		94	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*88*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-67671-D-2 MSD
Matrix: Water
Analysis Batch: 211874

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	192.3		ug/L		77	45 - 141	6	21
Benzene	0.407	J	50.0	49.56		ug/L		98	75 - 133	0	17
Bromoform	ND		50.0	44.77		ug/L		90	42 - 147	0	16
Bromomethane	ND		50.0	40.30		ug/L		81	16 - 163	21	50
2-Butanone (MEK)	ND		250	185.8		ug/L		74	50 - 138	0	19
Carbon disulfide	ND		50.0	47.45		ug/L		95	48 - 152	3	21
Carbon tetrachloride	ND		50.0	43.97		ug/L		88	62 - 164	3	19
Chlorobenzene	ND		50.0	48.59		ug/L		97	80 - 129	1	14
Chlorodibromomethane	ND		50.0	50.08	E	ug/L		100	66 - 140	2	15
Chloroethane	ND		50.0	48.94		ug/L		98	58 - 137	0	20
Chloroform	ND		50.0	42.46		ug/L		85	66 - 138	1	18
Chloromethane	ND		50.0	41.84		ug/L		84	10 - 169	6	31
cis-1,2-Dichloroethene	ND		50.0	47.08		ug/L		94	68 - 138	3	17
cis-1,3-Dichloropropene	ND		50.0	50.26		ug/L		101	71 - 141	1	15
Dibromomethane	ND		50.0	46.39		ug/L		93	58 - 140	0	16
Dichlorobromomethane	ND		50.0	50.84		ug/L		102	70 - 140	1	18
1,1-Dichloroethane	ND		50.0	49.04		ug/L		98	71 - 139	2	17
1,2-Dichloroethane	ND		50.0	40.56		ug/L		81	64 - 136	1	17
1,1-Dichloroethene	ND		50.0	49.41		ug/L		99	70 - 142	1	17
1,2-Dichloropropane	ND		50.0	53.26		ug/L		107	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	50.87		ug/L		102	76 - 139	2	17
Ethylbenzene	0.274	J	50.0	50.25		ug/L		100	79 - 139	1	15
2-Hexanone	ND		250	229.0		ug/L		92	50 - 150	0	15
Methylene Chloride	ND		50.0	45.87		ug/L		92	64 - 139	1	17
4-Methyl-2-pentanone (MIBK)	ND		250	246.4		ug/L		99	50 - 147	2	17
m-Xylene & p-Xylene	0.515		50.0	49.29		ug/L		98	80 - 153	3	16
o-Xylene	0.268	J	50.0	48.02		ug/L		96	74 - 138	1	14
Styrene	ND		50.0	47.95		ug/L		96	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	46.10		ug/L		92	73 - 141	2	16
Tetrachloroethene	ND		50.0	50.91		ug/L		102	72 - 145	12	16
Toluene	0.851		50.0	49.81		ug/L		98	75 - 136	1	15
trans-1,2-Dichloroethene	ND		50.0	50.11		ug/L		100	66 - 143	0	16
trans-1,3-Dichloropropene	ND		50.0	45.17		ug/L		90	59 - 135	1	14
1,3,5-Trichlorobenzene	ND		50.0	50.45		ug/L		101	60 - 140	9	30
1,1,1-Trichloroethane	ND		50.0	42.20		ug/L		84	76 - 149	2	17
1,1,2-Trichloroethane	ND		50.0	49.28		ug/L		99	74 - 134	5	15
Trichloroethene	ND		50.0	46.82		ug/L		94	73 - 144	1	17
Vinyl chloride	ND		50.0	57.20		ug/L		114	56 - 129	2	17
Xylenes, Total	0.783	J	100	97.31		ug/L		97	74 - 141	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
Dibromofluoromethane (Surr)	*90*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-212412/7
Matrix: Water
Analysis Batch: 212412

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5.00	2.66	ug/L			12/09/14 11:54	1
Benzene	ND		0.500	0.200	ug/L			12/09/14 11:54	1
Bromoform	ND		0.500	0.290	ug/L			12/09/14 11:54	1
Bromomethane	ND		0.500	0.350	ug/L			12/09/14 11:54	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			12/09/14 11:54	1
Carbon disulfide	ND		0.500	0.220	ug/L			12/09/14 11:54	1
Carbon tetrachloride	ND		0.500	0.180	ug/L			12/09/14 11:54	1
Chlorobenzene	ND		0.500	0.180	ug/L			12/09/14 11:54	1
Chlorodibromomethane	ND		0.500	0.250	ug/L			12/09/14 11:54	1
Chloroethane	ND		0.500	0.360	ug/L			12/09/14 11:54	1
Chloroform	ND		0.500	0.230	ug/L			12/09/14 11:54	1
Chloromethane	ND		0.500	0.360	ug/L			12/09/14 11:54	1
cis-1,2-Dichloroethene	ND		0.500	0.210	ug/L			12/09/14 11:54	1
cis-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/09/14 11:54	1
Dibromomethane	ND		0.500	0.450	ug/L			12/09/14 11:54	1
Dichlorobromomethane	ND		0.500	0.170	ug/L			12/09/14 11:54	1
1,1-Dichloroethane	ND		0.500	0.240	ug/L			12/09/14 11:54	1
1,2-Dichloroethane	ND		0.500	0.200	ug/L			12/09/14 11:54	1
1,1-Dichloroethene	ND		0.500	0.250	ug/L			12/09/14 11:54	1
1,2-Dichloropropane	ND		0.500	0.250	ug/L			12/09/14 11:54	1
1,1-Dichloropropene	ND		0.500	0.200	ug/L			12/09/14 11:54	1
Ethylbenzene	ND		0.500	0.190	ug/L			12/09/14 11:54	1
2-Hexanone	ND		5.00	1.28	ug/L			12/09/14 11:54	1
Methylene Chloride	ND		5.00	0.220	ug/L			12/09/14 11:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.00	0.810	ug/L			12/09/14 11:54	1
m-Xylene & p-Xylene	ND		0.500	0.380	ug/L			12/09/14 11:54	1
o-Xylene	ND		0.500	0.200	ug/L			12/09/14 11:54	1
Styrene	ND		0.500	0.280	ug/L			12/09/14 11:54	1
1,1,1,2-Tetrachloroethane	ND		0.500	0.150	ug/L			12/09/14 11:54	1
Tetrachloroethene	ND		0.500	0.140	ug/L			12/09/14 11:54	1
Toluene	ND		0.500	0.170	ug/L			12/09/14 11:54	1
trans-1,2-Dichloroethene	ND		0.500	0.230	ug/L			12/09/14 11:54	1
trans-1,3-Dichloropropene	ND		0.500	0.170	ug/L			12/09/14 11:54	1
1,3,5-Trichlorobenzene	ND		0.500	0.180	ug/L			12/09/14 11:54	1
1,1,1-Trichloroethane	ND		0.500	0.190	ug/L			12/09/14 11:54	1
1,1,2-Trichloroethane	ND		0.500	0.190	ug/L			12/09/14 11:54	1
Trichloroethene	ND		0.500	0.200	ug/L			12/09/14 11:54	1
Vinyl chloride	ND		0.500	0.180	ug/L			12/09/14 11:54	1
Xylenes, Total	ND		1.50	0.580	ug/L			12/09/14 11:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*		*12/09/14 11:54*	*1*
Dibromofluoromethane (Surr)	*91*		*70 - 130*		*12/09/14 11:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*70 - 130*		*12/09/14 11:54*	*1*
Toluene-d8 (Surr)	*104*		*70 - 130*		*12/09/14 11:54*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-212412/3
Matrix: Water
Analysis Batch: 212412

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	82.19		ug/L		82	54 - 145
Benzene	20.0	20.19		ug/L		101	80 - 121
Bromoform	20.0	17.45		ug/L		87	46 - 145
Bromomethane	20.0	14.52		ug/L		73	41 - 150
2-Butanone (MEK)	100	78.74		ug/L		79	62 - 133
Carbon disulfide	20.0	19.71		ug/L		99	77 - 126
Carbon tetrachloride	20.0	16.77		ug/L		84	64 - 147
Chlorobenzene	20.0	19.85		ug/L		99	80 - 120
Chlorodibromomethane	20.0	19.65		ug/L		98	69 - 133
Chloroethane	20.0	18.17		ug/L		91	72 - 120
Chloroform	20.0	17.49		ug/L		87	73 - 129
Chloromethane	20.0	15.91		ug/L		80	12 - 150
cis-1,2-Dichloroethene	20.0	19.09		ug/L		95	76 - 125
cis-1,3-Dichloropropene	20.0	20.65		ug/L		103	74 - 140
Dibromomethane	20.0	19.29		ug/L		96	71 - 125
Dichlorobromomethane	20.0	20.24		ug/L		101	75 - 129
1,1-Dichloroethane	20.0	20.15		ug/L		101	78 - 125
1,2-Dichloroethane	20.0	17.26		ug/L		86	77 - 121
1,1-Dichloroethene	20.0	19.87		ug/L		99	79 - 124
1,2-Dichloropropane	20.0	22.04		ug/L		110	75 - 120
1,1-Dichloropropene	20.0	20.45		ug/L		102	80 - 122
Ethylbenzene	20.0	19.64		ug/L		98	80 - 130
2-Hexanone	100	87.53		ug/L		88	60 - 142
Methylene Chloride	20.0	19.05		ug/L		95	79 - 123
4-Methyl-2-pentanone (MIBK)	100	92.24		ug/L		92	60 - 137
m-Xylene & p-Xylene	20.0	19.00		ug/L		95	80 - 141
o-Xylene	20.0	18.72		ug/L		94	80 - 127
Styrene	20.0	19.20		ug/L		96	80 - 127
1,1,1,2-Tetrachloroethane	20.0	18.36		ug/L		92	74 - 135
Tetrachloroethene	20.0	18.19		ug/L		91	80 - 126
Toluene	20.0	20.14		ug/L		101	80 - 126
trans-1,2-Dichloroethene	20.0	20.68		ug/L		103	79 - 126
trans-1,3-Dichloropropene	20.0	17.69		ug/L		88	63 - 134
1,3,5-Trichlorobenzene	20.0	19.38		ug/L		97	70 - 130
1,1,1-Trichloroethane	20.0	16.85		ug/L		84	78 - 135
1,1,2-Trichloroethane	20.0	19.51		ug/L		98	80 - 124
Trichloroethene	20.0	19.09		ug/L		95	80 - 123
Vinyl chloride	20.0	21.29		ug/L		106	68 - 120
Xylenes, Total	40.0	37.73		ug/L		94	80 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*90*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*100*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-212412/4
Matrix: Water
Analysis Batch: 212412

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
Acetone	100	81.11		ug/L		81	54 - 145	1	21
Benzene	20.0	19.23		ug/L		96	80 - 121	5	17
Bromoform	20.0	16.48		ug/L		82	46 - 145	6	16
Bromomethane	20.0	15.50		ug/L		78	41 - 150	7	50
2-Butanone (MEK)	100	76.56		ug/L		77	62 - 133	3	19
Carbon disulfide	20.0	18.69		ug/L		93	77 - 126	5	21
Carbon tetrachloride	20.0	16.01		ug/L		80	64 - 147	5	19
Chlorobenzene	20.0	18.81		ug/L		94	80 - 120	5	14
Chlorodibromomethane	20.0	18.60		ug/L		93	69 - 133	5	15
Chloroethane	20.0	18.66		ug/L		93	72 - 120	3	20
Chloroform	20.0	16.63		ug/L		83	73 - 129	5	18
Chloromethane	20.0	17.22		ug/L		86	12 - 150	8	31
cis-1,2-Dichloroethene	20.0	18.11		ug/L		91	76 - 125	5	17
cis-1,3-Dichloropropene	20.0	19.07		ug/L		95	74 - 140	8	15
Dibromomethane	20.0	18.38		ug/L		92	71 - 125	5	16
Dichlorobromomethane	20.0	19.34		ug/L		97	75 - 129	5	18
1,1-Dichloroethane	20.0	19.04		ug/L		95	78 - 125	6	17
1,2-Dichloroethane	20.0	16.44		ug/L		82	77 - 121	5	17
1,1-Dichloroethene	20.0	19.29		ug/L		96	79 - 124	3	17
1,2-Dichloropropane	20.0	20.95		ug/L		105	75 - 120	5	17
1,1-Dichloropropene	20.0	19.23		ug/L		96	80 - 122	6	17
Ethylbenzene	20.0	18.62		ug/L		93	80 - 130	5	15
2-Hexanone	100	79.82		ug/L		80	60 - 142	9	15
Methylene Chloride	20.0	18.52		ug/L		93	79 - 123	3	17
4-Methyl-2-pentanone (MIBK)	100	86.68		ug/L		87	60 - 137	6	17
m-Xylene & p-Xylene	20.0	17.90		ug/L		90	80 - 141	6	16
o-Xylene	20.0	17.64		ug/L		88	80 - 127	6	14
Styrene	20.0	17.99		ug/L		90	80 - 127	7	24
1,1,1,2-Tetrachloroethane	20.0	17.45		ug/L		87	74 - 135	5	16
Tetrachloroethene	20.0	17.48		ug/L		87	80 - 126	4	16
Toluene	20.0	18.87		ug/L		94	80 - 126	6	15
trans-1,2-Dichloroethene	20.0	19.63		ug/L		98	79 - 126	5	16
trans-1,3-Dichloropropene	20.0	17.23		ug/L		86	63 - 134	3	14
1,3,5-Trichlorobenzene	20.0	19.22		ug/L		96	70 - 130	1	30
1,1,1-Trichloroethane	20.0	15.67		ug/L		78	78 - 135	7	17
1,1,2-Trichloroethane	20.0	18.15		ug/L		91	80 - 124	7	15
Trichloroethene	20.0	17.80		ug/L		89	80 - 123	7	17
Vinyl chloride	20.0	21.72		ug/L		109	68 - 120	2	17
Xylenes, Total	40.0	35.55		ug/L		89	80 - 132	6	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
Dibromofluoromethane (Surr)	*90*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-67507-B-2 MS
Matrix: Water
Analysis Batch: 212412

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		250	182.2		ug/L		73	45 - 141
Benzene	ND		50.0	48.67		ug/L		97	75 - 133
Bromoform	ND		50.0	44.09		ug/L		88	42 - 147
Bromomethane	ND		50.0	35.49		ug/L		71	16 - 163
2-Butanone (MEK)	ND		250	190.4		ug/L		76	50 - 138
Carbon disulfide	ND		50.0	43.87		ug/L		88	48 - 152
Carbon tetrachloride	ND		50.0	43.24		ug/L		86	62 - 164
Chlorobenzene	ND		50.0	47.86		ug/L		96	80 - 129
Chlorodibromomethane	ND		50.0	49.77		ug/L		100	66 - 140
Chloroethane	ND		50.0	45.17		ug/L		90	58 - 137
Chloroform	ND		50.0	41.58		ug/L		83	66 - 138
Chloromethane	ND		50.0	39.99		ug/L		80	10 - 169
cis-1,2-Dichloroethene	ND		50.0	45.21		ug/L		90	68 - 138
cis-1,3-Dichloropropene	ND		50.0	49.08		ug/L		98	71 - 141
Dibromomethane	ND		50.0	46.10		ug/L		92	58 - 140
Dichlorobromomethane	ND		50.0	49.75		ug/L		99	70 - 140
1,1-Dichloroethane	ND		50.0	47.86		ug/L		96	71 - 139
1,2-Dichloroethane	ND		50.0	40.73		ug/L		81	64 - 136
1,1-Dichloroethene	ND		50.0	48.85		ug/L		98	70 - 142
1,2-Dichloropropane	ND		50.0	52.87		ug/L		106	67 - 131
1,1-Dichloropropene	ND		50.0	49.52		ug/L		99	76 - 139
Ethylbenzene	ND		50.0	48.05		ug/L		96	79 - 139
2-Hexanone	ND		250	220.0		ug/L		88	50 - 150
Methylene Chloride	ND		50.0	45.25		ug/L		91	64 - 139
4-Methyl-2-pentanone (MIBK)	ND		250	235.4		ug/L		94	50 - 147
m-Xylene & p-Xylene	ND		50.0	47.14		ug/L		94	80 - 153
o-Xylene	ND		50.0	45.97		ug/L		92	74 - 138
Styrene	ND		50.0	46.50		ug/L		93	61 - 148
1,1,1,2-Tetrachloroethane	ND		50.0	44.90		ug/L		90	73 - 141
Tetrachloroethene	ND		50.0	46.52		ug/L		93	72 - 145
Toluene	ND		50.0	47.94		ug/L		96	75 - 136
trans-1,2-Dichloroethene	ND		50.0	48.77		ug/L		98	66 - 143
trans-1,3-Dichloropropene	ND		50.0	44.20		ug/L		88	59 - 135
1,3,5-Trichlorobenzene	ND		50.0	42.80		ug/L		86	60 - 140
1,1,1-Trichloroethane	ND		50.0	41.32		ug/L		83	76 - 149
1,1,2-Trichloroethane	ND		50.0	46.53		ug/L		93	74 - 134
Trichloroethene	ND		50.0	46.10		ug/L		92	73 - 144
Vinyl chloride	ND		50.0	52.11		ug/L		104	56 - 129
Xylenes, Total	ND		100	93.11		ug/L		93	74 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*89*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*84*		*70 - 130*
Toluene-d8 (Surr)	*97*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-67507-C-2 MSD
Matrix: Water
Analysis Batch: 212412

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		250	188.5		ug/L		75	45 - 141	3	21
Benzene	ND		50.0	48.70		ug/L		97	75 - 133	0	17
Bromoform	ND		50.0	44.07		ug/L		88	42 - 147	0	16
Bromomethane	ND		50.0	39.38		ug/L		79	16 - 163	10	50
2-Butanone (MEK)	ND		250	177.8		ug/L		71	50 - 138	7	19
Carbon disulfide	ND		50.0	43.63		ug/L		87	48 - 152	1	21
Carbon tetrachloride	ND		50.0	43.55		ug/L		87	62 - 164	1	19
Chlorobenzene	ND		50.0	48.02		ug/L		96	80 - 129	0	14
Chlorodibromomethane	ND		50.0	49.21		ug/L		98	66 - 140	1	15
Chloroethane	ND		50.0	45.18		ug/L		90	58 - 137	0	20
Chloroform	ND		50.0	41.87		ug/L		84	66 - 138	1	18
Chloromethane	ND		50.0	41.92		ug/L		84	10 - 169	5	31
cis-1,2-Dichloroethene	ND		50.0	45.76		ug/L		92	68 - 138	1	17
cis-1,3-Dichloropropene	ND		50.0	49.63		ug/L		99	71 - 141	1	15
Dibromomethane	ND		50.0	46.53		ug/L		93	58 - 140	1	16
Dichlorobromomethane	ND		50.0	50.22		ug/L		100	70 - 140	1	18
1,1-Dichloroethane	ND		50.0	48.30		ug/L		97	71 - 139	1	17
1,2-Dichloroethane	ND		50.0	41.11		ug/L		82	64 - 136	1	17
1,1-Dichloroethene	ND		50.0	48.84		ug/L		98	70 - 142	0	17
1,2-Dichloropropane	ND		50.0	53.20		ug/L		106	67 - 131	1	17
1,1-Dichloropropene	ND		50.0	49.86		ug/L		100	76 - 139	1	17
Ethylbenzene	ND		50.0	49.00		ug/L		98	79 - 139	2	15
2-Hexanone	ND		250	228.5		ug/L		91	50 - 150	4	15
Methylene Chloride	ND		50.0	45.99		ug/L		92	64 - 139	2	17
4-Methyl-2-pentanone (MIBK)	ND		250	233.0		ug/L		93	50 - 147	1	17
m-Xylene & p-Xylene	ND		50.0	47.81		ug/L		96	80 - 153	1	16
o-Xylene	ND		50.0	46.84		ug/L		94	74 - 138	2	14
Styrene	ND		50.0	46.97		ug/L		94	61 - 148	1	24
1,1,1,2-Tetrachloroethane	ND		50.0	45.27		ug/L		91	73 - 141	1	16
Tetrachloroethene	ND		50.0	44.49		ug/L		89	72 - 145	4	16
Toluene	ND		50.0	47.96		ug/L		96	75 - 136	0	15
trans-1,2-Dichloroethene	ND		50.0	49.19		ug/L		98	66 - 143	1	16
trans-1,3-Dichloropropene	ND		50.0	44.99		ug/L		90	59 - 135	2	14
1,3,5-Trichlorobenzene	ND		50.0	45.73		ug/L		91	60 - 140	7	30
1,1,1-Trichloroethane	ND		50.0	41.76		ug/L		84	76 - 149	1	17
1,1,2-Trichloroethane	ND		50.0	46.97		ug/L		94	74 - 134	1	15
Trichloroethene	ND		50.0	46.58		ug/L		93	73 - 144	1	17
Vinyl chloride	ND		50.0	53.11		ug/L		106	56 - 129	2	17
Xylenes, Total	ND		100	94.65		ug/L		95	74 - 141	2	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
Dibromofluoromethane (Surr)	*90*		*70 - 130*
1,2-Dichloroethane-d4 (Surr)	*86*		*70 - 130*
Toluene-d8 (Surr)	*98*		*70 - 130*

QC Association Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

GC/MS VOA

Analysis Batch: 211874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67671-C-2 MS	Matrix Spike	Total/NA	Water	8260B	
490-67671-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-67817-3	Effluent	Total/NA	Water	8260B	
490-67817-6	Trip Blank	Total/NA	Water	8260B	
LCS 490-211874/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-211874/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-211874/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 212412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-67507-B-2 MS	Matrix Spike	Total/NA	Water	8260B	
490-67507-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-67817-1	IW-100	Total/NA	Water	8260B	
490-67817-2	IW-103	Total/NA	Water	8260B	
490-67817-4	GAC 1 OUT	Total/NA	Water	8260B	
490-67817-5	GAC 2 OUT	Total/NA	Water	8260B	
LCS 490-212412/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-212412/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-212412/7	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

Client Sample ID: IW-100 — Lab Sample ID: 490-67817-1

Date Collected: 12/03/14 11:40 — **Matrix: Water**
Date Received: 12/04/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	212412	12/09/14 13:15	JJR	TAL NSH

Client Sample ID: IW-103 — Lab Sample ID: 490-67817-2

Date Collected: 12/03/14 11:45 — **Matrix: Water**
Date Received: 12/04/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	212412	12/09/14 13:42	JJR	TAL NSH

Client Sample ID: Effluent — Lab Sample ID: 490-67817-3

Date Collected: 12/03/14 11:50 — **Matrix: Water**
Date Received: 12/04/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	211874	12/06/14 20:59	JJR	TAL NSH

Client Sample ID: GAC 1 OUT — Lab Sample ID: 490-67817-4

Date Collected: 12/03/14 11:55 — **Matrix: Water**
Date Received: 12/04/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	212412	12/09/14 14:09	JJR	TAL NSH

Client Sample ID: GAC 2 OUT — Lab Sample ID: 490-67817-5

Date Collected: 12/03/14 12:00 — **Matrix: Water**
Date Received: 12/04/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	212412	12/09/14 14:36	JJR	TAL NSH

Client Sample ID: Trip Blank — Lab Sample ID: 490-67817-6

Date Collected: 12/03/14 00:01 — **Matrix: Water**
Date Received: 12/04/14 08:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	211874	12/06/14 18:39	JJR	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: FORD Tibbetts Road Site E101274

TestAmerica Job ID: 490-67817-1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New Hampshire	NELAP	1	2963	10-09-15

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-67817 Chain of Custody

Cooler Received/Opened On 12/4/2014 @ 0830

1. Tracking # 9267 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 97310166

2. Temperature of rep. sample or temp blank when opened: 5.8 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? 1 front YES...NO...NA

If yes, how many and where:

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial)

7. Were custody seals on containers: YES NO and Intact YES...NO...NA on top across lids

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence #

I certify that I unloaded the cooler and answered questions 7-14 (intial)

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial)

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial)

I certify that I attached a label with the unique LIMS number to each container (intial)

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 11/28/12

12/10/2014

TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Phone (615) 726-0177 Fax (615) 726-0954

Chain of Custody Record

TestAmerica

Client Information	Sampler: DC/BT	Lab PM: Brown, Shali	Carrier Tracking No(s):	FORD Site E101274
Client Contact: Chuck Castelluccio	Phone: 978-937-9999	E-Mail: shali.brown@testamericainc.com		Page:
Company: ARCADIS U.S., Inc.				Job #:
Address: 1 Executive Drive Suite 303	Due Date Requested:			
City: Chelmsford	TAT Requested (days): Standard			
State, Zip: MA, 01824				
Phone:	PO #: Purchase Order Requested			
Email: chuck.castelluccio@arcadis-us.com	WO #:			
Project Name: Tibbetts Road Site E101274	Lab Project #: 49002494			
Site:	Client Project #:			

Analysis Requested

Loc: 490
67817

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B_LL - (MOD) New Hampshire Volatiles List	6010B As and Mn	Total Number of containers	Special Instructions/Note:	
			Preservation Code:				A	D			
IW-100	12/3/14	1145	G	W			3				-1
IW-103	↓	1145	G	W			3				-2
Effluent		1150	G	W			3				-3
GAC 1 out		1155	G	W			3				-4
GAC 2 out	↓	1200	G	W			3				-5
trip Blank	—	—	—	W			2				-6

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 12/3/14 1630	Company	Received by: [signature]	Date/Time: 12-4-14 / 0830	Company TAN
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 5.8°C

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 490-67817-1

Login Number: 67817

List Source: TestAmerica Nashville

List Number: 1

Creator: Huckaba, Jimmy

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	