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NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

REMEDIAL INVESTIGATION REPORT

222 South Ferry Street
Schenectady, New York

NYSDEC Site No. 447047

June 2018

New York State Department of
Environmental Conservation
Albany, New York

Remedial Investigation Report

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222 South Ferry Street
Schenectady, New York
Site # 447047

Work Assignment # D-007618-50

June 2018

I certify that I am currently a NYS registered professional engineer and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved scope of work and any DER-approved modifications.

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NYSDEC Site No. 447047

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1 INTRODUCTION

On behalf of the New York State Department of Environmental Conservation (NYSDEC), Arcadis CE, Inc. (Arcadis) has prepared this Remedial Investigation (RI) Report to summarize investigation activities at the 222 South Ferry Street Site, in the City of Schenectady, Schenectady County, New York (site) (Figures 1 and 2). The RI was conducted under NYSDEC State Superfund Standby Contract Work Assignment No. D007618-50. The objective of the RI was to evaluate the nature and extent of chlorinated solvents and other potential contaminants in the soil, groundwater, and soil vapor at the site; and the potential for soil vapor intrusion into area properties.

1.1 Site Location and Background

The 222 South Ferry Street Site is located in the eastern portion of the City of Schenectady (City) (Figure 1) and currently consists of a vacant parking lot owned by Maxim Engineering P.C. The site formerly consisted of a crockery warehouse and residential dwellings from at least the 1880s to the 1900s and a trucking repair shop and storage facility with a paint shop during the 1930s to the 1960s. The ground surface over the majority of the site is composed largely of asphalt paved areas with grass portions along the northern and southern edges. The site is relatively flat with no discernable slope. The site is located within a mixed residential-commercial neighborhood. The site is bordered by South Ferry Street and South Church Street to the east and west, respectively. It is bordered to the north by an apartment building and catering company, and to the south by commercial businesses, a vacant lot, and residential buildings. The last buildings on the site were demolished between the 1970s and 1980s.

1.2 Geology/Hydrogeology

The Schenectady Formation of the Upper Ordovician consisting primarily of greywacke with sandstone, siltstone, and shale is present beneath the site and the surrounding area according to regional mapping (Fisher et al., 1970). During the RI, soil borings were advanced up to approximately 18 feet below ground surface (bgs) at the site without encountering bedrock. Based on the 2004 geotechnical investigation, overburden materials extend to at least 90 feet bgs. Natural overburden materials in the area are mapped as commonly calcareous laminated silts and clays that have low permeability and potential land instability (Caldwell et al.,1987). Overburden materials observed during the RI were generally composed of urban fill and coarse to fine sand which overlies silt and clay. Groundwater flow at the site is generally to the north toward the Mohawk River, which is the regional groundwater discharge

1.3 Previous Investigations

To evaluate the subsurface conditions for a proposed four-story student housing complex, Dente Engineering, P.C. conducted a geotechnical investigation on behalf of BBL construction services (BBL) in 2007 (Dente Engineering, 2007). Six geotechnical soil borings between 22 feet bgs and 92 feet bgs in depth were advanced. Overburden materials observed included mainly fill material to depths of 15 to 20

feet bgs, fine sand and silt from 20 to 35 feet bgs, fine to medium sand from 35 to 55 feet bgs, and interbedded strata of silt and fine sand with some layers of coarse sand and clay from 55 feet bgs extending down to 90 feet bgs. Bedrock was not encountered, and groundwater ranged from nine to 12 feet bgs, with some isolated saturated zones at various shallower depths. Samples for laboratory analysis of potential contaminants were not collected during this investigation.

A Phase I Environmental Site Assessment (ESA) was completed by Evergreen Testing & Environmental Services, Inc., on behalf of BBL in October 2007 (Evergreen Testing and Environmental Services Inc., 2007). The Phase I revealed that the site formerly consisted of a crockery warehouse and residential dwellings from at least the 1880s to the 1900s, and was a trucking repair shop/storage facility and paint shop from the early 1930s to the 1960s. The last existing buildings on the site were all demolished between the 1970s and 1980s. The Phase I revealed no evidence of recognized environmental concerns and deemed that a Phase II ESA was not warranted. It was noted by Evergreen that “Other Environmental Concerns” existed at the site because of the truck repair and storage facility and other former buildings on and near the site that would have been heated by fuel oil. This fuel oil would have been stored in tanks located in the basement or underground, and it is unknown whether the tanks were emptied and/or removed.

Evergreen also conducted two subsurface investigations in December 2007 on behalf of BBL (Evergreen Testing and Environmental Services Inc., 2008). These investigations included soil and groundwater sampling. Four soil borings (EB-1 through EB-4) were advanced. One soil sample was collected from each boring and analyzed for volatile organic compounds (VOCs) and STARS semi-volatile organic compounds (SVOCs), Resource Conservation and Recovery Act (RCRA) 8 Metals and polychlorinated biphenyls (PCBs). A grab groundwater sample was also collected from three of the borings and analyzed for volatile organic compounds and semi-volatile organic compounds. An additional nine soil borings were advanced and converted into monitoring wells. Soil and groundwater samples were collected from each of these locations. Laboratory data from these two subsurface investigations conducted by Evergreen revealed that acetone and cis-1,2-dichloroethene exceeded Unrestricted Use Soil Cleanup Objectives (SCOs) from several soil sample locations. Various semi-volatile organic compounds exceeded the Unrestricted Use SCOs. However, Evergreen noted that these analytes are typical in coal tar and could be attributed to the existing fill material. Mercury, lead, and hexavalent chromium also exceeded the Unrestricted Use Soil Cleanup Objectives. Only one analyte (benzo(a)pyrene) was detected above the Commercial Use SCOs. Several chlorinated VOCs in groundwater were detected at concentrations exceeding NYSDEC Class GA Standards, with the highest concentrations existing in the central portion of the site. SVOCs were not detected in soil at concentrations greater than Commercial Use SCOs.

In August 2008, C.T. Male Associates Inc. (C.T. Male) performed a groundwater investigation on behalf of the Schenectady Metroplex Development Authority (C.T. Male Associates Inc., 2008). Groundwater samples were collected from the nine monitoring wells on site. Laboratory results indicated that groundwater samples from monitoring wells MW-2, MW-5, and MW-8, which are in the approximate central area of the site, contained chlorinated VOCs (CVOCs) at elevated concentrations.

In January 2014, Arcadis performed a site characterization (SC) of the site on behalf of the NYSDEC (Arcadis, 2014). The site characterization included the excavation of three test pits, drilling of four soil borings, installation and sampling of four groundwater monitoring wells, and the installation and sampling of eight soil vapor points. A subsurface soil sample was collected from each soil boring and test pit and was submitted for analysis of Target Compound List (TCL) volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260, TCL SVOCs by USEPA Method 8270, RCRA 8 Metals by USEPA Methods 6010 and 7471, and PCBs by USEPA Method 8082. Soil vapor samples were collected from the eight newly installed vapor points at the site and analyzed for VOCs by USEPA Method TO-15. Two rounds of groundwater sampling were conducted; during the first round samples were collected from the nine previously existing monitoring wells, and during the second round samples were collected from all thirteen monitoring wells on site. All groundwater samples were analyzed for TCL VOCs by USEPA Method 8260, TCL SVOCs by USEPA Method 8270, RCRA 8 Metals by USEPA Methods 6010 and 7470, and PCBs by USEPA Method 8082, with the exception of the second round of sampling of wells MW-1 through MW-9, which were only analyzed for TCL VOCs by USEPA Method 8260. The findings of the 2014 site characterization sampling are summarized below.

Unsaturated subsurface soil at, and in the vicinity of, the site did not appear to be significantly impacted by site-related CVOCs. CVOC-impacted soil at and below the water table was mainly isolated to the central area of the site. Vinyl chloride and cis-1,2-dichloroethene (DCE) were present at concentrations greater than corresponding 6 NYCRR Part 375 Unrestricted Use SCOs in this area. Vinyl chloride also exceeded the corresponding 6 NYCRR Part 375 Residential SCO in one soil sample collected from this area. CVOCs were detected in groundwater samples collected from 11 of the 13 overburden wells during the SC.

Trichloroethene, cis-1,2-DCE, and vinyl chloride were the most frequently detected compounds that exceeded the corresponding NYSDEC Class GA standards. CVOC- impacted groundwater generally extends the entire north to south width of the site and is present at the down-gradient property boundary at MW-10. However, these impacts did not extend to the eastern portion of the site. The soil vapor point sample from SV-8 adjacent to the residence at 226 South Ferry Street did not have detections of CVOCs.

Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene, benzo(k)fluoranthene, and chrysene were detected at concentrations greater than either the corresponding Commercial or Residential SCOs in one SC soil sample. Lead and mercury were the most frequently detected metals in SC soil samples, however, the majority of these detections were below corresponding Commercial and Residential SCOs. Arsenic, barium, chromium, and cadmium were also detected in one of two SC soil samples at concentrations greater than corresponding Commercial or Residential SCOs. Selenium was detected in samples from three monitoring wells and arsenic was detected in samples from two monitoring wells at concentrations greater than corresponding NYSDEC Class GA Groundwater Standards. The SVOCs and metals detected at the site, while not likely associated with the CVOC impacts, are likely attributable to past commercial and industrial activity at the site. PCBs were not detected in any of the SC soil or groundwater samples.

2 REMEDIAL INVESTIGATION

The scope of work for the RI was designed to further characterize the magnitude and extent of contaminants associated with the former site operations (i.e., CVOCs), the potential for off-site migration of contaminants, and the potential for vapor intrusion. The base scope of work included a geophysical survey, surface soil sampling, installation of additional soil vapor points, installation of additional groundwater monitoring wells, soil vapor point sampling, groundwater sampling, and an updated survey of new monitoring points. Based on site conditions and/or preliminary indications of contamination, the following changes/additions to the scope were made and subsequently approved by the NYSDEC:

1. The number of new soil vapor points and monitoring wells was initially reduced from five to four due to lack of access to the property south of the site. However, a fifth monitoring well, MW-6R, was installed via overdrilling to replace damaged MW-6.
2. A temporary soil vapor point, SV-T, was installed north of SV-9 due to SV-9's proximity to the water table, which precluded sampling.
3. All groundwater samples were analyzed for TCL VOCs by USEPA Method 8260 only, with the exception of five wells that were also analyzed for perfluorinated compounds (PFCs) and five wells that were analyzed for 1,4 Dioxane.
4. All preexisting soil vapor points were sampled in addition to the newly installed soil vapor points.
5. Six monitoring wells were discovered on the property north of the site (designated AMW-1 through AMW-6 by Arcadis). While not sampled during the RI, they were used for additional water level measurements.

An analytical laboratory approved by the New York State Department of Health (NYSDOH) under the Environmental Laboratory Approval Program (ELAP) analyzed all samples collected during the investigation. Analytical results were reported in ASP Category B data packages. Data Usability Summary Reports (DUSRs) were prepared upon the receipt of all analytical data so that the quality of the data was sufficient to evaluate remedial alternatives. Sample collection, handling activities, and QA/QC sampling were conducted in accordance with Arcadis' Generic Quality Assurance Project Plan (QAPP), which has previously been submitted to the NYSDEC for work conducted under the NYSDEC State Superfund Standby Contract No. D007618.

2.1 Geophysical Survey

Geophysical surveys were conducted in study areas using electromagnetic induction (EMI) and ground penetrating radar (GPR) methods to locate subsurface utilities and buried structures in the proposed drilling areas. An electrical line was identified in the northwestern portion of the investigation area. The location of the proposed well in this vicinity was adjusted accordingly in consultation with the NYSDEC. The geophysical survey report is provided in Appendix A.

As indicated in Appendix A, the former location of two underground storage tanks (USTs) was resurveyed. These had been discovered during test pit excavation as part of the 2014 Site Characterization. One UST was known to have been removed in late September 2017. The geophysical results did not show the other tank still in place at the site.

2.2 Surface Soil Sampling

Surface soil samples were collected from three locations at the site, as shown on Figure 3, to further evaluate potential exposure pathways. Normal utility clearance activities, consisting of reviewing available site drawings and contacting Dig Safely New York, were conducted prior to beginning the surface investigation.

2.2.1 Surface Soil Borings and Sample Collection

Three surface soil samples were collected within the green space in the southeast corner of the site as shown on Figure 3. All surface soil samples were collected using a hand auger.

Surface soil samples were collected from the 0-2” and 2-12” intervals at each of the three locations. A total of six soil samples were collected and submitted for analysis of TCL VOCs by USEPA Method 8260, TCL SVOCs by USEPA Method 8270, Target Analyte List (TAL) Metals by USEPA Methods 6010 and 7471, organochlorine pesticides by USEPA Method 8081, and PCBs by USEPA Method 8082.

2.3 Soil Vapor Evaluation

Soil vapor samples were collected from the four newly installed vapor points in addition to six existing soil vapor points at the site to evaluate potential preferential pathway migration of CVOCs toward nearby residences and adjoining properties. Existing soil vapor points SV-3 and SV-6 were destroyed and therefore not sampled. Newly installed soil vapor point SV-9 was not sampled due to its proximity to the water table. A temporary soil vapor point SV-T was installed north of SV-9 and sampled alternatively. An outdoor air sample was collected concurrently with the soil vapor points in a central location. All soil vapor points and outdoor air sampling locations are shown on Figure 3.

Each sample was collected simultaneously using sampling procedures in accordance with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006. All air samples were collected using 6-liter summa canisters equipped with pre-calibrated flow controllers. All soil vapor point samples were collected over a 2-hour time period. Samples from each monitoring point were sent to a NYSDOH ELAP and NYSDEC ASP-certified analytical laboratory under chain-of-custody procedures for analysis of VOCs by USEPA Method TO-15.

2.3.1 Soil Vapor Point Installation

The locations of subsurface utility conduits were marked by Dig Safe New York to evaluate potential preferential pathways for soil vapor migration. Three permanent and one temporary soil vapor point were installed throughout the site at the locations shown on Figure 3 based on utility markouts and the results of the geophysical survey. Soil vapor points were installed using a hand auger to advance a borehole to an approximate depth of four to five feet bgs, depending on water table proximity. Upon reaching the target depth, a six-inch small-diameter stainless steel screen attached to Teflon or Teflon-lined tubing was lowered to the bottom of the borehole. The bottom one-foot of the borehole was then backfilled with clean silica sand. The remaining borehole annulus was backfilled to the surface with hydrated bentonite. The point was completed with a flush mount casing.

2.3.2 Tracer Gas Testing

A tracer gas test was performed in accordance with NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH, 2006) to confirm that the soil vapor probes were constructed in a manner that minimized the entrainment of ambient air into the soil vapor samples. Helium was used as the tracer gas since it is non-toxic, non- reactive, and provides a sensitive response that can be monitored using a portable helium detector. Tracer gas testing was performed at all 10 soil vapor sampling locations. A small plastic container was placed over the sampling point, filled with helium, and measured using a helium detector to ensure 100 percent concentration of helium in the enclosure. A syringe was used to purge the sampling tube into a Tedlar® bag which was tested using the helium detector and a photoionization detector (PID). Once the probe seal's integrity was confirmed by tracer gas concentrations below 10 percent, the 6- liter sampling canister with a vacuum gauge and flow controller was connected to the sample tubing and the point was sampled.

2.3.3 Sampling

All air samples were collected using a Summa canister sampling train, which consisted of a summa canister, flow controller, particulate filter, pressure gage, and associated fittings. All canisters were batch-certified as analyte-free by the analytical laboratory prior to use. Flow regulators, calibrated and supplied by the analytical laboratory, were used to allow for continuous sampling over the designated sampling period. Each flow regulator was equipped with a filter to prevent particulate matter from entering the canister. The following procedure was used for the collection of soil vapor samples:

- Note the environmental conditions in the sample area on the sample collection sheet.
- Remove the brass fitting covering the 6-liter Summa canister sampling port using a wrench.
- Assemble the sampling train, connecting the flow controller with integral pressure gage to the Summa canister sampling port. Each fitting should be hand tightened and then tightened with a wrench approximately ¼ turn.
- Confirm that the sampling train is air tight by conducting a vacuum test. Place the brass cap at the end of the sampling train (particulate filter), quickly open and close the sampling valve and monitor the vacuum on the pressure gage. If the vacuum decreases, there is a leak in the system and the fitting should be rechecked and the vacuum test redone.

- Initiate sampling by opening the Summa canister valve. Record starting time and the vacuum within the canister on the sample collection sheet and canister identification tag.
- Check the sampling train pressure gage during the first hour of sampling to confirm that the air sampling is proceeding as planned.
- When the designated sampling time has elapsed since initiation of sampling, close the canister valve. Check the vacuum within the canister using the pressure gage and record the measurement on the sample collection sheet and canister identification tag.
- Since the flow rate into the canister can fluctuate due to variations in atmospheric conditions, the measured final vacuum may range from 2 to 12 inches of mercury (Hg). If the measured vacuum is greater the 12 inches of Hg or less than 1.0 inches of Hg, the sample may be flagged and re-sampling may be required.
- Disassemble the sampling train and place the brass cap on the sampling port of the canister and tighten. The air sampling is complete.

Soil vapor sampling logs are presented in Appendix B.

2.4 Groundwater Sampling

2.4.1 Groundwater Monitoring Well Installation

Five new overburden groundwater monitoring wells were installed at the locations shown on Figure 3. All monitoring well locations were hand cleared to a depth of five feet bgs before drilling, with the exception of MW-6R which was installed by over-drilling MW-6. All new monitoring wells were installed using hollow-stem auger drilling methods to depths ranging from 12 feet bgs to 18 feet bgs. Wells were constructed with 2-inch diameter PVC with 10-foot screens and were completed with flush-mount protective covers.

Upon completion, all new monitoring wells were developed to minimize turbidity in groundwater samples collected from each well and to improve their hydraulic properties. Development water generated was collected in UN-approved 55-gallon steel drums and staged at the site for pickup and disposal in accordance with federal, state, and local regulations.

Well construction logs and soil boring logs are provided in Appendix C. A summary of well construction information is provided in Table 1.

2.4.2 Groundwater Sampling

After the installation of the five new monitoring wells (MW-6R, MW-14, MW-15, MW-16, and MW-17), groundwater samples were collected from thirteen groundwater monitoring wells on site, excluding those that did not have previous exceedances of NYSDEC Class GA Standards. Prior to groundwater purging and sampling, the depth to water in each monitoring well was measured using an oil/water interface probe and recorded. Groundwater sampling was conducted in accordance with the USEPA Low-Flow/Low-Purge Sampling Protocol (USEPA, 1998). To the extent practicable, groundwater purging rates were low enough to prevent significant drawdown of the groundwater level in the monitoring well. Water levels were monitored during sampling so that excessive draw down was not occurring. Each groundwater sample

was analyzed for TCL VOCs by USEPA Method 8260. Additionally, five onsite wells (MW-1, MW-5, MW-8, MW-10, and MW-13) were analyzed for PFCs by Method 537 (modified). As a QA/QC supplement, field personnel collected two field blanks on sampling equipment prior to initiating groundwater purging. One field blank was performed on a water level meter, and the other performed on the HDPE sampling tubing. Both field blanks were submitted for analysis of PFCs by Method 537 (modified). In April 2018, five onsite wells (MW-5, MW-8, MW-10, MW-12, and MW-13) and supplementary field equipment blanks were sampled and analyzed for 1,4 Dioxane using USEPA Method 8270 SIM.

To evaluate geochemical characteristics of the groundwater and the effectiveness of well purging, temperature, pH, oxidation-reduction potential, specific conductivity, turbidity, and dissolved oxygen were measured during purging and immediately prior to groundwater sampling.

Groundwater purge logs are presented in Appendix D

2.5 Survey

Upon completion of the field investigation activities, the location and elevation of each new groundwater monitoring well, soil vapor point, and surface soil sample point installed during the RI was surveyed to the nearest 0.01-foot vertically and 0.1-foot horizontally and was added to a GIS base map for the site. The survey map of the site and sampling location coordinates by Thew Associates are provided in Appendix E.

2.6 Investigation-Derived Waste

Investigation derived wastes were handled in accordance with the NYSDEC Proposed Decision TAGM Disposal of Contaminated Groundwater Generated During Site Investigations and the Final TAGM – Disposal of Drill Cuttings. Soil and groundwater were contained in U.N.-approved 55-gallon drums and staged at a central location at the site for pickup and disposal in accordance with federal, state, and local regulations.

Waste disposal manifests are provided in Appendix F.

3 DATA VALIDATION

In accordance with the scope of work, data validation was performed for the samples collected during the RI so that the data generated provide sufficient information to achieve the project objectives. Sample processing was generally conducted in compliance with the analytical protocol requirements and quality criteria. All data were classified as usable with some minor qualification. Additional discussion is provided in the DUSR narratives in Appendix G.

4 NATURE AND EXTENT OF CONTAMINANTS

4.1 Field Observations

The ground surface over the majority of the site was asphalt-paved, with minor grass covered areas on the north and south perimeter of the site. The surface and was generally free of debris. Active demolition work was occurring on the adjacent property to the north, but did not interfere with RI activities. The site is generally flat with no discernable slope. As shown in the sample logs during well installation, overburden materials observed during the investigation were generally composed of fill material, building debris, sand and silt overlying clay and silt. Bedrock was not encountered during the remedial investigation. Neither visual nor olfactory evidence of contamination was noted in any of the drilling locations during the investigation. No light non-aqueous phase liquid (LNAPL), sheens, or staining were observed during groundwater monitoring well installation, and no LNAPL or sheens were observed during well development or groundwater sampling. Reducing conditions at the site are inferred from negative oxidation-reduction (Redox) values during purging of all site wells and the presence of reductive dechlorination daughter products.

4.2 Groundwater Flow

As shown in Table 2 and on Figure 4, overburden groundwater flow in the vicinity of the site is generally to the north/northeast. Higher groundwater elevations were observed northwest of the RI study area in the additional monitoring wells, although it should be noted that the screened intervals of these wells are not known. The hydraulic gradient over much of the site is relatively flat but steepens northward toward MW-15 where the measured hydraulic gradient was approximately 0.035.

4.3 Laboratory Results

Laboratory results for samples collected during the RI are summarized in Tables 3 through 6 (soil samples), Tables 7 through 9 (groundwater samples), and Table 10 (air samples).

Graphical depictions of analytical results are provided on Figures 5 (soil CVOCs), 6 (soil SVOCs), 7 (soil metals and pesticides), 8 (groundwater CVOCs), and 9 (soil vapor CVOCs). These figures show detected analytes at each location and highlight those contaminants and their concentrations which exceed the applicable 6 NYCRR Part 375 SCOs or NYSDEC Class GA Groundwater Standards. Analytical laboratory reporting forms for samples collected during the investigation are provided in Appendix H.

4.3.1 Surface Soil

4.3.1.1 VOCs

As shown in Table 3 and on Figure 5, there were no detections of VOCs in surface soil samples collected during the RI that exceeded the corresponding 6 NYCRR Part 375 Unrestricted Use, Residential, or Commercial SCOs.

4.3.1.2 SVOCs

As shown in Table 4 and on Figure 6, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene were the most frequently detected analytes in RI surface soil samples. All soil samples collected during the RI contained at least one of these compounds at concentrations greater than Residential or Commercial Use SCOs.

4.3.1.3 Metals

As shown in Table 5 and on Figure 7, lead, mercury, and zinc were the most frequently detected analytes in RI surface soil samples. All soil samples collected during the RI contained at least one metal at concentrations greater than Unrestricted Use SCOs. The soil sample from SS-03 (2-12") contained mercury at a concentration exceeding the corresponding 6 NYCRR Part 375 Residential SCO.

4.3.1.4 PCBs

As shown in Table 5, none of the soil samples collected during the RI contained PCBs at concentrations greater than the corresponding 6 NYCRR Part 375 Unrestricted Use SCOs.

4.3.1.5 Pesticides

As shown in Table 6 and on Figure 7, 4,4'-DDT was the only pesticide detected in the RI surface soil samples that exceeded the 6 NYCRR Part 375 Unrestricted Use SCOs.

4.3.2 Groundwater

4.3.2.1 VOCs

Table 7 and Figure 8 show that cis-1,2-dichloroethene and vinyl chloride were the most frequently detected compounds in groundwater samples collected during the RI. At least one of these compounds was detected in each groundwater sample except those from MW-14, MW-15, MW-16, and MW-17. Cis-1,2-DCE and vinyl chloride were present at concentrations four orders of magnitude greater than the corresponding NYSDEC Class GA Standard within the central area of the site (MW-8), up to 24,000 micrograms per liter (µg/L) and 19,000 µg/L, respectively. The concentration of 1,1-dichloroethene (1,1-DCE), trans-1,2-Dichloroethene, and trichloroethene (TCE) also exceeded the corresponding NYSDEC Class GA Groundwater Standards in the groundwater sample collected from MW-5.

VOCs were not detected in the samples collected from the four new groundwater monitoring wells north of the site (MW-14, MW-15, MW-16, and MW-17) during the RI sampling event.

4.3.2.2 PFCs

As shown in Table 8, none of the groundwater samples or equipment blanks collected during the RI contained PFCs at total concentrations greater than the corresponding USEPA Health Advisory Limit (HAL) of 70 nanograms/liter (ng/l).

4.3.2.3 1,4 Dioxane

As shown in Table 9, 1,4 Dioxane was detected at an estimated concentration (0.14 J µg/L) below the reporting limit. None of the other samples or equipment blanks collected during the RI contained 1,4 Dioxane.

4.3.3 Soil Vapor

As shown in Table 10 and on Figure 9, cis,1,2-DCE was detected at a concentration of 13,000 micrograms per cubic meter (µg/m^3) in soil vapor point SV-4, located in the center of the study area. TCE was detected at concentrations up to 160,000 µg/m^3 (SV-4) in soil vapor points located in the central portion of the site and at concentrations up to 5,400 µg/m^3(SV-1) in the southwestern portion of the study area. TCE was also detected at a concentration of 120 µg/m^3 (SV-8) in the southeast corner of the site. At least one of these compounds was detected in samples from all soil vapor points, with the exception of samples from SV-5, SV-T, and SV-11.

5 QUALITATIVE EXPOSURE ASSESSMENT

A qualitative human health exposure pathway assessment was performed using the data collected during the RI. The qualitative exposure assessment consists of characterizing the exposure setting, identifying potential exposure pathways, and evaluating contaminant fate and transport. An exposure pathway describes the means by which an individual may be exposed to contaminants originating from the site. An exposure pathway has five elements: (1) a contaminant source; (2) contaminant release and transport mechanism; (3) a point of exposure; (4) a route of exposure; and (5) a receptor population. The plausible exposure pathways are discussed below by medium.

5.1 Soil

Based on the results of the RI, surface soils contained at least one SVOC at concentrations exceeding the applicable 6NYCRR Part 375 SCOs. While the majority of the site is paved with asphalt, some areas of exposed soil/vegetation are present. Because some human receptors (e.g., pedestrians) have access to the site, there is the potential for human exposure to soil.

The most likely soil exposure pathway is construction/utility worker contact with subsurface soil via incidental ingestion, dermal contact, and inhalation of volatilized chemicals during construction activities (i.e., trenches or excavations to repair or maintain underground utilities). While prolonged contact or

ingestion of site soil is unlikely, contact with affected soil by construction and/or utility workers represents a possible future exposure pathway.

5.2 Groundwater

CVOCs are present in site groundwater at concentrations greater than applicable NYSDEC Class GA Standards. The impacts to groundwater appear limited and restricted to the site itself, as the new down-gradient off-site wells to the north did not contain CVOCs. Groundwater presently has no exposure point or route, as groundwater in the vicinity of the site is not used as a drinking water source, nor is it anticipated to be used as a drinking water source in the future. Utility workers are not expected to come into contact with groundwater containing CVOCs because the depth to groundwater at the site is greater than the depth of a typical utility or building excavation.

5.3 Soil Vapor

The basic model for soil vapor intrusion into a building is migration from a subsurface source (in this instance from volatilization of CVOCs from the dissolved-phase CVOC plume present beneath the site) through cracks, foundation joints, or other openings in the floor. Since there are no buildings currently on site, the human exposure pathway related to soil vapor is not complete. Based on data collected during the RI, soil vapor intrusion mitigation would be warranted if any building plans develop for the site.

6 REMEDIAL INVESTIGATION SUMMARY

6.1 Remedial Investigation

The RI expanded on the data collection during the 2014 Site Characterization. and CVOCs in groundwater and soil vapor. During the RI, on-site surface soil samples, on-site and off-site groundwater, and on-site and off-site soil vapor samples were collected.

Surface soil samples in the south-eastern portion of the site exceeded unrestricted SCOs for lead, zinc, mercury and the pesticide 4-4' DDT, but were below residential SCOs. One sample slightly exceeded the residential SCO for mercury. The SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b) fluoranthene, benzo(k)fluoranthene, chrysene and indeno (1,2,3-cd) pyrene, were detected at concentrations that exceeded the residential SCOs, and the commercial SCOs in some cases. These exceedances are likely attributable to past industrial activities at the site, but are not related to the chlorinated compounds found in groundwater and soil vapor at the site. Neither CVOCs, nor PCBs were detected in the surface soil samples. The Site Characterization report previously identified elevated metals concentrations in soil at depth in the northern portion of the site exceeding commercial SCOs, SVOCs in soil near MW-13, and minimal detections of CVOCs in sub-surface soil. Metals in soils are not believed to have been associated with site operations.

CVOCs were not detected in the three newly installed off-site wells north of the site. CVOCs were detected in groundwater samples collected from 9 of the 10 on-site wells during the RI. Cis-1,2-DCE, vinyl chloride, and TCE were the most frequently detected compounds that exceeded the NYSDEC Class GA

standards. On the western half of the site, CVOC-impacted groundwater generally extends across the width of the site from north to south and is present at the down-gradient (northern) property boundary at MW-10. However, these impacts do not appear to extend off-site to the north and are very limited on the eastern half of the site. This is consistent with the groundwater results from site characterization report.

As part of a state-wide initiative, groundwater samples were collected and analyzed for PFCs and 1,4 dioxane at the site. Groundwater concentrations of these compounds did not exceed screening levels or the USEPA health advisory limit for PFCs or 1,4 dioxane.

Concentrations of CVOCs in off-site soil vapor samples were very low and did not represent a concern for soil vapor intrusion. Elevated CVOC concentrations were present at soil vapor points SV-1 and SV-4 in the south and central portions of the site. The soil vapor at SV-8 adjacent to the residence at 226 South Ferry Street had detections of CVOCs in 2017, which is an increase from 2014 site characterization data.

6.2 Conceptual Site Model

With the conclusion of RI sampling and corresponding activities, the current Conceptual Site Model is as follows:

Previous investigations indicated that the source of the groundwater contamination was located in the central portion of the site. Additional contaminant delineation and sampling efforts during the RI confirm that CVOC concentrations are highest in the central portion of the site, with lower concentrations in soil and groundwater to the east and west. SVOC and metals impacts at the site are likely attributable to past commercial and industrial activity at the site.

CVOC-impacted groundwater and soil remain at the site. The concurrent decreases in TCE concentrations and increases in cis-1,2-DCE and vinyl chloride concentrations in groundwater samples and reducing conditions observed during groundwater purging suggest that anaerobic degradation is likely occurring at the site. Groundwater flow in the vicinity of the site is generally to the north-northeast with a relatively flat hydraulic gradient over much of the site. While CVOCs are present at elevated concentrations in the suspected source area, it doesn't appear that CVOC-impacted groundwater has migrated down-gradient or off-site to the north. Soil vapor sampling results indicate that there is a potential for soil vapor intrusion for newly constructed buildings at the site. Any future construction at the site should be evaluated for soil vapor intrusion.

The site land surface is generally flat and covered with asphalt pavement. The nearest residential area is adjacent to the southeast corner of the site, likely hydraulically up-gradient of the site. The area is serviced by municipal water. Overburden materials are generally composed of urban fill and sand which overlie silt and clay.

Unsaturated soil, fill materials, and building debris at the site do not appear to be significantly impacted by site-related contaminants. CVOC-impacted groundwater remains at the site in the suspected source area in the central portion of the site near MW-8, which contains groundwater with the highest concentrations of CVOCs. Groundwater with CVOC concentrations greater than the corresponding NYSDEC GA Standards is present over much of the central portion of the site.

7 REFERENCES

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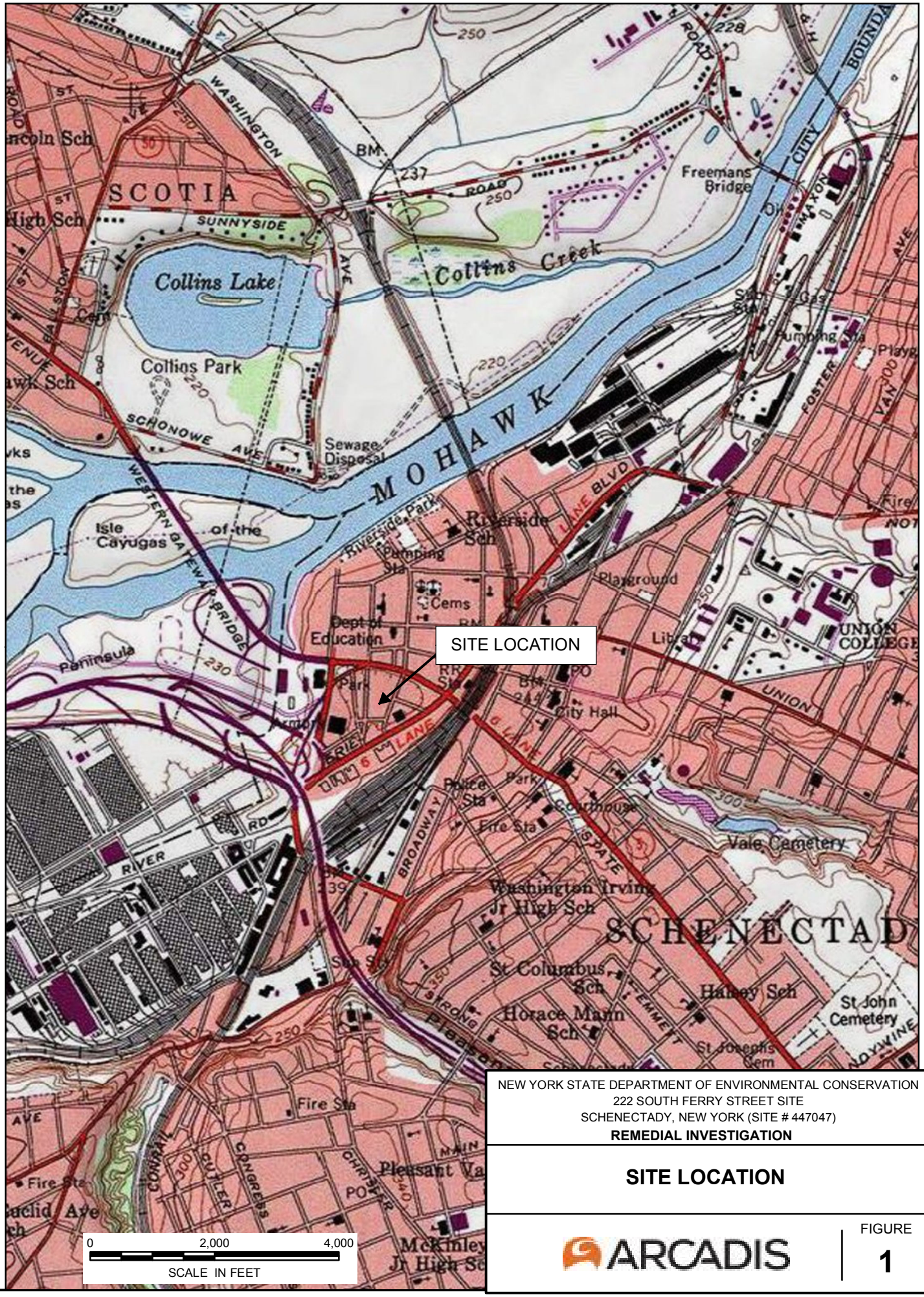
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FIGURES



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
222 SOUTH FERRY STREET SITE
SCHENECTADY, NEW YORK (SITE # 447047)
REMEDIAL INVESTIGATION

SITE LOCATION

ARCADIS

FIGURE
1

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NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL
CONSERVATION 222 SOUTH FERRY STREET
SITE (#447047) SCHENECTADY, NEW YORK
REMEDIAL INVESTIGATION

AERIAL PHOTOGRAPH

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FIGURE
2

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Feet
0 20 40 80 120 160

Legend

- Additional Monitoring Wells
- RI Soil Samples
- Groundwater Monitoring Wells
- RI Monitoring Well
- Soil Vapor Points
- Outdoor Air Sample (11/30/2017)
- RI Soil Vapor Point
- Test Pits
- 222 South Ferry St.

Note:
*SV-T Location Approximate

N

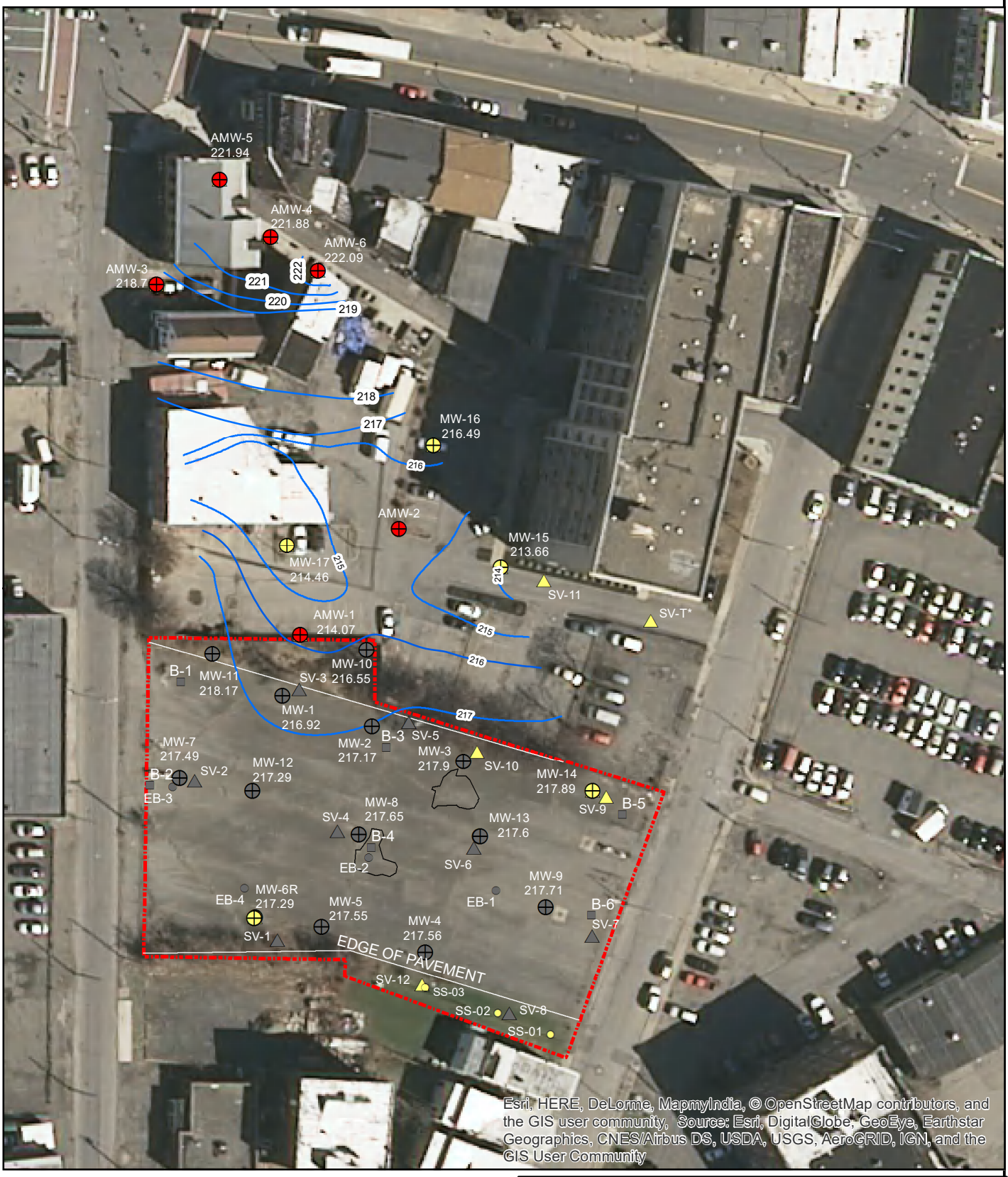
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222 SOUTH FERRY STREET SITE (#447047)
SCHENECTADY, NEW YORK
REMEDIAL INVESTIGATION

SAMPLING LOCATIONS

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FIGURE
3

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0 20 40 80 120 160 Feet

Legend

- Additional Monitoring Wells
- RI Monitoring Well
- RI Soil Vapor Point
- RI Soil Samples
- Groundwater Monitoring Wells
- Soil Vapor Points
- Geotechnical Borings (approx)
- Soil Borings (approx.)
- Test Pits
- 222 South Ferry St.

Note:
*SV-T Location Approximate

N

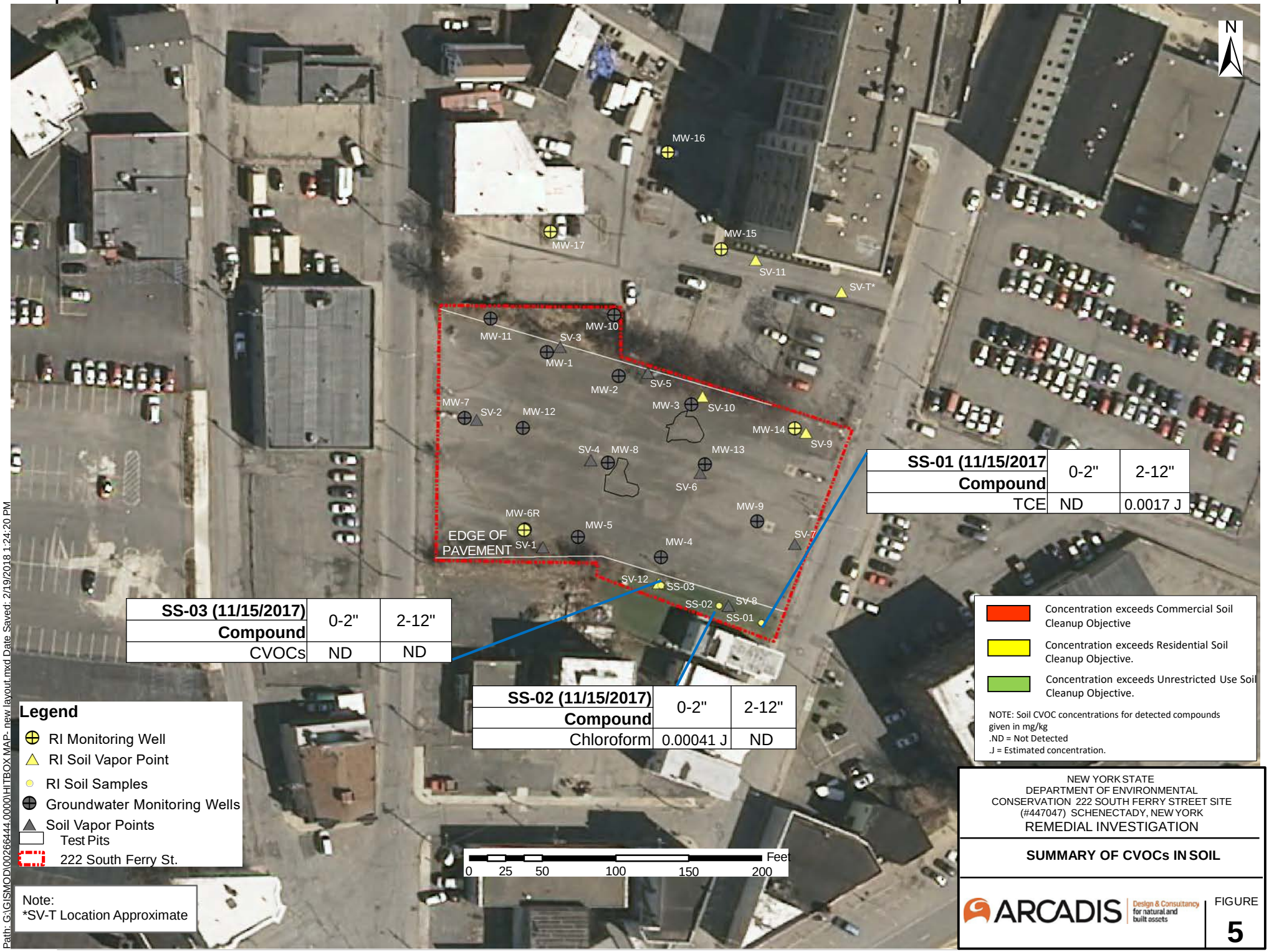
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222 SOUTH FERRY STREET SITE (#447047)
SCHENECTADY, NEW YORK
REMEDIAL INVESTIGATION

POTENTRIOMETRIC CONTOUR MAP (NOVEMBER 27, 2017)

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FIGURE
4

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SS-03 (11/15/2017)	0-2"	2-12"
Compound		
CVOCs	ND	ND

SS-02 (11/15/2017)	0-2"	2-12"
Compound		
Chloroform	0.00041 J	ND

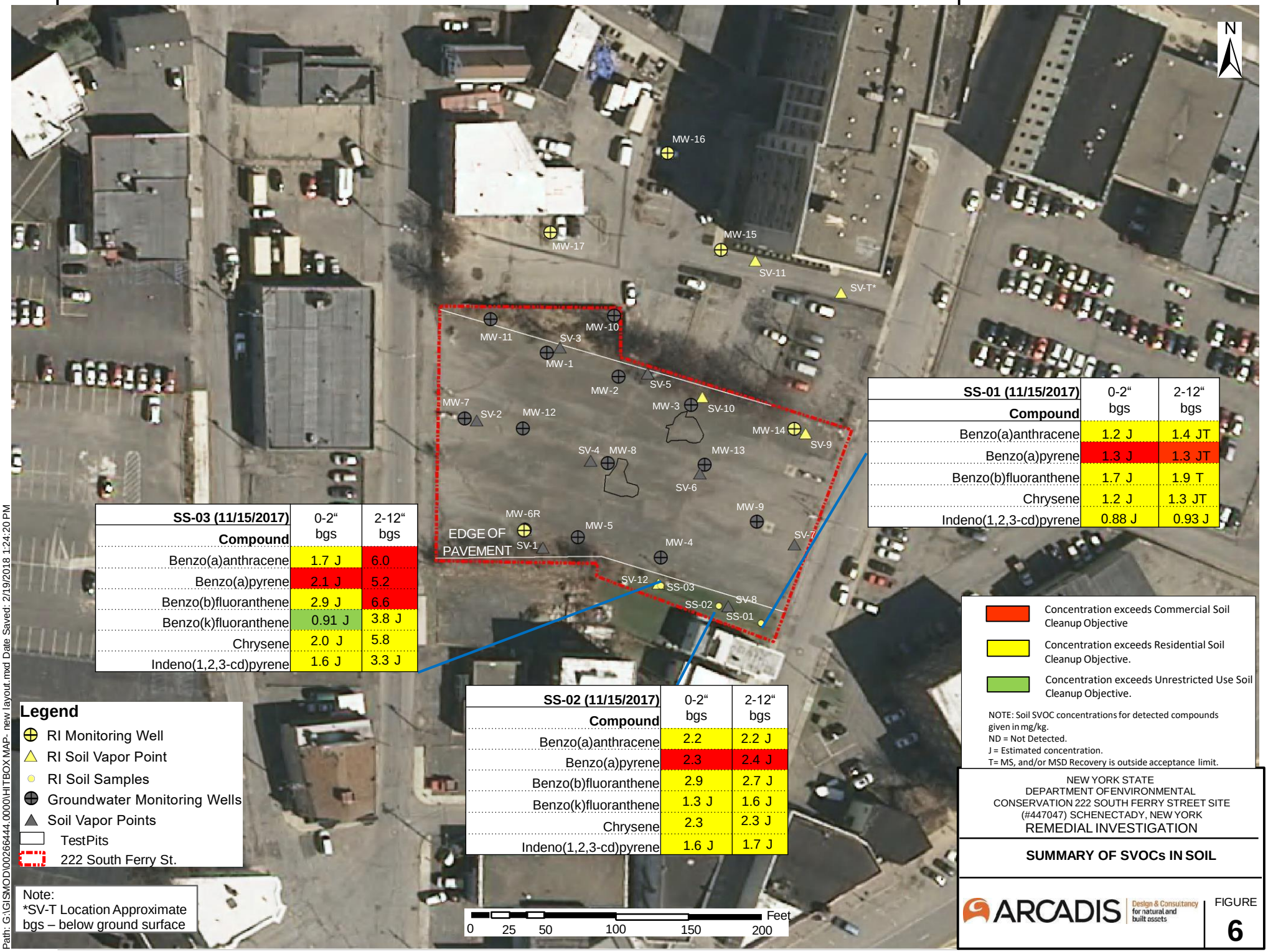
SS-01 (11/15/2017	0-2"	2-12"
Compound		
TCE	ND	0.0017 J

NEW YORK STATE
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(#447047) SCHENECTADY, NEW YORK
REMEDIAL INVESTIGATION

SUMMARY OF CVOCs IN SOIL

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FIGURE
5



SS-01 (11/15/2017)	0-2" bgs	2-12" bgs
Compound		
Benzo(a)anthracene	1.2 J	1.4 JT
Benzo(a)pyrene	1.3 J	1.3 JT
Benzo(b)fluoranthene	1.7 J	1.9 T
Chrysene	1.2 J	1.3 JT
Indeno(1,2,3-cd)pyrene	0.88 J	0.93 J

SS-03 (11/15/2017)	0-2" bgs	2-12" bgs
Compound		
Benzo(a)anthracene	1.7 J	6.0
Benzo(a)pyrene	2.1 J	5.2
Benzo(b)fluoranthene	2.9 J	6.6
Benzo(k)fluoranthene	0.91 J	3.8 J
Chrysene	2.0 J	5.8
Indeno(1,2,3-cd)pyrene	1.6 J	3.3 J

SS-02 (11/15/2017)	0-2" bgs	2-12" bgs
Compound		
Benzo(a)anthracene	2.2	2.2 J
Benzo(a)pyrene	2.3	2.4 J
Benzo(b)fluoranthene	2.9	2.7 J
Benzo(k)fluoranthene	1.3 J	1.6 J
Chrysene	2.3	2.3 J
Indeno(1,2,3-cd)pyrene	1.6 J	1.7 J

Legend

- RI Monitoring Well
- RI Soil Vapor Point
- RI Soil Samples
- Groundwater Monitoring Wells
- Soil Vapor Points
- TestPits
- 222 South Ferry St.

Note:
*SV-T Location Approximate
bgs – below ground surface

- Concentration exceeds Commercial Soil Cleanup Objective
- Concentration exceeds Residential Soil Cleanup Objective.
- Concentration exceeds Unrestricted Use Soil Cleanup Objective.

NOTE: Soil SVOC concentrations for detected compounds given in mg/kg.
ND = Not Detected.
J = Estimated concentration.
T= MS, and/or MSD Recovery is outside acceptance limit.

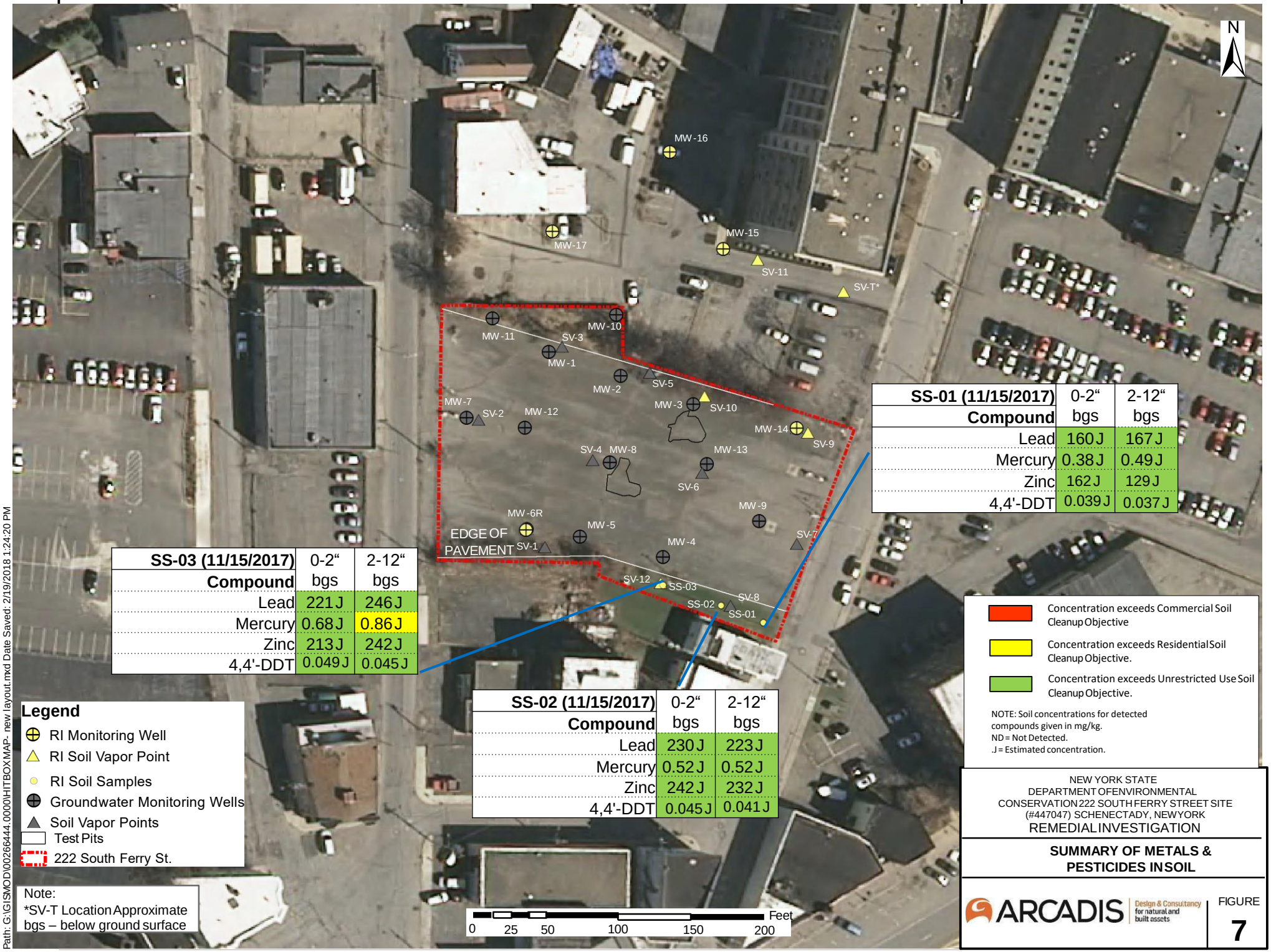
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CONSERVATION 222 SOUTH FERRY STREET SITE
(#447047) SCHENECTADY, NEW YORK
REMEDIAL INVESTIGATION

SUMMARY OF SVOCs IN SOIL

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FIGURE
6

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SS-01 (11/15/2017) Compound	0-2" bgs	2-12" bgs
Lead	160 J	167 J
Mercury	0.38 J	0.49 J
Zinc	162 J	129 J
4,4'-DDT	0.039 J	0.037 J

SS-03 (11/15/2017) Compound	0-2" bgs	2-12" bgs
Lead	221 J	246 J
Mercury	0.68 J	0.86 J
Zinc	213 J	242 J
4,4'-DDT	0.049 J	0.045 J

SS-02 (11/15/2017) Compound	0-2" bgs	2-12" bgs
Lead	230 J	223 J
Mercury	0.52 J	0.52 J
Zinc	242 J	232 J
4,4'-DDT	0.045 J	0.041 J

Legend

- RI Monitoring Well
- RI Soil Vapor Point
- RI Soil Samples
- Groundwater Monitoring Wells
- Soil Vapor Points
- Test Pits
- 222 South Ferry St.

Note:
*SV-T Location Approximate
bgs – below ground surface

- Concentration exceeds Commercial Soil Cleanup Objective
- Concentration exceeds Residential Soil Cleanup Objective.
- Concentration exceeds Unrestricted Use Soil Cleanup Objective.

NOTE: Soil concentrations for detected compounds given in mg/kg.
ND = Not Detected.
J = Estimated concentration.

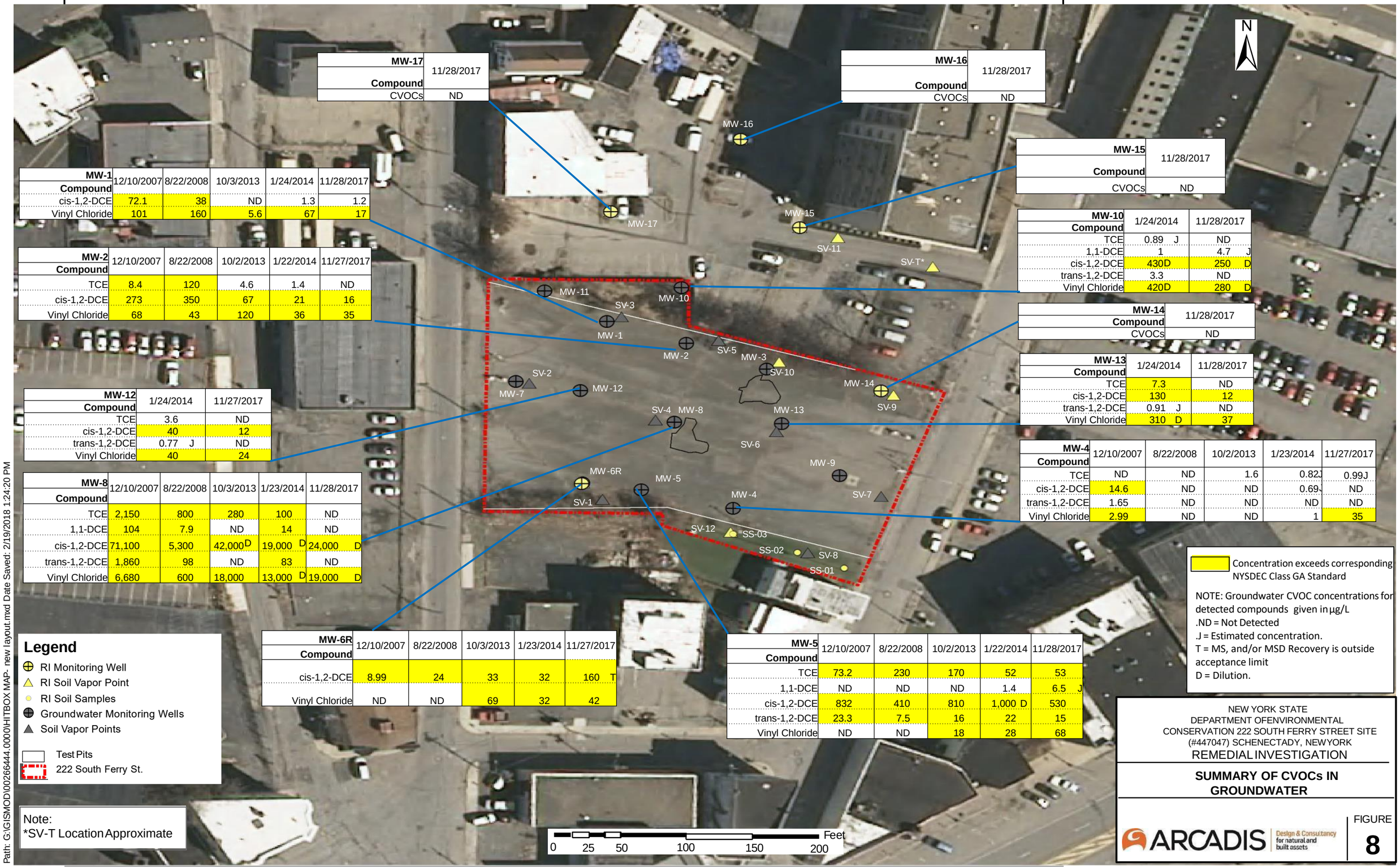
NEW YORK STATE
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CONSERVATION 222 SOUTH FERRY STREET SITE
(#447047) SCHENECTADY, NEW YORK
REMEDIAL INVESTIGATION

SUMMARY OF METALS & PESTICIDES IN SOIL

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FIGURE
7

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MW-17	11/28/2017
Compound	
CVOCs	ND

MW-16	11/28/2017
Compound	
CVOCs	ND

MW-15	11/28/2017
Compound	
CVOCs	ND

MW-1 Compound	12/10/2007	8/22/2008	10/3/2013	1/24/2014	11/28/2017
cis-1,2-DCE	72.1	38	ND	1.3	1.2
Vinyl Chloride	101	160	5.6	67	17

MW-2 Compound	12/10/2007	8/22/2008	10/2/2013	1/22/2014	11/27/2017
TCE	8.4	120	4.6	1.4	ND
cis-1,2-DCE	273	350	67	21	16
Vinyl Chloride	68	43	120	36	35

MW-10 Compound	1/24/2014	11/28/2017
TCE	0.89 J	ND
1,1-DCE	1	4.7 J
cis-1,2-DCE	430 D	250 D
trans-1,2-DCE	3.3	ND
Vinyl Chloride	420 D	280 D

MW-14 Compound	11/28/2017
CVOCs	ND

MW-13 Compound	1/24/2014	11/28/2017
TCE	7.3	ND
cis-1,2-DCE	130	12
trans-1,2-DCE	0.91 J	ND
Vinyl Chloride	310 D	37

MW-12 Compound	1/24/2014	11/27/2017
TCE	3.6	ND
cis-1,2-DCE	40	12
trans-1,2-DCE	0.77 J	ND
Vinyl Chloride	40	24

MW-4 Compound	12/10/2007	8/22/2008	10/2/2013	1/23/2014	11/27/2017
TCE	ND	ND	1.6	0.82J	0.99J
cis-1,2-DCE	14.6	ND	ND	0.69J	ND
trans-1,2-DCE	1.65	ND	ND	ND	ND
Vinyl Chloride	2.99	ND	ND	1	35

MW-8 Compound	12/10/2007	8/22/2008	10/3/2013	1/23/2014	11/28/2017
TCE	2,150	800	280	100	ND
1,1-DCE	104	7.9	ND	14	ND
cis-1,2-DCE	71,100	5,300	42,000 D	19,000 D	24,000 D
trans-1,2-DCE	1,860	98	ND	83	ND
Vinyl Chloride	6,680	600	18,000	13,000 D	19,000 D

MW-6R Compound	12/10/2007	8/22/2008	10/3/2013	1/23/2014	11/27/2017
cis-1,2-DCE	8.99	24	33	32	160 T
Vinyl Chloride	ND	ND	69	32	42

MW-5 Compound	12/10/2007	8/22/2008	10/2/2013	1/22/2014	11/28/2017
TCE	73.2	230	170	52	53
1,1-DCE	ND	ND	ND	1.4	6.5 J
cis-1,2-DCE	832	410	810	1,000 D	530
trans-1,2-DCE	23.3	7.5	16	22	15
Vinyl Chloride	ND	ND	18	28	68

Legend

- RI Monitoring Well
- RI Soil Vapor Point
- RI Soil Samples
- Groundwater Monitoring Wells
- Soil Vapor Points
- Test Pits
- 222 South Ferry St.

Note:
*SV-T Location Approximate

Concentration exceeds corresponding NYSDEC Class GA Standard

NOTE: Groundwater CVOC concentrations for detected compounds given in µg/L
.ND = Not Detected
.J = Estimated concentration.
T = MS, and/or MSD Recovery is outside acceptance limit
D = Dilution.

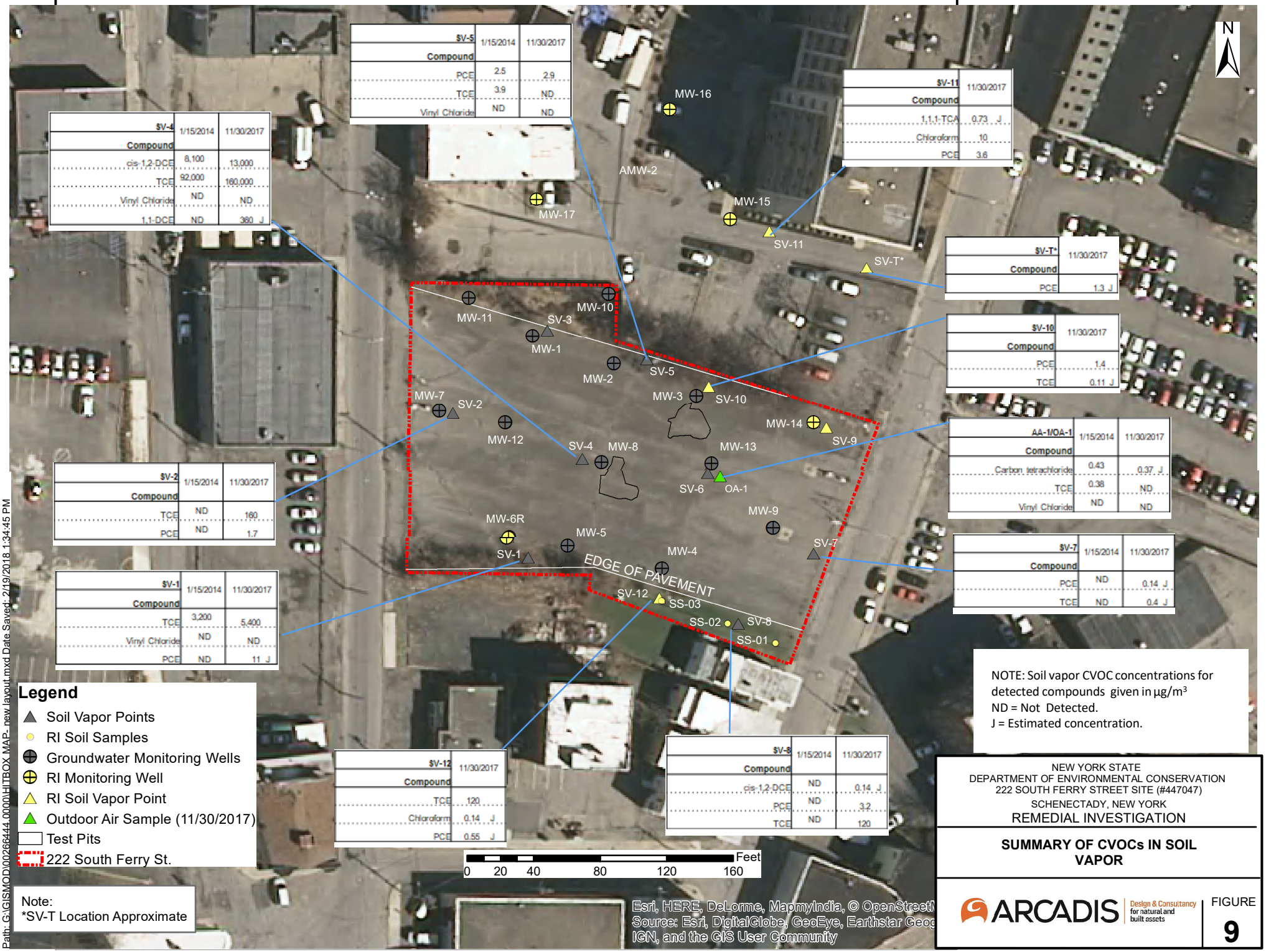
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CONSERVATION 222 SOUTH FERRY STREET SITE
(#447047) SCHENECTADY, NEWYORK
REMEDIAL INVESTIGATION

SUMMARY OF CVOCs IN GROUNDWATER

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FIGURE **8**

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SV-5	1/15/2014	11/30/2017
Compound		
PCE	2.5	2.9
TCE	3.9	ND
Vinyl Chloride	ND	ND

SV-4	1/15/2014	11/30/2017
Compound		
cis-1,2-DCE	8,100	13,000
TCE	92,000	160,000
Vinyl Chloride	ND	ND
1,1-DCE	ND	380 J

SV-11	11/30/2017
Compound	
1,1,1-TCA	0.73 J
Chloroform	10
PCE	3.6

SV-T*	11/30/2017
Compound	
PCE	1.3 J

SV-10	11/30/2017
Compound	
PCE	1.4
TCE	0.11 J

AA-1/OA-1	1/15/2014	11/30/2017
Compound		
Carbon tetrachloride	0.43	0.37 J
TCE	0.38	ND
Vinyl Chloride	ND	ND

SV-2	1/15/2014	11/30/2017
Compound		
TCE	ND	160
PCE	ND	1.7

SV-7	1/15/2014	11/30/2017
Compound		
PCE	ND	0.14 J
TCE	ND	0.4 J

SV-1	1/15/2014	11/30/2017
Compound		
TCE	3,200	5,400
Vinyl Chloride	ND	ND
PCE	ND	11 J

SV-12	11/30/2017
Compound	
TCE	120
Chloroform	0.14 J
PCE	0.55 J

SV-8	1/15/2014	11/30/2017
Compound		
cis-1,2-DCE	ND	0.14 J
PCE	ND	3.2
TCE	ND	120

Legend

- Soil Vapor Points
- RI Soil Samples
- Groundwater Monitoring Wells
- RI Monitoring Well
- RI Soil Vapor Point
- Outdoor Air Sample (11/30/2017)
- Test Pits
- 222 South Ferry St.

Note:
*SV-T Location Approximate

NOTE: Soil vapor CVOC concentrations for detected compounds given in µg/m³
ND = Not Detected.
J = Estimated concentration.

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
222 SOUTH FERRY STREET SITE (#447047)
SCHENECTADY, NEW YORK
REMEDIAL INVESTIGATION

SUMMARY OF CVOCs IN SOIL VAPOR

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FIGURE 9

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TABLES

TABLE 1
SUMMARY OF WELL CONSTRUCTION INFORMATION
SITE # 447047
222 SOUTH FERRY STREET
SCHENECTADY, NEW YORK

Well	Measuring Point Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	Date of Installation	Well Diameter (inches)	Well Material	Total Depth of Well/ Length of Casing Below TOC (ft.) *	Screen Slot Size	Length of Screen (feet)	Screened/Open Interval (ft. below TOC)
MW-1	224.34	224.47	12/1/2007	1	PVC	11.85*	--	--	--
MW-2	223.84	223.96	12/1/2007	1	PVC	12.75*	--	--	--
MW-3	223.40	223.49	12/1/2007	1	PVC	12.75*	--	--	--
MW-4	223.92	224.14	12/1/2007	1	PVC	11.65*	--	--	--
MW-5	224.51	224.59	12/1/2007	1	PVC	12.12*	--	--	--
MW-6	224.58	224.55	12/1/2007	1	PVC	12.48*	--	--	--
MW-6R	224.06	224.40	11/15/2017	2	PVC	14.65**	10	10	5 - 15
MW-7	225.13	225.41	12/1/2007	1	PVC	12.27*	--	--	--
MW-8	224.00	224.12	12/1/2007	1	PVC	12.35*	--	--	--
MW-9	222.81	222.91	12/1/2007	1	PVC	12.27*	--	--	--
MW-10	223.87	224.06	1/14/14	2	PVC	18.45**	10	10	10 - 20
MW-11	225.29	225.49	1/15/14	2	PVC	19.38**	10	10	10 - 20
MW-12	224.19	224.38	1/15/14	2	PVC	14.14 **	10	10	5 - 15
MW-13	223.08	223.60	1/16/14	2	PVC	13.71 **	10	10	5 - 15
MW-14	222.36	222.6	11/14/17	2	PVC	11.89 **	10	10	2 - 12
MW-15	221.49	222.1	11/15/17	2	PVC	16.50 **	10	10	7 - 17
MW-16	221.86	222.1	11/14/17	2	PVC	14.19 **	10	10	5 - 15
MW-17	223.74	224.1	11/14/17	2	PVC	17.39 **	10	10	8 - 18

Elevations based on NAVD 88 datum.
Measuremnts taken from top of PVC casing and are recorded in feet (ft.)
MW-6 was overdrilled on 11-15-2017
-- Parameter Unknown
* Based on depth to bottom measurements in October 2013
** Based on depth to bottom measurements in November 2017 (MW-11 in January 2014)

TABLE 2
SUMMARY OF GROUNDWATER ELEVATIONS
222 SOUTH FERRY STREET SITE
SITE # 447047
SCHENECTADY, NEW YORK

Well	Measuring Point Elevation	Ground Elevation (feet)	7/10/2013		9/18/2013		9/26/2013		1/22/2014		1/30/2014		11/27/2017	
			DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)	DTW (feet)	Elevation (feet)
MW-1	224.34	224.47	Casing Obstructed		Casing Obstructed		8.10	216.24	7.83	216.51	8.14	216.20	7.42	216.92
MW-2	223.84	223.96	5.49	218.35	6.52	217.32	6.59	217.25	6.30	217.54	6.52	217.32	6.67	217.17
MW-3	223.40	223.49	4.95	218.45	5.81	217.59	5.79	217.61	NM	NM	5.54	217.86	5.50	217.90
MW-4	223.92	224.14	Obstructed		6.24	217.68	6.35	217.57	5.67	218.25	5.99	217.93	6.36	217.56
MW-5	224.51	224.59	5.78	218.73	6.84	217.67	6.84	217.67	-	-	-	-	-	-
MW-5*	224.36	224.72	-	-	-	-	-	-	6.25	218.11	6.58	217.78	6.81	217.55
MW-6**	224.58	224.58	5.75	218.83	6.91	217.67	7.00	217.58	6.76	217.82	7.01	217.57	-	-
MW-6R	224.06	224.40	-	-	-	-	-	-	-	-	-	-	6.77	217.29
MW-7	225.13	225.41	6.59	218.54	7.40	217.73	7.48	217.65	7.25	217.88	7.45	217.68	7.64	217.49
MW-8	224.00	224.12	5.20	218.80	6.27	217.73	6.35	217.65	5.93	218.07	6.20	217.80	6.35	217.65
MW-9	222.81	222.91	4.30	218.51	5.15	217.66	5.19	217.62	4.62	218.19	4.97	217.84	5.10	217.71
MW-10	223.87	224.06	-	-	-	-	-	-	7.95	215.92	7.96	215.91	7.32	216.55
MW-11	225.29	225.49	-	-	-	-	-	-	7.52	217.77	7.66	217.63	7.12	218.17
MW-12	224.19	224.38	-	-	-	-	-	-	6.59	217.60	6.81	217.38	6.90	217.29
MW-13	223.08	223.60	-	-	-	-	-	-	5.06	218.02	5.34	217.74	5.48	217.60
MW-14	222.36	222.60	-	-	-	-	-	-	-	-	-	-	4.47	217.89
MW-15	221.49	222.10	-	-	-	-	-	-	-	-	-	-	7.83	213.66
MW-16	221.86	222.10	-	-	-	-	-	-	-	-	-	-	5.37	216.49
MW-17	223.74	224.10	-	-	-	-	-	-	-	-	-	-	9.28	214.46
AMW-1	223.76	224.10	-	-	-	-	-	-	-	-	-	-	9.69	214.07
AMW-2	222.61	222.90	-	-	-	-	-	-	-	-	-	-	Obstructed	
AMW-3	227.13	227.30	-	-	-	-	-	-	-	-	-	-	8.43	218.70
AMW-4	226.95	227.30	-	-	-	-	-	-	-	-	-	-	5.07	221.88
AMW-5	230.57	230.80	-	-	-	-	-	-	-	-	-	-	8.63	221.94
AMW-6	226.09	226.30	-	-	-	-	-	-	-	-	-	-	4.00	222.09

Elevations based on NAVD 88 datum.
Measuring point is the top of PVC casing and is recorded in feet (ft.)
*MW-5 flush-mount replaced and re-surveyed in January 2014.

TABLE 3
SUMMARY OF SOIL SAMPLING RESULTS (VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample/Boring ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater SCO mg/kg	6 NYCRR Part 375 Unrestricted Use SCO mg/kg	6 NYCRR Part 375 Residential SCO mg/kg	6 NYCRR Part 375 Commercial SCO mg/kg	SS-01 0-2" bgs 11/15/17 SOIL mg/kg	SS-01 2-12" bgs 11/15/17 SOIL mg/kg	SS-02 0-2" bgs 11/15/17 SOIL mg/kg
VOCs							
1,1,1-Trichloroethane	0.68	0.68	100	500	0.0059 U	0.0056 U	0.0066 U
1,1,2,2-Tetrachloroethane					0.0059 U	0.0056 U	0.0066 U
1,1,2-Trichlorotrifluoroethane					0.0059 U	0.0056 U	0.0066 U
1,1,2-Trichloroethane					0.0059 U	0.0056 U	0.0066 U
1,1-Dichloroethane	0.27	0.27	19	240	0.0059 U	0.0056 U	0.0066 U
1,1-Dichloroethene	0.33	0.33	100	500	0.0059 U	0.0056 U	0.0066 U
1,2,4-Trichlorobenzene					0.0059 U	0.0056 UT	0.0066 U
1,2-Dibromo-3-Chloropropane					0.0059 U	0.0056 U	0.0066 U
1,2-Dibromoethane					0.0059 U	0.0056 U	0.0066 U
1,2-Dichlorobenzene	1.1	1.1	100	500	0.0059 U	0.0056 U	0.0066 U
1,2-Dichloroethane	0.02	0.02	2.3	30	0.0059 U	0.0056 U	0.0066 U
1,2-Dichloropropane					0.0059 U	0.0056 U	0.0066 U
1,3-Dichlorobenzene	2.4	2.4	17	280	0.0059 U	0.0056 U	0.0066 U
1,4-Dichlorobenzene	1.8	1.8	9.8	130	0.0059 U	0.0056 U	0.0066 U
2-Hexanone					0.03 UJ	0.028 UJ	0.033 UJ
Acetone	0.05	0.05	100	500	0.03 U	0.028 U	0.033 U
Benzene	0.06	0.06	2.9	44	0.0059 U	0.0056 U	0.0066 U
Bromodichloromethane					0.0059 U	0.0056 U	0.0066 U
Bromoform					0.0059 UJ	0.0056 UJ	0.0066 UJ
Bromomethane					0.0059 UJ	0.0056 UJ	0.0066 UJ
Carbon Disulfide					0.0059 U	0.0056 U	0.0066 U
Carbon Tetrachloride	0.76	0.76	1.4	22	0.0059 UJ	0.0056 UJ	0.0066 UJ
Chlorobenzene	1.1	1.1	100	500	0.0059 U	0.0056 U	0.0066 U
Chloroethane					0.0059 U	0.0056 U	0.0066 U
Chloroform	0.37	0.37	10	350	0.0059 U	0.0056 U	0.00041 J
Chloromethane					0.0059 UJ	0.0056 UJ	0.0066 UJ
cis-1,2-Dichloroethene	0.25	0.25	59	500	0.0059 U	0.0056 U	0.0066 U
cis-1,3-Dichloropropene					0.0059 U	0.0056 U	0.0066 U
Cyclohexane					0.0059 U	0.0056 U	0.0066 U
Dibromochloromethane					0.0059 U	0.0056 U	0.0066 U
Dichlorodifluoromethane					0.0059 UT	0.0056 UT	0.0066 UT
Ethyl Benzene	1.0	1.0	30	390	0.0059 U	0.0056 U	0.0066 U
Isopropylbenzene					0.0059 U	0.0056 U	0.0066 U
Methyl Acetate					0.03 U	0.028 U	0.033 U
2-Butanone (MEK)	0.12	0.12	100	500	0.03 UJ	0.028 UJ	0.033 UJ
4-Methyl-2-Pentanone					0.03 U	0.028 U	0.033 U
Methyl Cyclohexane					0.0059 U	0.0056 U	0.0066 U
Methylene Chloride	0.05	0.05	51	500	0.0059 U	0.0056 U	0.0066 U
Styrene					0.0059 U	0.0056 U	0.0066 U
Methyl tert-butyl Ether	0.93	0.93	62	500	0.0059 U	0.0056 U	0.0066 U
Tetrachloroethene	1.3	1.3	5.5	150	0.0059 U	0.0056 U	0.0066 U
Toluene	0.7	0.7	100	500	0.0059 U	0.0056 U	0.0066 U
trans-1,2-Dichloroethene	0.19	0.19	100	500	0.0059 U	0.0056 U	0.0066 U
trans-1,3-Dichloropropene					0.0059 U	0.0056 U	0.0066 U
Trichloroethene	0.47	0.47	10	200	0.0059 U	0.0017 J	0.0066 U
Trichlorofluoromethane					0.0059 U	0.0056 U	0.0066 U
Vinyl Chloride	0.02	0.02	0.21	13	0.0059 UT	0.0056 UT	0.0066 UT
Xylene (mixed)	0.16	0.26	100	500	0.012 U	0.011 U	0.013 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
UJ - The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity
T - MS, and/or MSD Recovery is outside acceptance limit

TABLE 3
SUMMARY OF SOIL SAMPLING RESULTS (VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample/Boring ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater SCO mg/kg	6 NYCRR Part 375 Unrestricted Use SCO mg/kg	6 NYCRR Part 375 Residential SCO mg/kg	6 NYCRR Part 375 Commercial SCO mg/kg	SS-02 2-12" bgs 11/15/17 SOIL mg/kg	DUP-01 (SS-02) 2-12" bgs 11/15/17 SOIL mg/kg
VOCs						
1,1,1-Trichloroethane	0.68	0.68	100	500	0.0058 U	0.0056 U
1,1,2,2-Tetrachloroethane					0.0058 U	0.0056 U
1,1,2-Trichlorotrifluoroethane					0.0058 U	0.0056 U
1,1,2-Trichloroethane					0.0058 U	0.0056 U
1,1-Dichloroethane	0.27	0.27	19	240	0.0058 U	0.0056 U
1,1-Dichloroethene	0.33	0.33	100	500	0.0058 U	0.0056 U
1,2,4-Trichlorobenzene					0.0058 U	0.0056 U
1,2-Dibromo-3-Chloropropane					0.0058 U	0.0056 U
1,2-Dibromoethane					0.0058 U	0.0056 U
1,2-Dichlorobenzene	1.1	1.1	100	500	0.0058 U	0.0056 U
1,2-Dichloroethane	0.02	0.02	2.3	30	0.0058 U	0.0056 U
1,2-Dichloropropane					0.0058 U	0.0056 U
1,3-Dichlorobenzene	2.4	2.4	17	280	0.0058 U	0.0056 U
1,4-Dichlorobenzene	1.8	1.8	9.8	130	0.0058 U	0.0056 U
2-Hexanone					0.029 UJ	0.028 U
Acetone	0.05	0.05	100	500	0.029 U	0.028 U
Benzene	0.06	0.06	2.9	44	0.0058 U	0.0056 U
Bromodichloromethane					0.0058 U	0.0056 U
Bromoform					0.0058 UJ	0.0056 UJ
Bromomethane					0.0058 UJ	0.0056 UJ
Carbon Disulfide					0.0058 U	0.0056 U
Carbon Tetrachloride	0.76	0.76	1.4	22	0.0058 UJ	0.0056 UJ
Chlorobenzene	1.1	1.1	100	500	0.0058 U	0.0056 U
Chloroethane					0.0058 U	0.0056 UJ
Chloroform	0.37	0.37	10	350	0.0058 U	0.0056 U
Chloromethane					0.0058 UJ	0.0056 UJ
cis-1,2-Dichloroethene	0.25	0.25	59	500	0.0058 U	0.0056 U
cis-1,3-Dichloropropene					0.0058 U	0.0056 U
Cyclohexane					0.0058 U	0.0056 U
Dibromochloromethane					0.0058 U	0.0056 U
Dichlorodifluoromethane					0.0058 UT	0.0056 UJ
Ethyl Benzene	1.0	1.0	30	390	0.0058 U	0.0056 U
Isopropylbenzene					0.0058 U	0.0056 U
Methyl Acetate					0.029 U	0.028 U
2-Butanone (MEK)	0.12	0.12	100	500	0.029 UJ	0.028 U
4-Methyl-2-Pentanone					0.029 U	0.028 U
Methyl Cyclohexane					0.0058 U	0.0056 U
Methylene Chloride	0.05	0.05	51	500	0.0058 U	0.0056 U
Styrene					0.0058 U	0.0056 U
Methyl tert-butyl Ether	0.93	0.93	62	500	0.0058 U	0.0056 U
Tetrachloroethene	1.3	1.3	5.5	150	0.0058 U	0.0056 J
Toluene	0.7	0.7	100	500	0.0058 U	0.0056 U
trans-1,2-Dichloroethene	0.19	0.19	100	500	0.0058 U	0.0056 U
trans-1,3-Dichloropropene					0.0058 U	0.0056 U
Trichloroethene	0.47	0.47	10	200	0.0058 U	0.0056 U
Trichlorofluoromethane					0.0058 U	0.0056 U
Vinyl Chloride	0.02	0.02	0.21	13	0.0058 UT	0.0056 UJ
Xylene (mixed)	0.16	0.26	100	500	0.012 U	0.011 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
UJ - The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity
T - MS, and/or MSD Recovery is outside acceptance limit

TABLE 3
SUMMARY OF SOIL SAMPLING RESULTS (VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample/Boring ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater SCO mg/kg	6 NYCRR Part 375 Unrestricted Use SCO mg/kg	6 NYCRR Part 375 Residential SCO mg/kg	6 NYCRR Part 375 Commercial SCO mg/kg	SS-03 0-2" bgs 11/15/17 SOIL mg/kg	SS-03 2-12" bgs 11/15/17 SOIL mg/kg	DRUM-C Composite 11/15/17 SOIL mg/kg
VOCs							
1,1,1-Trichloroethane	0.68	0.68	100	500	0.006 U	0.0057 U	0.0061 UT
1,1,2,2-Tetrachloroethane					0.006 U	0.0057 U	0.0061 UT
1,1,2-Trichlorotrifluoroethane					0.006 U	0.0057 U	0.0061 UT
1,1,2-Trichloroethane					0.006 U	0.0057 U	0.0061 UT
1,1-Dichloroethane	0.27	0.27	19	240	0.006 U	0.0057 U	0.0061 UT
1,1-Dichloroethene	0.33	0.33	100	500	0.006 U	0.0057 U	0.0061 UT
1,2,4-Trichlorobenzene					0.006 U	0.0057 U	0.0061 UT
1,2-Dibromo-3-Chloropropane					0.006 U	0.0057 U	0.0061 UT
1,2-Dibromoethane					0.006 U	0.0057 U	0.0061 UT
1,2-Dichlorobenzene	1.1	1.1	100	500	0.006 U	0.0057 U	0.0061 UT
1,2-Dichloroethane	0.02	0.02	2.3	30	0.006 U	0.0057 U	0.0061 U
1,2-Dichloropropane					0.006 U	0.0057 U	0.0061 UT
1,3-Dichlorobenzene	2.4	2.4	17	280	0.006 U	0.0057 U	0.0061 UT
1,4-Dichlorobenzene	1.8	1.8	9.8	130	0.006 U	0.0057 U	0.0061 UT
2-Hexanone					0.03 UJ	0.028 UJ	0.031 U
Acetone	0.05	0.05	100	500	0.03 U	0.028 U	0.022 JT
Benzene	0.06	0.06	2.9	44	0.006 U	0.0057 U	0.0061 UT
Bromodichloromethane					0.006 U	0.0057 U	0.0061 UT
Bromoform					0.006 UJ	0.0057 UJ	0.0061 UJ
Bromomethane					0.006 UJ	0.0057 UJ	0.0061 UJ
Carbon Disulfide					0.006 U	0.0057 U	0.0061 UT
Carbon Tetrachloride	0.76	0.76	1.4	22	0.006 UJ	0.0057 UJ	0.0061 UJ
Chlorobenzene	1.1	1.1	100	500	0.006 U	0.0057 U	0.0061 UT
Chloroethane					0.006 U	0.0057 U	0.0061 UJ
Chloroform	0.37	0.37	10	350	0.006 U	0.0057 U	0.0061 UT
Chloromethane					0.006 UJ	0.0057 UJ	0.0061 UJ
cis-1,2-Dichloroethene	0.25	0.25	59	500	0.006 U	0.0057 U	0.0027 JT
cis-1,3-Dichloropropene					0.006 U	0.0057 U	0.0061 UT
Cyclohexane					0.006 U	0.0057 U	0.0061 UT
Dibromochloromethane					0.006 U	0.0057 U	0.0061 UT
Dichlorodifluoromethane					0.006 UT	0.0057 UT	0.0061 UJ
Ethyl Benzene	1.0	1.0	30	390	0.006 U	0.0057 U	0.0061 UT
Isopropylbenzene					0.006 U	0.0057 U	0.0061 UT
Methyl Acetate					0.03 U	0.028 U	0.031 U
2-Butanone (MEK)	0.12	0.12	100	500	0.03 UJ	0.028 UJ	0.031 UT
4-Methyl-2-Pentanone					0.03 U	0.028 U	0.031 U
Methyl Cyclohexane					0.006 U	0.0057 U	0.0061 UT
Methylene Chloride	0.05	0.05	51	500	0.006 U	0.0057 U	0.0061 UT
Styrene					0.006 U	0.0057 U	0.0061 UT
Methyl tert-butyl Ether	0.93	0.93	62	500	0.006 U	0.0057 U	0.0061 U
Tetrachloroethene	1.3	1.3	5.5	150	0.006 U	0.0057 U	0.0021 JT
Toluene	0.7	0.7	100	500	0.006 U	0.0057 U	0.0005 JT
trans-1,2-Dichloroethene	0.19	0.19	100	500	0.006 U	0.0057 U	0.0061 UT
trans-1,3-Dichloropropene					0.006 U	0.0057 U	0.0061 UT
Trichloroethene	0.47	0.47	10	200	0.006 U	0.0057 U	0.0023 JT
Trichlorofluoromethane					0.006 U	0.0057 U	0.0061 UT
Vinyl Chloride	0.02	0.02	0.21	13	0.006 UT	0.0057 UT	0.0011 UJ
Xylene (mixed)	0.16	0.26	100	500	0.012 U	0.011 U	0.012 UT

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
UJ - The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity
T - MS, and/or MSD Recovery is outside acceptance limit

TABLE 4
SUMMARY OF SOIL SAMPLING RESULTS (SVOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample/Boring ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater SCO mg/kg	6 NYCRR Part 375 Unrestricted Use SCO mg/kg	6 NYCRR Part 375 Residential SCO mg/kg	6 NYCRR Part 375 Commercial SCO mg/kg	SS-01 0-2" bgs 11/15/17 SOIL mg/kg	SS-01 2-12" bgs 11/15/17 SOIL mg/kg	SS-02 0-2" bgs 11/15/17 SOIL mg/kg
SVOCs							
2,4,5-Trichlorophenol					2.0 U	1.9 U	2.2 U
2,4,6-Trichlorophenol					2.0 U	1.9 U	2.2 U
2,4-Dichlorophenol					2.0 U	1.9 UT	2.2 U
2,4-Dimethylphenol					2.0 U	1.9 U	2.2 U
2,4-Dinitrophenol					19 U	19 U	22 U
2,4-Dinitrotoluene					2.0 U	1.9 U	2.2 U
2,6-Dinitrotoluene					2.0 U	1.9 U	2.2 U
2-Chloronaphthalene					2.0 U	1.9 U	2.2 U
2-Chlorophenol					2.0 U	1.9 U	2.2 U
2-Methylnaphthalene					2.0 U	1.9 U	2.2 U
2-Methylphenol					2.0 U	1.9 U	2.2 U
2-Nitroaniline					3.9 U	3.8 U	4.4 U
2-Nitrophenol					2.0 U	1.9 U	2.2 U
3,3'-Dichlorobenzidine					3.9 U	3.8 U	4.4 U
3-Nitroaniline					3.9 U	3.8 U	4.4 U
4,6-Dinitro-2-methylphenol					3.9 U	3.8 U	4.4 U
4-Bromophenyl-phenylether					2.0 U	1.9 UT	2.2 U
4-Chloro-3-Methylphenol					2.0 U	1.9 U	2.2 U
4-Chloroaniline					2.0 U	1.9 U	2.2 U
4-Chlorophenyl-phenylether					2.0 U	1.9 U	2.2 U
4-Methylphenol					3.9 U	3.8 U	4.4 U
4-Nitroaniline					3.9 U	3.8 U	4.4 U
4-Nitrophenol					3.9 U	3.8 U	4.4 U
Acenaphthene	98	20	100	500	2.0 U	1.9 U	2.2 U
Acenaphthylene	107	100	100	500	2.0 U	1.9 U	2.2 U
Acetophenone					2.0 U	1.9 U	2.2 U
Anthracene	1,000	100	100	500	2.0 U	1.9 UT	0.61 J
Atrazine					2.0 U	1.9 U	2.2 U
Benzaldehyde					2.0 U	1.9 U	2.2 U
Benzo(a)anthracene	1.0	1.0	1.0	5.6	1.2 J	1.4 JT	2.2
Benzo(a)pyrene	22	1.0	1.0	1.0	1.3 J	1.3 JT	2.3
Benzo(b)fluoranthene	1.7	1.0	1.0	5.6	1.7 J	1.9 T	2.9
Benzo(g,h,i)perylene	1,000	100	100	500	0.82 J	0.89 J	1.5 J
Benzo(k)fluoranthene	1.7	0.8	1.0	56	0.72 J	0.55 JT	1.3 J
Butylbenzylphthalate					2.0 U	1.9 UT	2.2 U
Biphenyl (Diphenyl)					2.0 U	1.9 U	2.2 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
JT- Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. MS and/or MSD Recovery is outside acceptance
UT- MS/MSD RPD exceeds control limits
NS - Not sampled.
T - MS, and/or MSD Recovery is outside acceptance limit

TABLE 4
SUMMARY OF SOIL SAMPLING RESULTS (SVOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample/Boring ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater SCO mg/kg	6 NYCRR Part 375 Unrestricted Use SCO mg/kg	6 NYCRR Part 375 Residential SCO mg/kg	6 NYCRR Part 375 Commercial SCO mg/kg	SS-01 0-2" bgs 11/15/17 SOIL mg/kg	SS-01 2-12" bgs 11/15/17 SOIL mg/kg	SS-02 0-2" bgs 11/15/17 SOIL mg/kg
bis(2-Chloroethoxy)methane					2.0 U	1.9 U	2.2 U
bis(2-Chloroethyl)Ether					2.0 U	1.9 U	2.2 U
bis (2-Chloroisopropyl)Ether					2.0 U	1.9 UT	2.2 U
bis(2-Ethylhexyl)phthalate					2.0 U	1.9 U	2.2 U
Caprolactam					2.0 U	1.9 U	2.2 U
Carbazole					2.0 U	1.9 U	0.34 J
Chrysene	1.0	1.0	1.0	56	1.2 J	1.3 JT	2.3
Dibenzo(a,h)anthracene	1,000	0.33	0.33	0.56	2.0 U	1.9 U	2.2 U
Dibenzofuran					2.0 U	1.9 U	2.2 U
Diethylphthalate					2.0 U	1.9 UT	2.2 U
Dimethylphthalate					2.0 U	1.9 UT	2.2 U
Di-n-butylphthalate					2.0 U	1.9 U	2.2 U
Di-n-octylphthalate					2.0 U	1.9 U	2.2 U
Fluoranthene	1,000	100	100	500	2.4	2.6 T	4.7
Fluorene	386	30	100	500	2.0 U	1.9 U	2.2 U
Hexachlorobenzene					2.0 U	1.9 U	2.2 U
Hexachlorobutadiene					2.0 U	1.9 U	2.2 U
Hexachlorocyclopentadiene					2.0 U	1.9 U	2.2 U
Hexachloroethane					2.0 U	1.9 U	2.2 U
Indeno(1,2,3-cd)pyrene	8.2	0.5	0.5	5.6	0.88 J	0.93 J	1.6 J
Isophorone					2.0 U	1.9 U	2.2 U
Naphthalene	12	12	100	500	2.0 U	1.9 U	2.2 U
Nitrobenzene					2.0 U	1.9 U	2.2 U
N-Nitroso-di-n-propylamine					2.0 U	1.9 U	2.2 U
N-Nitrosodiphenylamine(1)					2.0 U	1.9 UT	2.2 U
Pentachlorophenol	0.8	0.8	2.4	6.7	3.9 U	3.8 U	4.4 U
Phenanthrene	1,000	100	100	500	1.2 J	1.5 JT	3.3
Phenol	0.33	0.33	100	500	2.0 U	1.9 U	2.2 U
Pyrene	1,000	100	100	500	1.9 J	2.0 T	4.1

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
JT- Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. MS and/or MSD Recovery is outside acceptance limits.

UT- MS/MSD RPD exceeds control limits
NS - Not sampled.
T - MS, and/or MSD Recovery is outside acceptance limit

TABLE 4
SUMMARY OF SOIL SAMPLING RESULTS (SVOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample/Boring ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater SCO mg/kg	6 NYCRR Part 375 Unrestricted Use SCO mg/kg	6 NYCRR Part 375 Residential SCO mg/kg	6 NYCRR Part 375 Commercial SCO mg/kg	SS-02 2-12" bgs 11/15/17 SOIL mg/kg	DUP-01 (SS-02) 2-12" bgs 11/15/17 SOIL mg/kg	SS-03 0-2" bgs 11/15/17 SOIL mg/kg	SS-03 2-12" bgs 11/15/17 SOIL mg/kg	DRUM-C Composite 11/15/17 SOIL mg/kg
SVOCs									
2,4,5-Trichlorophenol					3.9 U	3.9 U	4.1 U	4.0 U	NS
2,4,6-Trichlorophenol					3.9 U	3.9 U	4.1 U	4.0 U	NS
2,4-Dichlorophenol					3.9 U	3.9 U	4.1 U	4.0 U	NS
2,4-Dimethylphenol					3.9 U	3.9 U	4.1 U	4.0 U	NS
2,4-Dinitrophenol					38 U	38 U	40 U	39 U	NS
2,4-Dinitrotoluene					3.9 U	3.9 U	4.1 U	4.0 U	NS
2,6-Dinitrotoluene					3.9 U	3.9 U	4.1 U	4.0 U	NS
2-Chloronaphthalene					3.9 U	3.9 U	4.1 U	4.0 U	NS
2-Chlorophenol					3.9 U	3.9 U	4.1 U	4.0 U	NS
2-Methylnaphthalene					3.9 U	3.9 U	4.1 U	4.0 U	NS
2-Methylphenol					3.9 U	3.9 U	4.1 U	4.0 U	NS
2-Nitroaniline					7.7 U	7.5 U	8.0 U	7.8 U	NS
2-Nitrophenol					3.9 U	3.9 U	4.1 U	4.0 U	NS
3,3'-Dichlorobenzidine					7.7 U	7.5 U	8.0 U	7.8 U	NS
3-Nitroaniline					7.7 U	7.5 U	8.0 U	7.8 U	NS
4,6-Dinitro-2-methylphenol					7.7 U	7.5 U	8.0 U	7.8 U	NS
4-Bromophenyl-phenylether					3.9 U	3.9 U	4.1 U	4.0 U	NS
4-Chloro-3-Methylphenol					3.9 U	3.9 U	4.1 U	4.0 U	NS
4-Chloroaniline					3.9 U	3.9 U	4.1 U	4.0 U	NS
4-Chlorophenyl-phenylether					3.9 U	3.9 U	4.1 U	4.0 U	NS
4-Methylphenol					7.7 U	7.5 U	8.0 U	7.8 U	NS
4-Nitroaniline					7.7 U	7.5 U	8.0 U	7.8 U	NS
4-Nitrophenol					7.7 U	7.5 U	8.0 U	7.8 U	NS
Acenaphthene	98	20	100	500	3.9 U	0.95 J	4.1 U	1.4 J	NS
Acenaphthylene	107	100	100	500	3.9 U	3.9 U	4.1 U	4.0 U	NS
Acetophenone					3.9 U	3.9 U	4.1 U	4.0 U	NS
Anthracene	1,000	100	100	500	3.9 U	2.0 J	4.1 U	3.4 J	NS
Atrazine					3.9 U	3.9 U	4.1 U	4.0 U	NS
Benzaldehyde					3.9 U	3.9 U	4.1 U	4.0 U	NS
Benzo(a)anthracene	1.0	1.0	1.0	5.6	2.2 J	4.1	1.7 J	6.0	NS
Benzo(a)pyrene	22	1.0	1.0	1.0	2.4 J	3.7 J	2.1 J	5.2	NS
Benzo(b)fluoranthene	1.7	1.0	1.0	5.6	2.7 J	4.3	2.9 J	6.6	NS
Benzo(g,h,i)perylene	1,000	100	100	500	1.5 J	2.2 J	1.3 J	3.6 J	NS
Benzo(k)fluoranthene	1.7	0.8	1.0	56	1.6 J	2.4 J	0.91 J	3.8 J	NS
Butylbenzylphthalate					3.9 U	3.9 U	4.1 U	4.0 U	NS
Biphenyl (Diphenyl)					3.9 U	3.9 U	4.1 U	4.0 U	NS

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
JT- Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. MS and/or MSD Recovery is outside acceptance
UT- MS/MSD RPD exceeds control limits
NS - Not sampled.
T - MS, and/or MSD Recovery is outside acceptance limit

TABLE 4
SUMMARY OF SOIL SAMPLING RESULTS (SVOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample/Boring ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater SCO mg/kg	6 NYCRR Part 375 Unrestricted Use SCO mg/kg	6 NYCRR Part 375 Residential SCO mg/kg	6 NYCRR Part 375 Commercial SCO mg/kg	SS-02 2-12" bgs 11/15/17 SOIL mg/kg	DUP-01 (SS-02) 2-12" bgs 11/15/17 SOIL mg/kg	SS-03 0-2" bgs 11/15/17 SOIL mg/kg	SS-03 2-12" bgs 11/15/17 SOIL mg/kg	DRUM-C Composite 11/15/17 SOIL mg/kg
bis(2-Chloroethoxy)methane					3.9 U	3.9 U	4.1 U	4.0 U	NS
bis(2-Chloroethyl)Ether					3.9 U	3.9 U	4.1 U	4.0 U	NS
bis (2-Chloroisopropyl)Ether					3.9 U	3.9 U	4.1 U	4.0 U	NS
bis(2-Ethylhexyl)phthalate					3.9 U	3.9 U	4.1 U	4.0 U	NS
Caprolactam					3.9 U	3.9 U	4.1 U	4.0 U	NS
Carbazole					3.9 U	0.97 J	4.1 U	1.3 J	NS
Chrysene	1.0	1.0	1.0	56	2.3 J	4.0	2.0 J	5.8	NS
Dibenzo(a,h)anthracene	1,000	0.33	0.33	0.56	3.9 U	3.9 U	4.1 U	4.0 U	NS
Dibenzofuran					3.9 U	0.93 J	4.1 U	1.2 J	NS
Diethylphthalate					3.9 U	3.9 U	4.1 U	4.0 U	NS
Dimethylphthalate					3.9 U	3.9 U	4.1 U	4.0 U	NS
Di-n-butylphthalate					3.9 U	3.9 U	4.1 U	4.0 U	NS
Di-n-octylphthalate					3.9 U	3.9 U	4.1 U	4.0 U	NS
Fluoranthene	1,000	100	100	500	4.8	9.8	3.9 J	14	NS
Fluorene	386	30	100	500	3.9 U	1.3 J	4.1 U	1.6 J	NS
Hexachlorobenzene					3.9 U	3.9 U	4.1 U	4.0 U	NS
Hexachlorobutadiene					3.9 U	3.9 U	4.1 U	4.0 U	NS
Hexachlorocyclopentadiene					3.9 U	3.9 U	4.1 U	4.0 U	NS
Hexachloroethane					3.9 U	3.9 U	4.1 U	4.0 U	NS
Indeno(1,2,3-cd)pyrene	8.2	0.5	0.5	5.6	1.7 J	2.4 J	1.6 J	3.3 J	NS
Isophorone					3.9 U	3.9 U	4.1 U	4.0 U	NS
Naphthalene	12	12	100	500	3.9 U	3.9 U	4.1 U	4.0 U	NS
Nitrobenzene					3.9 U	3.9 U	4.1 U	4.0 U	NS
N-Nitroso-di-n-propylamine					3.9 U	3.9 U	4.1 U	4.0 U	NS
N-Nitrosodiphenylamine(1)					3.9 U	3.9 U	4.1 U	4.0 U	NS
Pentachlorophenol	0.8	0.8	2.4	6.7	7.7 U	7.5 U	8.0 U	7.8 U	NS
Phenanthrene	1,000	100	100	500	3.1 J	9.1	1.9 J	14	NS
Phenol	0.33	0.33	100	500	3.9 U	3.9 U	4.1 U	4.0 U	NS
Pyrene	1,000	100	100	500	3.8 J	6.8	3.0 J	10	NS

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
JT- Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. MS and/or MSD Recovery is outside acceptance limits.

UT- MS/MSD RPD exceeds control limits
NS - Not sampled.
T - MS, and/or MSD Recovery is outside acceptance limit

TABLE 5
SUMMARY OF SOIL SAMPLING RESULTS (Metals, PCBs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective mg/kg	6 NYCRR Part 375 Residential Soil Cleanup Objectives mg/kg	6 NYCRR Part 375 Commercial Soil Cleanup Objectives mg/kg	SS-01 0-2" bgs 11/15/17 SOIL mg/kg	SS-01 2-12" bgs 11/15/17 SOIL mg/kg	SS-02 0-2" bgs 11/15/17 SOIL mg/kg	SS-02 2-12" bgs 11/15/17 SOIL mg/kg	DUP-01 (SS-02) 2-12" bgs 11/15/17 SOIL mg/kg	SS-03 0-2" bgs 11/15/17 SOIL mg/kg	SS-03 2-12" bgs 11/15/17 SOIL mg/kg	DRUM-C Composite 11/15/17 SOIL mg/kg
TAL METALS (Total)											
Arsenic	13	16	16	4.4	5.5	5	6	5.9	5.8	5.8	5.2
Aluminum				7,150 J	7,880 J	9,150 J	8,500 J	8,660 J	7,930 J	9,390 J	11,000 J
Antimony				17.5 UJ	16.8 UJ	19.9 UJ	17.4 UJ	17.1 UJ	17.4 UJ	17.8 UJ	18.9 UJ
Barium	350	350	400	68.2 J	78.9 J	125 J	104 J	98.1 J	98.4 J	115 J	89 J
Beryllium	7.2	14	590	0.4	0.45	0.52	0.48	0.47	0.44	0.56	0.56
Cadmium	2.5	2.5	9.3	0.37	0.39	0.73	0.55	0.56	0.58	0.6	0.3
Calcium				16,900	35,800	30,200	19,500	23,600	28,300	21,500	11,400
Chromium	30	36	1,500	13.1 J	13.2 J	16.1 J	15 J	13.4 J	13.9 J	16.5 J	27.7 J
Cobalt				4.9	5.7	6.3	5.9	5.9	5.8	6.4	7.3
Copper	50	270	270	32.5	29.7	36	35.5	39.9	34.7	40.3	40.2
Iron				13,000 J	13,300 J	15,000	15,200 J	15,500 J	16,000 J	16,400 J	16,400 J
Lead	63	400	1,000	160 J	167 J	230 J	223 J	237 J	221 J	246 J	221 J
Magnesium				5,230	15,900	10,800	5,280	5,780	5,420	7,690	4,760
Manganese	1,600	2,000	10,000	292	297	403	325	290	336	334	286
Mercury	0.18	0.81	2.8	0.38 J	0.49 J	0.52 J	0.52 J	0.60 J	0.68 J	0.86 J	0.47 J
Nickel	30	140	310	12.7	16	16.4	15.3	15.2	15.6	17	17.5
Potassium				1,610 J	1,950 J	2,140 J	1,810 J	1,770 J	1,750 J	2,110 J	2,330 J
Selenium	3.9	36	1,500	4.7 U	4.5 U	5.3 U	4.6 U	4.6 U	4.6 U	4.7 U	5 U
Silver	2	36	1,500	0.7 U	0.67 U	0.79 U	0.26 J	0.23 J	0.27 J	0.29 J	0.26 J
Sodium				164 U	157 U	185 U	162 U	159 U	162 U	166 U	251
Thallium				7 U	6.7 U	7.9 U	6.9 U	6.8 U	7 U	7.1 U	7.5 U
Vanadium				18.9	27.8	23.7	23.3	29.9	21	24.1	26.5
Zinc	109	2,200	10,000	162 J	129 J	242 J	232 J	221 J	213 J	242 J	121 J
PCBs											
Aroclor-1016	-	-	-	0.22 UJ	0.22 UJ	0.32 UJ	0.26 UJ	0.22 UJ	0.27 UJ	0.24 UJ	NS
Aroclor-1221	-	-	-	0.22 UJ	0.22 UJ	0.32 UJ	0.26 UJ	0.22 UJ	0.27 UJ	0.24 UJ	NS
Aroclor-1232	-	-	-	0.22 U	0.22 U	0.32 U	0.26 U	0.22 U	0.27 U	0.24 U	NS
Aroclor-1242	-	-	-	0.22 UJ	0.22 UJ	0.32 UJ	0.26 UJ	0.22 UJ	0.27 UJ	0.24 UJ	NS
Aroclor-1248	-	-	-	0.22 UJ	0.22 UJ	0.32 UJ	0.26 UJ	0.22 UJ	0.27 UJ	0.24 UJ	NS
Aroclor-1254	-	-	-	0.22 UJ	0.22 UJ	0.32 UJ	0.26 UJ	0.22 UJ	0.27 UJ	0.24 UJ	NS
Aroclor-1260	-	-	-	0.22 UJ	0.22 UJ	0.32 UJ	0.26 UJ	0.22 UJ	0.27 UJ	0.24 UJ	NS
Total PCBs	0.1	1	1	0.22 U	0.22 U	0.32 U	0.26 U	0.22 U	0.27 U	0.24 U	NS

Qualifiers

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
UJ - The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an

TABLE 6
SUMMARY OF SOIL SAMPLING RESULTS (Pesticides)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater SCOs mg/kg	6 NYCRR Part 375 Unrestricted Use SCOs mg/kg	6 NYCRR Part 375 Residential SCOs mg/kg	6 NYCRR Part 375 Commercial SCOs mg/kg	SS-01 0-2" bgs 11/15/17 SOIL mg/kg	SS-01 2-12" bgs 11/15/17 SOIL mg/kg	SS-02 0-2" bgs 11/15/17 SOIL mg/kg
PESTICIDES							
ALDRIN	0.19	0.005	0.019	0.68	0.098 U	0.095 U	0.11 U
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE	0.02	0.02	0.097	3.4	0.098 U	0.095 UT	0.11 U
ALPHA CHLORDANE	2.9	0.094	0.91	24	0.098 U	0.095 U	0.11 U
ENDOSULFAN I	102	2.4	4.8	200	0.098 U	0.095 UT	0.11 U
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	3	0.04	0.072	3	0.098 U	0.095 UT	0.11 U
ENDOSULFAN II	102	2.4	4.8	200	0.098 U	0.095 UT	0.11 U
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	500	0.04	100	500	0.098 U	0.095 UT	0.11 U
DIELDRIN	0	0.005	0.039	1.4	0.098 U	0.095 U	0.11 U
ENDOSULFAN SULFATE	1,000	2.4	4.8	200	0.098 U	0.095 U	0.11 U
ENDRIN	0.06	0.014	2.2	89	0.098 U	0.095 UT	0.11 U
ENDRIN ALDEHYDE					0.098 U	0.095 U	0.11 U
ENDRIN KETONE					0.098 U	0.095 U	0.11 U
GAMMA BHC (LINDANE)	9.2	0.1	0.28	9.2	0.098 U	0.095 UT	0.11 U
HEPTACHLOR	0.38	0.042	0.42	15	0.098 U	0.095 U	0.11 U
HEPTACHLOR EPOXIDE					0.098 U	0.095 U	0.11 U
METHOXYCHLOR					0.098 U	0.095 UT	0.11 U
4,4'-DDD	14	0.0033	2.6	92	0.098 U	0.095 UT	0.11 U
4,4'-DDE	17	0.0033	1.8	62	0.098 U	0.095 U	0.11 U
4,4'-DDT	136	0.0033	1.7	47	0.039 J	0.037 J	0.045 J
TOXAPHENE					0.98 U	0.95 U	1.1 U
TRANS-CHLORDANE					0.098 U	0.095 U	0.11 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
T - MS, and/or MSD Recovery is outside acceptance limit

TABLE 6
SUMMARY OF SOIL SAMPLING RESULTS (Pesticides)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater SCOs mg/kg	6 NYCRR Part 375 Unrestricted Use SCOs mg/kg	6 NYCRR Part 375 Residential SCOs mg/kg	6 NYCRR Part 375 Commercial SCOs mg/kg	SS-02 2-12" bgs 11/15/17 SOIL mg/kg	DUP-01 (SS-02) 2-12" bgs 11/15/17 SOIL mg/kg
PESTICIDES						
ALDRIN	0.19	0.005	0.019	0.68	0.098 U	0.094 U
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE	0.02	0.02	0.097	3.4	0.098 U	0.094 U
ALPHA CHLORDANE	2.9	0.094	0.91	24	0.098 U	0.094 U
ENDOSULFAN I	102	2.4	4.8	200	0.098 U	0.094 U
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	3	0.04	0.072	3	0.098 U	0.094 U
ENDOSULFAN II	102	2.4	4.8	200	0.098 U	0.094 U
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	500	0.04	100	500	0.098 U	0.094 U
DIELDRIN	0	0.005	0.039	1.4	0.098 U	0.094 U
ENDOSULFAN SULFATE	1,000	2.4	4.8	200	0.098 U	0.094 U
ENDRIN	0.06	0.014	2.2	89	0.098 U	0.094 U
ENDRIN ALDEHYDE					0.098 U	0.094 U
ENDRIN KETONE					0.098 U	0.094 U
GAMMA BHC (LINDANE)	9.2	0.1	0.28	9.2	0.098 U	0.094 U
HEPTACHLOR	0.38	0.042	0.42	15	0.098 U	0.094 U
HEPTACHLOR EPOXIDE					0.098 U	0.094 U
METHOXYCHLOR					0.098 U	0.094 U
4,4'-DDD	14	0.0033	2.6	92	0.098 U	0.094 U
4,4'-DDE	17	0.0033	1.8	62	0.098 U	0.094 U
4,4'-DDT	136	0.0033	1.7	47	0.041 J	0.039 J
TOXAPHENE					0.98 U	0.94 U
TRANS-CHLORDANE					0.098 U	0.094 U

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
T - MS, and/or MSD Recovery is outside acceptance limit

TABLE 6
SUMMARY OF SOIL SAMPLING RESULTS (Pesticides)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID Sample Depth (feet) Sampling Date Matrix Units	6 NYCRR Part 375 Protection of Groundwater SCOs mg/kg	6 NYCRR Part 375 Unrestricted Use SCOs mg/kg	6 NYCRR Part 375 Residential SCOs mg/kg	6 NYCRR Part 375 Commercial SCOs mg/kg	SS-03 0-2" bgs 11/15/17 SOIL mg/kg	SS-03 2-12" bgs 11/15/17 SOIL mg/kg	DRUM-C Composite 11/15/17 SOIL mg/kg
PESTICIDES							
ALDRIN	0.19	0.005	0.019	0.68	0.1 U	0.097 U	NS
ALPHA BHC (ALPHA HEXACHLOROCYCLOHEXANE	0.02	0.02	0.097	3.4	0.1 U	0.097 U	NS
ALPHA CHLORDANE	2.9	0.094	0.91	24	0.1 U	0.097 U	NS
ENDOSULFAN I	102	2.4	4.8	200	0.1 U	0.097 U	NS
BETA BHC (BETA HEXACHLOROCYCLOHEXANE)	3	0.04	0.072	3	0.1 U	0.097 U	NS
ENDOSULFAN II	102	2.4	4.8	200	0.1 U	0.097 U	NS
DELTA BHC (DELTA HEXACHLOROCYCLOHEXANE)	500	0.04	100	500	0.1 U	0.097 U	NS
DIELDRIN	0	0.005	0.039	1.4	0.1 U	0.097 U	NS
ENDOSULFAN SULFATE	1,000	2.4	4.8	200	0.1 U	0.097 U	NS
ENDRIN	0.06	0.014	2.2	89	0.1 U	0.097 U	NS
ENDRIN ALDEHYDE					0.1 U	0.097 U	NS
ENDRIN KETONE					0.1 U	0.097 U	NS
GAMMA BHC (LINDANE)	9.2	0.1	0.28	9.2	0.1 U	0.097 U	NS
HEPTACHLOR	0.38	0.042	0.42	15	0.1 U	0.097 U	NS
HEPTACHLOR EPOXIDE					0.1 U	0.097 U	NS
METHOXYCHLOR					0.1 U	0.097 U	NS
4,4'-DDD	14	0.0033	2.6	92	0.1 U	0.097 U	NS
4,4'-DDE	17	0.0033	1.8	62	0.1 U	0.097 U	NS
4,4'-DDT	136	0.0033	1.7	47	0.049 J	0.045 J	NS
TOXAPHENE					1.0 U	0.97 U	NS
TRANS-CHLORDANE					0.1 U	0.097 U	NS

Notes

- Concentration exceeds corresponding 6 NYCRR Part 375 Commercial Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Residential Soil Cleanup Objective.

- Concentration exceeds corresponding 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

Units given in mg/kg (milligrams per kilogram)
U - The compound was not detected at the indicated concentration.
J - The concentration given is an estimated value.
T - MS, and/or MSD Recovery is outside acceptance limit

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
(VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	NYSDEC Class GA Standard	MW-1			MW-2			MW-3		
Sampling Date		10/3/2013	1/24/2014	11/28/2017	10/2/2013	1/22/2014	11/27/2017	10/2/2013	MW-X 10/2/2013	1/24/2014
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
VOCs										
1,1,1-Trichloroethane	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene		1.0 U	1 U	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichloropropane		1.0 U	NS	NS	1.0 U	NS	NS	1.0 U	1.0 U	NS
1,4-Dichlorobenzene		NS	1 U	1.0 U	NS	1.0 U	1.0 U	NS	NS	1.0 U
1,4-Dioxane		100 UR	100 R	NS	100 UR	100 R	NS	100 UR	100 UR	100 R
2-Hexanone		5.0 U	5 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Acetone	50	5.0 UJ	5 U	18	5.0 UJ	5.0 U	10 UJ	5.0 UJ	5.0 UJ	5.0 U
Benzene	1	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromochloromethane		1.0 U	1 U	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Disulfide		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon Tetrachloride	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

Units given in µg/L (micrograms per liter)

U - The compound was not detected at the indicated concentration.

J - Estimated value.

NJ - Tentative in identification and estimated in value.

D - Results obtained from a dilution.

NS- Not sampled.

ND - Not detected.

T- MS, and/or MSD Recovery is outside acceptance limit

R - The data are unusable. Resampling and reanalysis are necessary for

2013/2014 samples collected during the Site Characterization

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
(VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	NYSDEC Class GA Standard	MW-1			MW-2			MW-3		
Sampling Date		10/3/2013	1/24/2014	11/28/2017	10/2/2013	1/22/2014	11/27/2017	10/2/2013	MW-X 10/2/2013	1/24/2014
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
cis-1,2-Dichloroethene	5	1.0 U	1.3	1.2	67	21	16	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane		NS	1 U	1.0 U	NS	1.0 U	1.0 U	NS	NS	1.0 U
Dichlorodifluoromethane		1.0 UJ	1 U	1.0 U	1.0 UJ	1.0 U	1.0 UJ	1.0 UJ	1.0 UJ	1.0 U
Ethyl Benzene	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m/p-Xylenes	5	1.0 U	1 U	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U
Methyl acetate		1.0 U	1 U	2.5 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U
2-Butanone	50	5.0 U	5 R	4.4 J	5.0 U	5.0 R	10 U	5.0 U	5.0 U	5.0 R
4-Methyl-2-Pentanone		5.0 U	5 U	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U
Methylcyclohexane		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Xylene	5	1.0 U	1 U	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U
Styrene		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert-butyl Ether (MTBE)	10	1.0 U	1 U	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene		1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	1.0 U	1 U	1.0 U	4.6	1.4	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	5.6	67	17	120	36	35	1.0 U	1.0 U	1.0 U
Xylenes, total		NS	NS	2.0 U	NS	NS	2.0 U	NS	NS	NS

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

Units given in µg/L (micrograms per liter)

U - The compound was not detected at the indicated concentration.

J - Estimated value.

NJ - Tentative in identification and estimated in value.

D - Results obtained from a dilution.

NS- Not sampled.

ND - Not detected.

T- MS, and/or MSD Recovery is outside acceptance limit

R - The data are unusable. Resampling and reanalysis are necessary for verification.

2013/2014 samples collected during the Site Characterization

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
(VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	NYSDEC Class GA Standard	MW-4			MW-5			MW-6		MW-6R	MW-7	
Sampling Date		10/2/2013	1/23/2014	11/27/2017	10/2/2013	1/22/2014	11/28/2017	10/3/2013	1/23/2014	11/27/2017	10/3/2013	1/23/2014
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
VOCs												
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	8.0 U	1.4	6.5 J	1.0 U	1.0 U	4.0 UT	1.0 U	1.0 U
1,2,3-Trichlorobenzene		1.0 U	1.0 U	NS	8.0 U	1.0 U	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,2-Dibromoethane		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,2-Dichloropropane		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
1,3-Dichloropropane		1.0 U	NS	NS	8.0 U	NS	NS	1.0 U	NS	NS	1.0 U	NS
1,4-Dichlorobenzene		NS	1.0 U	1.0 U	NS	1.0 U	10 U	NS	1.0 U	4.0 U	NS	1.0 U
1,4-Dioxane		100 UR	100 R	NS	800 UR	100 R	NS	100 UR	100 R	NS	100 UR	100 R
2-Hexanone		5.0 U	5.0 U	5.0 UJ	40 U	5.0 U	50 U	5.0 U	5.0 U	20 UJ	5.0 U	5.0 U
Acetone	50	5.0 UJ	5.0 U	3.6 J	40 UJ	5.0 U	100 U	5.0 UJ	5.0 U	40 UJ	5.0 UJ	5.0 U
Benzene	1	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Bromochloromethane		1.0 U	1.0 U	NS	8.0 U	1.0 U	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Bromoform		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 UT	1.0 U	1.0 U
Bromomethane	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 UJ	4.0 UT	1.0 U	1.0 U
Carbon Disulfide		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Carbon Tetrachloride	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

Units given in µg/L (micrograms per liter)

U - The compound was not detected at the indicated concentration.

J - Estimated value.

NJ - Tentative in identification and estimated in value.

D - Results obtained from a dilution.

NS- Not sampled.

ND - Not detected.

T- MS, and/or MSD Recovery is outside acceptance limit

R - The data are unusable. Resampling and reanalysis are necessary for

2013/2014 samples collected during the Site Characterization

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
(VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	NYSDEC Class GA Standard	MW-4			MW-5			MW-6		MW-6R	MW-7	
Sampling Date		10/2/2013	1/23/2014	11/27/2017	10/2/2013	1/22/2014	11/28/2017	10/3/2013	1/23/2014	11/27/2017	10/3/2013	1/23/2014
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
cis-1,2-Dichloroethene	5	1.0 U	0.69 J	1.0 U	810	1,000 D	530	33	32	160 T	1.0 U	1.0 U
cis-1,3-Dichloropropene		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Dibromochloromethane		NS	1.0 U	1.0 U	NS	1.0 U	10 U	NS	1.0 U	4.0 U	NS	1.0 U
Dichlorodifluoromethane		1.0 UJ	1.0 U	1.0 UJ	8.0 UJ	1.0 U	10 U	1.0 UJ	1.0 U	4.0 UJ	1.0 UJ	1.0 U
Ethyl Benzene	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Isopropylbenzene	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
m/p-Xylenes	5	1.0 U	1.0 U	NS	8.0 U	1.0 U	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U
Methyl acetate		1.0 U	1.0 U	2.5 U	8.0 U	1.0 U	25 U	1.0 U	1.0 U	10 U	1.0 U	1.0 U
2-Butanone	50	5.0 U	5.0 R	10 UJ	40 U	5.0 R	100 U	5.0 U	5.0 R	40 UJ	5.0 U	5.0 R
4-Methyl-2-Pentanone		5.0 U	5.0 U	5.0 UJ	40 U	5.0 U	50 U	5.0 U	5.0 U	20 UJ	5.0 U	5.0 U
Methylcyclohexane		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 UT	1.0 U	1.0 U
o-Xylene	5	1.0 U	1.0 U	NS	8.0 U	1.0 U	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U
Styrene		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Methyl tert-butyl Ether (MTBE)	10	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	1.0 U	1.0 U	1.0 U	16	22	15	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene		1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 UT	1.0 U	1.0 U
Trichloroethene	5	1.6	0.82 J	0.99 J	170	52	53	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	8.0 U	1.0 U	10 U	1.0 U	1.0 U	4.0 U	1.0 U	1.0 U
Vinyl Chloride	2	1.0 U	1.0	35	18	28	68	69	32	42	1.0 U	1.0 U
Xylenes, total		NS	NS	2.0 U	NS	NS	20 U	NS	NS	8.0 U	NS	NS

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

Units given in µg/L (micrograms per liter)

U - The compound was not detected at the indicated concentration.

J - Estimated value.

NJ - Tentative in identification and estimated in value.

D - Results obtained from a dilution.

NS- Not sampled.

ND - Not detected.

T- MS, and/or MSD Recovery is outside acceptance limit

R - The data are unusable. Resampling and reanalysis are necessary for verification.

2013/2014 samples collected during the Site Characterization

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
(VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	NYSDEC Class GA Standard	MW-8			MW-9		MW-10			MW-11	
Sampling Date		10/3/2013	1/23/2014	11/28/2017	10/3/2013	1/23/2014	1/24/2014	11/28/2017	DUP-01 11/28/2017	1/24/2014	MW-X 1/24/2014
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
VOCs											
1,1,1-Trichloroethane	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,1,2-Trichloroethane		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,1-Dichloroethane	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,1-Dichloroethene	5	200 U	14	400 U	1.0 U	1.0 U	1.0	4.7 J	10 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene		200 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,2-Dibromo-3-Chloropropane		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,2-Dibromoethane		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,2-Dichlorobenzene		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,2-Dichloropropane		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,3-Dichloropropane		200 U	NS	NS	1.0 U	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene		NS	1.0 U	400 U	NS	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
1,4-Dioxane		20,000 UR	100 R	NS	100 UR	100 R	100 R	NS	NS	100 R	100 R
2-Hexanone		1,000 U	5.0 U	2,000 U	5.0 U	5.0 U	5.0 U	50 U	50 U	5.0 U	5.0 U
Acetone	50	1,000 UJ	5.0 U	4,000 U	5.0 UJ	5.0 U	5.0 U	100 U	100 U	5.0 UJ	5.0 U
Benzene	1	200 U	1.2	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Bromochloromethane		200 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U
Bromodichloromethane	50	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Bromoform		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Bromomethane	5	200 U	1.0 U	400 U	1.0 U	1.0 UJ	1.0 U	10 U	10 U	1.0 UJ	1.0 UJ
Carbon Disulfide		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Carbon Tetrachloride	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Chlorobenzene	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Chloroethane	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Chloroform	7	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Chloromethane		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 UJ	1.0 U

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

Units given in µg/L (micrograms per liter)

U - The compound was not detected at the indicated concentration.

J - Estimated value.

NJ - Tentative in identification and estimated in value.

D - Results obtained from a dilution.

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2013/2014 samples collected during the Site Characterization

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
(VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	NYSDEC Class GA Standard	MW-8			MW-9		MW-10			MW-11	
Sampling Date		10/3/2013	1/23/2014	11/28/2017	10/3/2013	1/23/2014	1/24/2014	11/28/2017	DUP-01 11/28/2017	1/24/2014	MW-X 1/24/2014
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
cis-1,2-Dichloroethene	5	42,000 D	19,000 D	24,000 D	1.0 U	1.0 U	430 D	250 D	290 D	0.76 J	1.0
cis-1,3-Dichloropropene		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Cyclohexane		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Dibromochloromethane		NS	1.0 U	400 U	NS	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Dichlorodifluoromethane		200 UJ	1.0 U	400 U	1.0 UJ	1.0 U	1.0 U	10 U	10 U	1.0 UJ	1.0 U
Ethyl Benzene	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Isopropylbenzene	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
m/p-Xylenes	5	200 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U
Methyl acetate		200 U	1.0 U	1,000 U	1.0 U	1.0 U	1.0 U	25 U	25 U	1.0 U	1.0 U
2-Butanone	50	1,000 U	5.0 R	4,000 U	5.0 U	5.0 R	5.0 R	100 U	100 U	5.0 R	5.0 R
4-Methyl-2-Pentanone		1,000 U	5.0 U	2,000 U	5.0 U	5.0 U	5.0 U	50 U	50 U	5.0 U	5.0 U
Methylcyclohexane		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Methylene Chloride	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
o-Xylene	5	200 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U
Styrene		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Methyl tert-butyl Ether (MTBE)	10	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Tetrachloroethene	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Toluene	5	200 U	5.1	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	200 U	83	400 U	1.0 U	1.0 U	3.3	10 U	10 U	1.0 U	1.0 U
trans-1,3-Dichloropropene		200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Trichloroethene	5	280	100	400 U	1.0 U	1.0 U	0.89 J	10 U	10 U	1.0 U	1.0 U
Trichlorofluoromethane	5	200 U	1.0 U	400 U	1.0 U	1.0 U	1.0 U	10 U	10 U	1.0 U	1.0 U
Vinyl Chloride	2	18,000	13,000 D	19,000 D	1.0 U	1.0 U	420 D	280 D	340 D	1.0 U	1.0 U
Xylenes, total		NS	NS	800 U	NS	NS	NS	20 U	20 U	NS	NS

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

Units given in µg/L (micrograms per liter)

U - The compound was not detected at the indicated concentration.

J - Estimated value.

NJ - Tentative in identification and estimated in value.

D - Results obtained from a dilution.

NS- Not sampled.

ND - Not detected.

T- MS, and/or MSD Recovery is outside acceptance limit

R - The data are unusable. Resampling and reanalysis are necessary for verification.

2013/2014 samples collected during the Site Characterization

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
(VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	NYSDEC Class GA Standard	MW-12		MW-13		MW-14	MW-15	MW-16	MW-17
Sampling Date		1/24/2014	11/27/2017	1/24/2014	11/28/2017	11/28/2017	11/28/2017	11/28/2017	11/28/2017
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
VOCs									
1,1,1-Trichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,1,2,2-Tetrachloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,1,2-Trichlorotrifluoroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,1,2-Trichloroethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,1-Dichloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,1-Dichloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,2,3-Trichlorobenzene		1.0 U	NS	1.0 U	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,2-Dibromo-3-Chloropropane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,2-Dibromoethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,2-Dichlorobenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,2-Dichloroethane	0.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,2-Dichloropropane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,3-Dichlorobenzene	3	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,3-Dichloropropane		NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
1,4-Dioxane		100 R	NS	100 R	NS	NS	NS	NS	NS
2-Hexanone		5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	20 U	50 U	5.0 U
Acetone	50	5.0 U	10 UJ	5.0 U	3.3 J	10 U	40 U	100 U	10 U
Benzene	1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Bromochloromethane		1.0 U	NS	1.0 U	NS	NS	NS	NS	NS
Bromodichloromethane	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Bromoform		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Bromomethane	5	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Carbon Disulfide		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Carbon Tetrachloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Chlorobenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Chloroethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Chloroform	7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Chloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

Units given in µg/L (micrograms per liter)

U - The compound was not detected at the indicated concentration.

J - Estimated value.

NJ - Tentative in identification and estimated in value.

D - Results obtained from a dilution.

NS- Not sampled.

ND - Not detected.

T- MS, and/or MSD Recovery is outside acceptance limit

R - The data are unusable. Resampling and reanalysis are necessary for

2013/2014 samples collected during the Site Characterization

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
(VOCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	NYSDEC Class GA Standard	MW-12		MW-13		MW-14	MW-15	MW-16	MW-17
Sampling Date		1/24/2014	11/27/2017	1/24/2014	11/28/2017	11/28/2017	11/28/2017	11/28/2017	11/28/2017
Matrix		WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
cis-1,2-Dichloroethene	5	40	12	130	12	1.0 U	4.0 U	10 U	1.0 U
cis-1,3-Dichloropropene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Cyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Dibromochloromethane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Dichlorodifluoromethane		1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Ethyl Benzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Isopropylbenzene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
m/p-Xylenes	5	1.0 U	NS	1.0 U	NS	NS	NS	NS	NS
Methyl acetate		1.0 U	2.5 U	1.0 U	2.5 U	2.5 U	10 U	25 U	2.5 U
2-Butanone	50	5.0 R	10 UJ	5.0 R	10 U	10 U	40 U	100 U	10 U
4-Methyl-2-Pentanone		5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	20 U	50 U	5.0 U
Methylcyclohexane		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Methylene Chloride	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
o-Xylene	5	1.0 U	NS	1.0 U	NS	NS	NS	NS	NS
Styrene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Methyl tert-butyl Ether (MTBE)	10	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Tetrachloroethene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Toluene	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
trans-1,2-Dichloroethene	5	0.77 J	1.0 U	0.91 J	1.0 U	1.0 U	4.0 U	10 U	1.0 U
trans-1,3-Dichloropropene		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Trichloroethene	5	3.6	1.0 U	7.3	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Trichlorofluoromethane	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0 U	10 U	1.0 U
Vinyl Chloride	2	40	24	310 D	37	1.0 U	4.0 U	10 U	1.0 U
Xylenes, total		NS	2.0 U	NS	2.0 U	2.0 U	8.0 U	20 U	2.0 U

Notes

- Concentration exceeds corresponding NYSDEC Class GA Standard.

Units given in µg/L (micrograms per liter)

U - The compound was not detected at the indicated concentration.

J - Estimated value.

NJ - Tentative in identification and estimated in value.

D - Results obtained from a dilution.

NS- Not sampled.

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T- MS, and/or MSD Recovery is outside acceptance limit

R - The data are unusable. Resampling and reanalysis are necessary for verification.

2013/2014 samples collected during the Site Characterization

TABLE 8

SUMMARY OF GROUNDWATER SAMPLING RESULTS (PFCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	USEPA	MW-1	MW-5	MW-8	MW-10	
Sampling Date	Health Advisory Limit (HAL)	11/28/2017	11/28/2017	11/28/2017	11/28/2017	DUP-01 11/29/2017
Matrix		WATER	WATER	WATER	WATER	WATER
Units	ng/l	ng/l	ng/l	ng/l	ng/l	ng/l
PFCs						
2-(N-METHYL PERFLUOROOCTANESULFONAMIDO) ACETIC ACID		24 U	20 U	20 U	21 U	20 U
N-ETHYL-N-((HEPTADECAFLUOROOCTYL)SULPHONYL) GLYCINE		24 U	20 U	20 U	21 U	20 U
PERFLUOROBUTANESULFONIC ACID		2.4 U	2.0 U	2.0 U	2.1 U	2.0 U
PERFLUOROBUTYRIC ACID (PFBA)		4.0 B	12 B	6.2 B	3.4 B	3.4 B
PERFLUORODECANE SULFONIC ACID		2.4 U	2.0 U	2.0 U	2.1 U	2.0 U
PERFLUORODECANOIC ACID (PFDA)		2.4 U	2.0 U	0.36 J	2.1 U	2.0 U
PERFLUORODODECANOIC ACID (PFDoA)		2.4 U	2.0 U	2.0 U	2.1 U	2.0 U
PERFLUOROHEPTANE SULFONATE (PFHpS)		2.4 U	2.0 U	2.0 U	2.1 U	2.0 U
PERFLUOROHEPTANOIC ACID (PFHpA)		1.2 J	1.6 J	0.6 J	2.1 U	2.0 U
PERFLUOROHEXANESULFONIC ACID		0.85 BJ	4.4 B	1.7 BJ	0.51 BJ	0.36 BJ
PERFLUOROHEXANOIC ACID (PFHxA)		1.7 J	1.9 J	1.6 J	1.1 J	1.1 J
PERFLUORONONANOIC ACID		2.4 U	0.44 J	0.31 J	2.1 U	2.0 U
PERFLUOROOCTANE SULFONAMIDE (FOSA)		2.4 U	0.54 J	1.2 J	0.67 J	0.94 J
PERFLUOROOCTANE SULFONIC ACID	70	1.8 J	3.2	3.1	2.1 U	2.0 U
PERFLUOROOCTANOIC ACID (PFOA)	70	4.3	2.7	2.4	1.1 J	0.94 J
PERFLUOROPENTANOIC ACID (PFPeA)		1.8 J	0.63 J	1.5 J	0.89 J	2.0 U
PERFLUOROTETRADECANOIC ACID (PFTeA)		2.4 U	2.0 U	2.0 U	2.1 U	2.0 U
PERFLUOROTRIDECANOIC ACID (PFTriA)		2.4 U	2.0 U	2.0 U	2.1 U	2.0 U
PERFLUOROUNDECANOIC ACID (PFUnA)		2.4 U	2.0 U	2.0 U	2.1 U	2.0 U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)		24 U	20 U	20 U	21 U	20 U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)		24 U	20 U	20 U	21 U	20 U
TOTAL	70	15.65	27.41	18.92	7.67	6.74

Notes
USEPA Health Advisory Limit (HAL) for drinking water
Units given in ng/l (nanograms per liter)
NA - Not Analyzed
U - The compound was not detected at the indicated concentration.
J - Estimated value.
B- Compound was found in blank and sample

* - EB-01 is the equipment blank taken from the water level meter used while sampling.

**- EB-02 is the equipment blank taken from the HDPE tubing used to sample.

TABLE 8

SUMMARY OF GROUNDWATER SAMPLING RESULTS (PFCs)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	USEPA	MW-13	EB-01*	EB-02**
Sampling Date	Health Advisory Limit (HAL)	11/28/2017	11/28/2017	11/28/2017
Matrix		WATER	WATER	WATER
Units	ng/l	ng/l	ng/l	ng/l
PFCs				
2-(N-METHYL PERFLUOROOCTANESULFONAMIDO) ACETIC ACID		20 U	20 U	20 U
N-ETHYL-N-((HEPTADECAFLUOROOCTYL)SULPHONYL) GLYCINE		20 U	20 U	20 U
PERFLUOROBUTANESULFONIC ACID		2.0 U	2.0 U	2.0 U
PERFLUOROBUTYRIC ACID (PFBA)		2.8 B	0.57 BJ	0.50 BJ
PERFLUORODECANE SULFONIC ACID		2.0 U	2.0 U	2.0 U
PERFLUORODECANOIC ACID (PFDA)		2.0 U	2.0 U	2.0 U
PERFLUORODODECANOIC ACID (PFDoA)		2.0 U	2.0 U	2.0 U
PERFLUOROHEPTANE SULFONATE (PFHpS)		2.0 U	2.0 U	2.0 U
PERFLUOROHEPTANOIC ACID (PFHpA)		0.39 J	2.0 U	2.0 U
PERFLUOROHEXANESULFONIC ACID		0.42 BJ	0.26 BJ	0.30 BJ
PERFLUOROHEXANOIC ACID (PFHxA)		0.85 J	2.0 U	2.0 U
PERFLUORONONANOIC ACID		2.0 U	2.0 U	2.0 U
PERFLUOROOCTANE SULFONAMIDE (FOSA)		3.4	2.0 U	2.0 U
PERFLUOROOCTANE SULFONIC ACID	70	2.0 U	2.0 U	2.0 U
PERFLUOROOCTANOIC ACID (PFOA)	70	1.6 J	2.0 U	2.0 U
PERFLUOROPENTANOIC ACID (PFPeA)		2.0 U	2.0 U	2.0 U
PERFLUOROTETRADECANOIC ACID (PFTeA)		2.0 U	2.0 U	2.0 U
PERFLUOROTRIDECANOIC ACID (PFTriA)		2.0 U	2.0 U	2.0 U
PERFLUOROUNDECANOIC ACID (PFUnA)		2.0 U	2.0 U	2.0 U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)		20 U	20 U	20 U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)		20 U	20 U	20 U
TOTAL	70	9.46	0.83	0.80

Notes
USEPA Health Advisory Limit (HAL) for drinking water
Units given in ng/l (nanograms per liter)
NA - Not Analyzed
U - The compound was not detected at the indicated concentration.
J - Estimated value.
B- Compound was found in blank and sample

* - EB-01 is the equipment blank taken from the water level meter used while sampling.

**- EB-02 is the equipment blank taken from the HDPE tubing used to sample.

TABLE 9
SUMMARY OF GROUNDWATER SAMPLING RESULTS (1,4 Dioxane)
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	MW-5	DUP-1	MW-8	MW-10	MW-12	MW-13	EB-01*	EB-02**
Sampling Date	4/3/2018	4/3/2018	4/3/2018	4/3/2018	4/3/2018	4/3/2018	4/3/2018	4/3/2018
Matrix	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
1,4 Dioxane	0.20 U	0.20 U	0.20 U	0.14 J	2.0 U	0.20 U	0.20 U	0.20 U

Notes:
Units given in µg/L (micrograms per liter)
U - The compound was not detected at the indicated concentration.
J - Estimated value.

TABLE 10
SUMMARY OF AIR SAMPLING RESULTS
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	AA-1	OA-1	SV-1		SV-2		SV-3	SV-4	
Sample Type	Ambient Air	Ambient Air	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
Date	1/15/2014	11/30/2017	1/15/2014	11/30/2017	1/15/2014	11/30/2017	1/15/2014	1/15/2014	11/30/2017
Units	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
VOCs									
1,1,1-TRICHLOROETHANE	0.22 U	1.1 U	36 U	62 U	1.1 U	1.1 U	1.1 U	610 U	1,700 U
1,1,2,2-TETRACHLOROETHANE	0.27 UJ	1.4 U	45 U	78 U	1.4 U	1.4 U	1.4 U	770 U	2,100 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	NS	0.48 J	NS	87 U	NS	0.24 J	NS	NS	2,400 U
1,1,2-TRICHLOROETHANE	0.22 U	1.1 U	36 U	62 U	1.1 U	1.1 U	1.1 U	610 U	1,700 U
1,1-DICHLOROETHANE	0.16 U	0.81 U	27 U	46 U	0.81 U	0.81 U	0.81 U	450 U	1,200 U
1,1-DICHLOROETHENE	0.16 U	0.79 U	26 U	45 U	0.79 U	0.79 U	0.79 U	450 U	360 J
1,2,4-TRICHLOROBENZENE	NS	3.7 U	NS	210 U	NS	3.7 U	NS	NS	5,700 U
1,2,4-TRIMETHYLBENZENE	NS	0.98 U	NS	56 U	NS	0.98 U	NS	NS	1,500 U
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	0.31 U	1.5 U	51 U	87 U	1.5 U	1.5 U	1.5 U	860 U	2,400 U
1,2-DICHLOROBENZENE	NS	1.2 U	NS	68 U	NS	1.2 U	NS	NS	1,900 U
1,2-DICHLOROETHANE	0.32 U	0.81 U	27 U	46 U	0.81 U	0.81 U	0.81 U	450 U	1,200 U
1,2-DICHLOROETHENE, TOTAL	0.16 U	1.6 U	26 U	90 U	0.79 U	1.6 U	0.79 U	8,100	13,000
1,2-DICHLOROPROPANE	0.37 U	0.92 U	31 U	53 U	0.92 U	0.92 U	0.92 U	520 U	1,400 U
1,2-DICHLOROTETRAFLUOROETHANE	0.28 U	1.4 U	46 U	80 U	1.4 U	1.4 U	1.4 U	790 U	2,200 U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	0.39 U	0.98 U	32 U	56 U	0.98 U	0.98 U	1.4	550 U	1,500 U
1,3-BUTADIENE	0.18 U	0.44 U	15 U	25 U	0.44 U	0.44 U	0.44 U	250 U	680 U
1,3-DICHLOROBENZENE	NS	1.2 U	NS	68 U	NS	1.2 U	NS	NS	1,900 U
1,4-DICHLOROBENZENE	NS	1.2 U	NS	68 U	NS	1.2 U	NS	NS	1,900 U
1,4-DIOXANE (P-DIOXANE)	NS	18 U	NS	1,000 U	NS	18 U	NS	NS	28,000 U
2,2,4-TRIMETHYLPENTANE	0.19 U	0.93 U	31 U	53 U	0.93 U	0.93 U	0.93 U	530 U	1,400 U
2-CHLOROTOLUENE	NS	1.0 U	NS	59 U	NS	1.0 U	NS	NS	1,600 U
2-HEXANONE	NS	2.0 U	NS	120 U	NS	2.0 U	NS	NS	3,200 U
4-ETHYLTOLUENE	0.2 U	0.98 U	32 U	56 U	0.98 U	0.98 U	2	550 U	1,500 U
ACETONE	NS	6.3 J	NS	680 U	NS	24	NS	NS	18,000 U
ALLYL CHLORIDE (3-CHLOROPROPENE)	0.25 UJ	1.6 U	52 U	89 U	1.6 U	1.6 U	1.6 U	880 U	2,400 U
BENZENE	0.54	0.42 J	21 U	36 U	0.85	1.9	2.5	360 U	980 U
BENZYL CHLORIDE	NS	1.0 U	NS	59 U	NS	1.0 U	NS	NS	1,600 U
BROMODICHLOROMETHANE	0.27 U	1.3 U	44 U	76 U	1.3 U	1.3 U	1.3 U	750 U	2,100 U
BROMOETHENE	0.35 U	0.87 U	29 U	50 U	0.87 U	0.87 U	0.87 U	490 U	1,300 U
BROMOFORM	0.41 U	2.1 U	68 U	120 U	2.1 U	2.1 U	2.1 U	1,200 U	3,200 U
BROMOMETHANE	0.31 U	0.78 U	26 U	44 U	0.78 U	0.78 U	0.78 U	440 U	1,200 U
BUTANE	NS	2.0	NS	68 U	NS	0.87 J	NS	NS	1,800 U
CARBON DISULFIDE	NS	1.6 U	NS	89 U	NS	0.43 J	NS	NS	2,400 U
CARBON TETRACHLORIDE	0.43	0.37 J	42 U	72 U	1.3 U	1.3 U	1.3 U	710 U	1,900 U
CHLOROBENZENE	NS	0.92 U	NS	52 U	NS	0.92 U	NS	NS	1,400 U

Notes:

Units given in µg/m3 (microgram per cubic meter of air)

U - Compound not detected above listed concentration.

* - Recovery or RPD exceeds control limits.

being functional.

J - Estimated value.

NS - Not sampled.

2013/2014 samples collected during the Site Characterization

TABLE 10
SUMMARY OF AIR SAMPLING RESULTS
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	AA-1	OA-1	SV-1		SV-2		SV-3	SV-4	
Sample Type	Ambient Air	Ambient Air	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor
Date	1/15/2014	11/30/2017	1/15/2014	11/30/2017	1/15/2014	11/30/2017	1/15/2014	1/15/2014	11/30/2017
Units	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
VOCs									
CHLORODIFLUOROMETHANE	NS	1.5 J	NS	100 U	NS	1.8 U	NS	NS	2,700 U
CHLOROETHANE	0.21 U	1.3 U	44 U	75 U	1.3 U	1.3 U	1.3 U	740 U	2,000 U
CHLOROFORM	0.2 U	0.98 U	32 U	56 U	0.98 U	0.52 J	1.7	550 U	1,500 U
CHLOROMETHANE	NS	0.99 J	NS	59 U	NS	1.0 U	NS	NS	1,600 U
CIS-1,2-DICHLOROETHYLENE	0.16 U	0.79 U	26 U	45 U	0.79 U	0.79 U	0.79 U	8,100	13,000
CIS-1,3-DICHLOROPROPENE	0.18 U	0.91 U	30 U	52 U	0.91 U	0.91 U	0.91 U	510 U	1,400 U
CYCLOHEXANE	0.15	0.69 U	23 U	39 U	0.69 U	0.69 U	0.87	390 U	1,100 U
CYMENE	NS	1.1 U	NS	62 U	NS	1.1 U	NS	NS	1,700 U
DIBROMOCHLOROMETHANE	0.34 U	1.7 U	56 U	97 U	1.7 U	1.7 U	1.7 U	960 U	2,600 U
DICHLORODIFLUOROMETHANE	2.2	2.1 J	82 U	140 U	2.5 U	1.2 J	2.5 U	1,400 U	3,800 U
DICHLOROETHYLENES	NS	1.6 U	NS	90 U	NS	1.6 U	NS	NS	13,000
ETHYLBENZENE	0.18	0.87 U	29 U	49 U	0.87 U	0.21 J	4.2	490 U	1,300 U
HEXACHLOROBUTADIENE	NS	2.1 U	NS	120 U	NS	2.1 U	NS	NS	3,300 U
ISOPROPANOL	NS	0.63 J	NS	700 U	NS	2.6 J	NS	NS	19,000 U
ISOPROPYLBENZENE (CUMENE)	NS	0.98 U	NS	56 U	NS	0.98 U	NS	NS	1,500 U
M,P-XYLENES	0.58	2.2 U	72 U	120 U	2.2 U	0.72 J	18	1,200 U	3,300 U
METHYL ETHYL KETONE (2-BUTANONE)	NS	0.78 J	NS	84 U	NS	1.1 J	NS	NS	2,300 U
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	NS	2.0 U	NS	120 U	NS	2.0 U	NS	NS	3,200 U
METHYL METHACRYLATE	NS	2.0 U	NS	120 U	NS	2.0 U	NS	NS	3,200 U
METHYLENE CHLORIDE	1.4 U	2.2	57 U	99 U	1.7 U	1.7 U	1.7 U	980 U	2,700 U
NAPHTHALENE	NS	2.6 U	NS	150 U	NS	2.6 U	NS	NS	4,000 U
N-BUTYLBENZENE	NS	1.1 U	NS	62 U	NS	1.1 U	NS	NS	1,700 U
N-HEPTANE	0.24	0.82 U	27 U	47 U	0.82 U	0.82 U	2.7	460 U	1,300 U
N-HEXANE	0.38	0.39 J	23 U	40 U	0.7 U	0.25 J	4.5	400 U	1,100 U
N-PROPYLBENZENE	NS	0.98 U	NS	56 U	NS	0.98 U	NS	NS	1,500 U
O-XYLENE (1,2-DIMETHYLBENZENE)	0.54	0.87 U	29 U	49 U	1.1	0.21 J	4.4	490 U	1,300 U
SEC-BUTYLBENZENE	NS	1.1 U	NS	62 U	NS	1.1 U	NS	NS	1,700 U
STYRENE	NS	0.85 U	NS	48 U	NS	0.85 U	NS	NS	1,300 U
T-BUTYLBENZENE	NS	1.1 U	NS	62 U	NS	1.1 U	NS	NS	1,700 U
TERT-BUTYL ALCOHOL	NS	15 U	NS	860 U	NS	15 U	NS	NS	23,000 U
TERT-BUTYL METHYL ETHER	0.14 UJ	0.72 U	24 U	41 U	0.72 U	0.72 U	0.72 U	410 U	1,100 U
TETRACHLOROETHYLENE(PCE)	0.27 U	1.4 U	45 U	11 J	1.4 U	1.7	1.4 U	760 U	2,100 U
TETRAHYDROFURAN	NS	15 U	NS	840 U	NS	15 U	NS	NS	23,000 U
TOLUENE	0.82	0.67 J	25 U	43 U	1.9	3.4	21	420 U	1,200 U
TRANS-1,2-DICHLOROETHENE	0.16 U	0.79 U	26 U	45 U	0.79 U	0.79 U	0.79 U	450 U	1,200 U
TRANS-1,3-DICHLOROPROPENE	0.18 U	0.91 U	30 U	52 U	0.91 U	0.91 U	0.91 U	510 U	1,400 U
TRICHLOROETHYLENE (TCE)	0.38	1.1 U	3,200	5,400	1.1 U	160	69	92,000	160,000
TRICHLOROFLUOROMETHANE	0.99	1.1 J	37 U	64 U	1.2	0.38 J	1.1 U	630 U	1,700 U
VINYL CHLORIDE	0.2 U	0.51 U	17 U	29 U	0.51 U	0.51 U	0.51 U	290 U	790 U
XYLENES, TOTAL	1.1	3.0 U	29 U	170 U	2.2	0.95 J	22	490 U	4,700 U

Notes:

Units given in µg/m3 (microgram per cubic meter of air)

U - Compound not detected above listed concentration.

* - Recovery or RPD exceeds control limits.

**- "SV-T" is the temporary soil vapor point installed in place of SV-9 not being functional.

J - Estimated value.

NS - Not sampled.

2013/2014 samples collected during the Site Characterization

TABLE 10
SUMMARY OF AIR SAMPLING RESULTS
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	SV-5		SV-6	SV-7		SV-8		
Sample Type	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Dup SV-X	Soil Vapor
Date	1/15/2014	11/30/2017	1/15/2014	1/15/2014	11/30/2017	1/15/2014	1/15/2014	11/30/2017
Units	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
VOCs								
1,1,1-TRICHLOROETHANE	1.1 U	1.1 U	48 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,1,2,2-TETRACHLOROETHANE	1.4 U	1.4 U	60 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	NS	0.36 J	NS	NS	0.26 J	NS	NS	0.37 J
1,1,2-TRICHLOROETHANE	1.1 U	1.1 U	48 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
1,1-DICHLOROETHANE	0.81 U	0.81 U	36 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
1,1-DICHLOROETHENE	0.79 U	0.79 U	35 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
1,2,4-TRICHLOROBENZENE	NS	3.7 U	NS	NS	3.7 U	NS	NS	3.7 U
1,2,4-TRIMETHYLBENZENE	NS	0.98 U	NS	NS	0.98 U	NS	NS	0.29 J
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	1.5 U	1.5 U	68 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-DICHLOROBENZENE	NS	1.2 U	NS	NS	1.2 U	NS	NS	1.2 U
1,2-DICHLOROETHANE	0.81 U	0.81 U	36 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
1,2-DICHLOROETHENE, TOTAL	0.79 U	1.6 U	240	0.79 U	1.6 U	0.79 U	0.79 U	0.14 J
1,2-DICHLOROPROPANE	0.92 U	0.92 U	41 U	0.92 U	0.92 U	0.92 U	0.92 U	0.92 U
1,2-DICHLOROTETRAFLUOROETHANE	1.4 U	1.4 U	62 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	1.5	0.98 U	43 U	1.3	0.98 U	0.98 U	0.98 U	0.98 U
1,3-BUTADIENE	0.44 U	0.44 U	19 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,3-DICHLOROBENZENE	NS	1.2 U	NS	NS	1.2 U	NS	NS	1.2 U
1,4-DICHLOROBENZENE	NS	1.2 U	NS	NS	1.2 U	NS	NS	1.2 U
1,4-DIOXANE (P-DIOXANE)	NS	18 U	NS	NS	18 U	NS	NS	18 U
2,2,4-TRIMETHYLPENTANE	0.93 U	0.93 U	41 U	0.93 U	0.93 U	0.93 U	0.93 U	0.93 U
2-CHLOROTOLUENE	NS	1.0 U	NS	NS	1.0 U	NS	NS	1.0 U
2-HEXANONE	NS	2.0 U	NS	NS	0.49 J	NS	NS	2.0 U
4-ETHYLTOLUENE	2.1	0.98 U	43 U	1.9	0.98 U	0.98 U	0.98 U	0.98 U
ACETONE	NS	21	NS	NS	42	NS	NS	27
ALLYL CHLORIDE (3-CHLOROPROPENE)	1.6 U	1.6 U	69 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
BENZENE	5.1	0.28 J	28 U	3	1.7	0.77	0.82	0.39 J
BENZYL CHLORIDE	NS	1.0 U	NS	NS	1.0 U	NS	NS	1.0 U
BROMODICHLOROMETHANE	1.3 U	1.3 U	59 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
BROMOETHENE	0.87 U	0.87 U	38 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U
BROMOFORM	2.1 U	2.1 U	91 U	2.1 U	2.1 U	2.1 U	2.1 U	2.1 U
BROMOMETHANE	0.78 U	0.78 U	34 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U
BUTANE	NS	0.63 J	NS	NS	1.6	NS	NS	1.1 J
CARBON DISULFIDE	NS	1.6 U	NS	NS	0.14 J	NS	NS	0.20 J
CARBON TETRACHLORIDE	1.3 U	1.3 U	55 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
CHLOROBENZENE	NS	0.92 U	NS	NS	0.92 U	NS	NS	0.92 U

Notes:

Units given in µg/m3 (microgram per cubic meter of air)

U - Compound not detected above listed concentration.

* - Recovery or RPD exceeds control limits.
being functional.

J - Estimated value.

NS - Not sampled.

2013/2014 samples collected during the Site Characterization

TABLE 10
SUMMARY OF AIR SAMPLING RESULTS
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	SV-5		SV-6	SV-7		SV-8		
Sample Type	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Soil Vapor	Dup SV-X	Soil Vapor
Date	1/15/2014	11/30/2017	1/15/2014	1/15/2014	11/30/2017	1/15/2014	1/15/2014	11/30/2017
Units	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
VOCs								
CHLORODIFLUOROMETHANE	NS	1.8 U	NS	NS	1.8 U	NS	NS	1.8 U
CHLOROETHANE	1.3 U	1.3 U	58 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
CHLOROFORM	0.95	0.39 J	43 U	1.2	1.8	0.98 U	0.98 U	1.4
CHLOROMETHANE	NS	1.0 U	NS	NS	1.0 U	NS	NS	0.45 J
CIS-1,2-DICHLOROETHYLENE	0.79 U	0.79 U	240	0.79 U	0.79 U	0.79 U	0.79 U	0.14 J
CIS-1,3-DICHLOROPROPENE	0.91 U	0.91 U	40 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
CYCLOHEXANE	0.68	0.69 U	30 U	0.75	0.69 U	0.69 U	0.69 U	0.69 U
CYMENE	NS	1.1 U	NS	NS	1.1 U	NS	NS	1.1 U
DIBROMOCHLOROMETHANE	1.7 U	1.7 U	75 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
DICHLORODIFLUOROMETHANE	2.5 U	1.5 J	110 U	2.5 U	1.3 J	2.5 U	2.5 U	1.8 J
DICHLOROETHYLENES	NS	1.6 U	NS	NS	1.6 U	NS	NS	0.14 J
ETHYLBENZENE	5.6	0.18 J	38 U	4.6	0.87 U	0.93	1.2	0.39 J
HEXACHLOROBUTADIENE	NS	2.1 U	NS	NS	2.1 U	NS	NS	2.1 U
ISOPROPANOL	NS	1.2 J	NS	NS	3.3 J	NS	NS	1.2 J
ISOPROPYLBENZENE (CUMENE)	NS	0.98 U	NS	NS	0.98 U	NS	NS	0.98 U
M,P-XYLENES	23	0.62 J	96 U	20	0.46 J	4.1	4.4	0.60 J
METHYL ETHYL KETONE (2-BUTANONE)	NS	2.2	NS	NS	6.2	NS	NS	1.8
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	NS	2.0 U	NS	NS	2.0 U	NS	NS	0.39 J
METHYL METHACRYLATE	NS	2.0 U	NS	NS	2.0 U	NS	NS	2.0 U
METHYLENE CHLORIDE	18	0.27 J	76 U	1.7 U	0.40 J	1.7 U	1.7 U	1.7 U
NAPHTHALENE	NS	2.6 U	NS	NS	2.6 U	NS	NS	2.6 U
N-BUTYLBENZENE	NS	1.1 U	NS	NS	1.1 U	NS	NS	1.1 U
N-HEPTANE	2.9	0.82 U	36 U	2.1	0.82 U	0.82 U	0.82 U	0.30 J
N-HEXANE	3.3	0.22 J	31 U	2.3	0.27 J	0.7 U	0.7 U	0.36 J
N-PROPYLBENZENE	NS	0.98 U	NS		0.98 U	NS	NS	0.98 U
O-XYLENE (1,2-DIMETHYLBENZENE)	11	0.23 J	38 U	6.2	0.87 U	6.7	6.4	0.24 J
SEC-BUTYLBENZENE	NS	1.1 U	NS	NS	1.1 U	NS	NS	1.1 U
STYRENE	NS	0.85 U	NS	NS	0.85 U	NS	NS	0.85 U
T-BUTYLBENZENE	NS	1.1 U	NS	NS	1.1 U	NS	NS	1.1 U
TERT-BUTYL ALCOHOL	NS	15 U	NS	NS	8.8 J	NS	NS	8.2 J
TERT-BUTYL METHYL ETHER	0.72 U	0.72 U	32 U	0.72 U	0.72 U	0.72 U	0.72 U	0.72 U
TETRACHLOROETHYLENE(PCE)	2.5	2.9	60 U	1.4 U	0.14 J	1.4 U	1.4 U	3.2
TETRAHYDROFURAN	NS	15 U	NS	NS	15 U	NS	NS	15 U
TOLUENE	24	0.61 J	33 U	24	0.49 J	1.9	1.7	0.66 J
TRANS-1,2-DICHLOROETHENE	0.79 U	0.79 U	35 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
TRANS-1,3-DICHLOROPROPENE	0.91 U	0.91 U	40 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
TRICHLOROETHYLENE (TCE)	3.9	1.1 U	4,200	1.1 U	0.40 J	1.1 U	1.1 U	120
TRICHLOROFLUOROMETHANE	1.1 U	0.80 J	49 U	1.1 U	0.45 J	1.2	1.2	0.78 J
VINYL CHLORIDE	0.51 U	0.51 U	22 U	0.51 U	0.51 U	0.51 U	0.51 U	0.51 U
XYLENES, TOTAL	34	0.84 J	38 U	26	0.48 J	11	11	0.84 J

Notes:

Units given in µg/m3 (microgram per cubic meter of air)

U - Compound not detected above listed concentration.

* - Recovery or RPD exceeds control limits.

**- "SV-T" is the temporary soil vapor point installed in place of SV-9 not being functional.

J - Estimated value.

NS - Not sampled.

2013/2014 samples collected during the Site Characterization

TABLE 10
SUMMARY OF AIR SAMPLING RESULTS
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	SV-T **	SV-10	SV-11		SV-12
Sample Type	Soil Vapor	Soil Vapor	Soil Vapor	SVDUP-1	Soil Vapor
Date	11/30/2017	11/30/2017	11/30/2017	11/30/2017	11/30/2017
Units	µg/m^3	µg/m3	µg/m3	µg/m3	µg/m3
VOCs					
1,1,1-TRICHLOROETHANE	4.4 U	1.1 U	0.73 J	0.72 J	1.1 U
1,1,2,2-TETRACHLOROETHANE	5.5 U	1.4 U	1.4 U	1.4 U	1.4 U
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	6.1 U	0.27 J	0.33 J	0.37 J	0.37 J
1,1,2-TRICHLOROETHANE	4.4 U	1.1 U	1.1 U	1.1 U	1.1 U
1,1-DICHLOROETHANE	3.2 U	0.81 U	0.81 U	0.81 U	0.81 U
1,1-DICHLOROETHENE	3.2 U	0.79 U	0.79 U	0.79 U	0.79 U
1,2,4-TRICHLOROBENZENE	15 U	3.7 U	3.7 U	3.7 U	3.7 U
1,2,4-TRIMETHYLBENZENE	7.5	9.4	3.9	4.0	13
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)	6.1 U	1.5 U	1.5 U	1.5 U	1.5 U
1,2-DICHLOROBENZENE	4.8 U	1.2 U	1.2 U	1.2 U	1.2 U
1,2-DICHLOROETHANE	3.2 U	0.81 U	0.81 U	0.81 U	0.81 U
1,2-DICHLOROETHENE, TOTAL	6.3 U	1.6 U	1.6 U	1.6 U	1.6 U
1,2-DICHLOROPROPANE	3.7 U	0.92 U	0.92 U	0.92 U	0.92 U
1,2-DICHLOROTETRAFLUOROETHANE	5.6 U	1.4 U	1.4 U	1.4 U	1.4 U
1,3,5-TRIMETHYLBENZENE (MESITYLENE)	3.6 J	2.9	1.2	1.2	3.4
1,3-BUTADIENE	1.8 U	0.44 U	0.44 U	0.44 U	0.44 U
1,3-DICHLOROBENZENE	4.8 U	1.2 U	0.42 J	0.41 J	1.2 U
1,4-DICHLOROBENZENE	4.8 U	1.2 U	1.2 U	1.2 U	1.2 U
1,4-DIOXANE (P-DIOXANE)	72 U	18 U	18 U	18 U	18 U
2,2,4-TRIMETHYLPENTANE	2.2 J	0.56 J	1.1	1.1	0.46 J
2-CHLOROTOLUENE	4.1 U	0.43 J	1.0 U	0.19 J	0.52 J
2-HEXANONE	8.2 U	0.45 J	2.0 U	2.0 U	2.0 U
4-ETHYLTOLUENE	2.9 J	2.9	1.1	1.1	3.7
ACETONE	170	18	32	31	16
ALLYL CHLORIDE (3-CHLOROPROPENE)	6.3 U	1.6 U	1.6 U	1.6 U	1.6 U
BENZENE	1.5 J	0.51 J	0.50 J	0.52 J	0.83
BENZYL CHLORIDE	4.1 U	1.0 U	1.0 U	1.0 U	1.0 U
BROMODICHLOROMETHANE	5.4 U	1.3 U	1.3 U	1.3 U	1.3 U
BROMOETHENE	3.5 U	0.87 U	0.87 U	0.87 U	0.87 U
BROMOFORM	8.3 U	2.1 U	2.1 U	2.1 U	2.1 U
BROMOMETHANE	3.1 U	0.78 U	0.78 U	0.78 U	0.78 U
BUTANE	8.1	0.27 J	1.8	1.9	0.30 J
CARBON DISULFIDE	1.7 J	0.99 J	0.75 J	0.67 J	0.28 J
CARBON TETRACHLORIDE	5.0 U	1.3	1.3 U	0.067 J	1.3 U
CHLOROBENZENE	3.7 U	0.92 U	0.92 U	0.92 U	0.92 U

Notes:

Units given in µg/m3 (microgram per cubic meter of air)

U - Compound not detected above listed concentration.

* - Recovery or RPD exceeds control limits.

being functional.

J - Estimated value.

NS - Not sampled.

2013/2014 samples collected during the Site Characterization

TABLE 10
SUMMARY OF AIR SAMPLING RESULTS
REMEDIAL INVESTIGATION
222 SOUTH FERRY STREET (SITE #447047)
SCHENECTADY, NEW YORK

Sample ID	SV-T **	SV-10	SV-11		SV-12
Sample Type	Soil Vapor	Soil Vapor	Soil Vapor	SVDUP-1	Soil Vapor
Date	11/30/2017	11/30/2017	11/30/2017	11/30/2017	11/30/2017
Units	µg/m^3	µg/m3	µg/m3	µg/m3	µg/m3
VOCs					
CHLORODIFLUOROMETHANE	7.1 U	1.8 U	1.8 U	1.8 U	1.8 U
CHLOROETHANE	5.3 U	1.3 U	1.3 U	1.3 U	1.3 U
CHLOROFORM	2.9 J	2.6	10	10	0.14 J
CHLOROMETHANE	4.1 U	1.0 U	1.0 U	0.36 J	1.0 U
CIS-1,2-DICHLOROETHYLENE	3.2 U	0.79 U	0.79 U	0.79 U	0.79 U
CIS-1,3-DICHLOROPROPENE	3.6 U	0.91 U	0.91 U	0.91 U	0.91 U
CYCLOHEXANE	1.2 J	0.56 J	0.48 J	0.50 J	0.50 J
CYMENE	4.4 U	1.1 U	1.1 U	1.1 U	0.36 J
DIBROMOCHLOROMETHANE	6.8 U	1.7 U	1.7 U	1.7 U	1.7 U
DICHLORODIFLUOROMETHANE	2.0 J	1.2 J	1.4 J	1.4 J	1.7 J
DICHLOROETHYLENES	6.3 U	1.6 U	1.6 U	1.6 U	1.6 U
ETHYLBENZENE	4.9	5.2	3.6	3.6	7.1
HEXACHLOROBUTADIENE	8.5 U	2.1 U	2.1 U	2.1 U	2.1 U
ISOPROPANOL	67	0.89 J	1.2 J	1.1 J	0.45 J
ISOPROPYLBENZENE (CUMENE)	1.6 J	0.49 J	0.32 J	0.33 J	0.56 J
M,P-XYLENES	19	19	13	14	25
METHYL ETHYL KETONE (2-BUTANONE)	87	1.9	16	16	1.4 J
METHYL ISOBUTYL KETONE (4-METHYL-2-PENTANONE)	5.4 J	2.0 U	0.61 J	0.61 J	2.0 U
METHYL METHACRYLATE	8.2 U	2.0 U	2.0 U	2.0 U	2.0 U
METHYLENE CHLORIDE	6.9 U	0.25 J	0.25 J	0.26 J	1.7 U
NAPHTHALENE	10 U	2.6 U	2.6 U	2.6 U	0.80 J
N-BUTYLBENZENE	4.4 U	1.1 U	1.1 U	1.1 U	0.62 J
N-HEPTANE	2.3 J	1.5	1.0	1.0	1.8
N-HEXANE	2.3 J	1.3	0.70	0.78	1.5
N-PROPYLBENZENE	2.5 J	2.0	0.78 J	0.78 J	2.5
O-XYLENE (1,2-DIMETHYLBENZENE)	7.0	7.3	4.7	4.7	9.2
SEC-BUTYLBENZENE	4.4 U	0.20 J	1.1 U	1.1 U	0.25 J
STYRENE	3.4 U	0.85 U	0.85 U	0.85 U	0.17 J
T-BUTYLBENZENE	4.4 U	1.1 U	1.1 U	1.1 U	1.1 U
TERT-BUTYL ALCOHOL	61 U	15 U	15 U	15 U	15 U
TERT-BUTYL METHYL ETHER	0.63 J	0.72 U	0.72 U	0.72 U	0.72 U
TETRACHLOROETHYLENE(PCE)	1.3 J	1.4	3.6	3.6	0.55 J
TETRAHYDROFURAN	55 J	15 U	80	81	15 U
TOLUENE	11	10	6.6	6.7	16
TRANS-1,2-DICHLOROETHENE	3.2 U	0.79 U	0.79 U	0.79 U	0.79 U
TRANS-1,3-DICHLOROPROPENE	3.6 U	0.91 U	0.91 U	0.91 U	0.91 U
TRICHLOROETHYLENE (TCE)	4.3 U	0.11 J	1.1 U	1.1 U	120
TRICHLOROFLUOROMETHANE	0.69 J	0.50 J	1.1	1.1	0.84 J
VINYL CHLORIDE	2.0 U	0.51 U	0.51 U	0.51 U	0.51 U
XYLENES, TOTAL	26	26	18	19	34

Notes:

Units given in µg/m3 (microgram per cubic meter of air)

U - Compound not detected above listed concentration.

* - Recovery or RPD exceeds control limits.

**- "SV-T" is the temporary soil vapor point installed in place of SV-9 not being functional.

J - Estimated value.

NS - Not sampled.

2013/2014 samples collected during the Site Characterization

APPENDIX A

Geophysical Survey Report

Radar Solutions International, Inc.™

RSI Geophysics for People and the Environment

November 20th, 2017

Mr. Stefan Bagnato
Senior Geologist
ARCADIS
855 Route 146, Suite 210
Clifton Park, New York, 12065

Via E-Mail: stefan.bagnato@arcadis.com

RE: Borehole Clearance and Utility Locating
Using GPR and EM Induction
222 Ferry Street
Schenectady, New York

Dear Stefan,

In accordance with your authorization, Radar Solutions International (RSI) conducted ground penetrating radar (GPR) and EM Induction (EMI) surveys at the above-referenced site in Schenectady, New York on November 6th, 2017. The purpose of this geophysical survey was to determine the location and depth of any possible utilities, and other obstructions, that might impact the upcoming drilling schedule. RSI's finalized survey results and interpretations are summarized below.

We appreciate the opportunity to conduct this work for ARCADIS. Please do not hesitate to call should you have further questions and comments regarding this report, and we look forward to working again with ARCADIS in the future.

Sincerely,

RADAR SOLUTIONS INTERNATIONAL, Inc.

Doria L. Kutrubes

Cameron A Russ

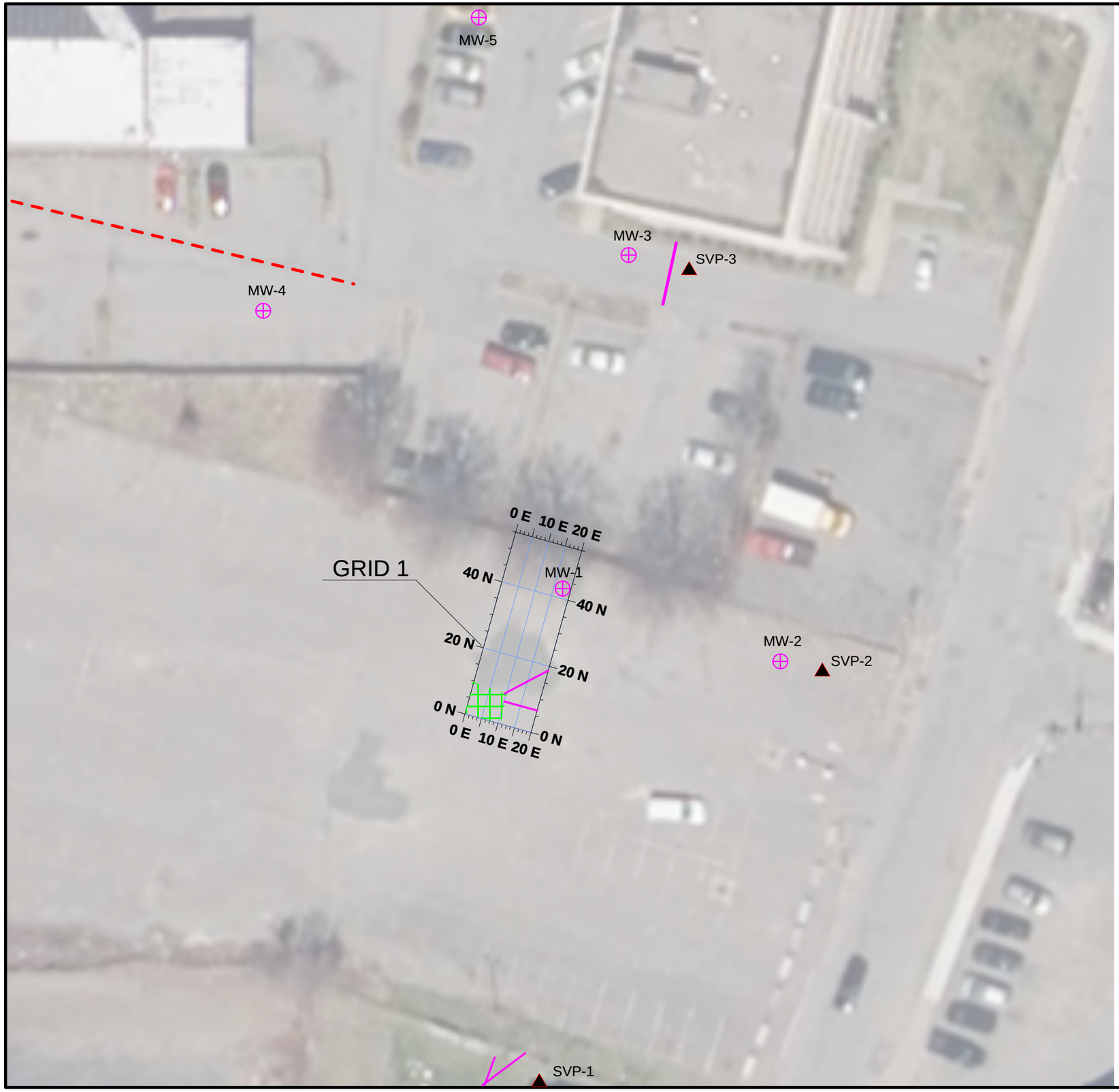
Doria Kutrubes, M.Sc., P.G.
President and Sr. Geophysicist

Cameron Russ
Geophysicist & GIS Analyst

RSI Geophysics for People and the Environment
Radar Solutions International, Inc.™

BORING/MW LOCATION	PROPOSED LOCATION	PROPOSED RE-LOCATION	COMMENTS
MW-1	17.5X,42.5Y	N/A	Proposed location clear of obstructions.
MW-2	5X,9Y	2.5X,8Y	Proposed location moved away from potential obstruction at 7.5X,10Y.
MW-3	7.5X.7.5Y	N/A	Proposed location clear of obstructions.
MW-4	5X,5Y	5X,2.5Y	Proposed location moved to area most clear of GPR anomalies.
MW-5	5X,5Y	4X,5Y	Proposed location moved to area most clear of GPR anomalies.
SVP-1	N/A	10X,7.5Y	Recommended location moved away from possible utility trending from (2.5X,0Y) to (5X,10Y).
SVP-2	15X,10Y	N/A	Looks OK.
SVP-3	N/A	25X,7.5Y	Proposed location moved away from potential utility trending along 22.5X.

*GPR Data were collected and reduced within Grid 1 (Figure 1) to determine the presence of a UST. The GPR signal penetration was good with a depth ranging between 5-7 Feet. Flat reflectors were detected within the possible UST area observed real time, however no GPR reflectors were detected that are often associated with a UST. The flat gpr anomalies that were detected within this investigative area could be a buried reinforced concrete pad. RSI does recommend further test pitting to confirm these finding, however, we do not suspect a UST is located within that scanned area.



LEGEND

- Recommended Monitoring Well Location
- Recommended SVP location

Utilities Detected by EMI:

- Electrical (60 Hz) Live
- Gas
- Telephone
- Storm Drain
- Water
- Sewer

- Unkown Utility Detected with GPR
- Possible UST (Indicated by GPR)

COORDINATE SYSTEM

UTM 18N - WGS 1984
US SURVEY FEET

SCALE: 1 Inch = 30 Feet

30 0 30 Feet

FIGURE 1
GPR BOREHOLE CLEARNCE RESULTS WITH EMI

222 FERRY STREET
SCHENECTADY, NEW YORK

Prepared for
ARCADIS
NOVEMBER 2017

RSI Geophysics for People and the Environment
Radar Solutions International, Inc.™

APPENDIX B

Soil Vapor Sampling Logs

ARCADIS

Soil-Vapor Sample Log

Sample ID: SV-1 (113017)
Date: 11-30-17
Time: 0959
Weather: 30's, sunny

Project/No.: 00266444.0000
Sampling Personnel: A. Thomey
E. Sousa

DESCRIPTION OF SAMPLE LOCATION:

✓ Outdoor

Location: Shrubby area of parking lot
Est. depth to water (ft): ~6' bgs
Soil type: –
Odor: –
Color: –

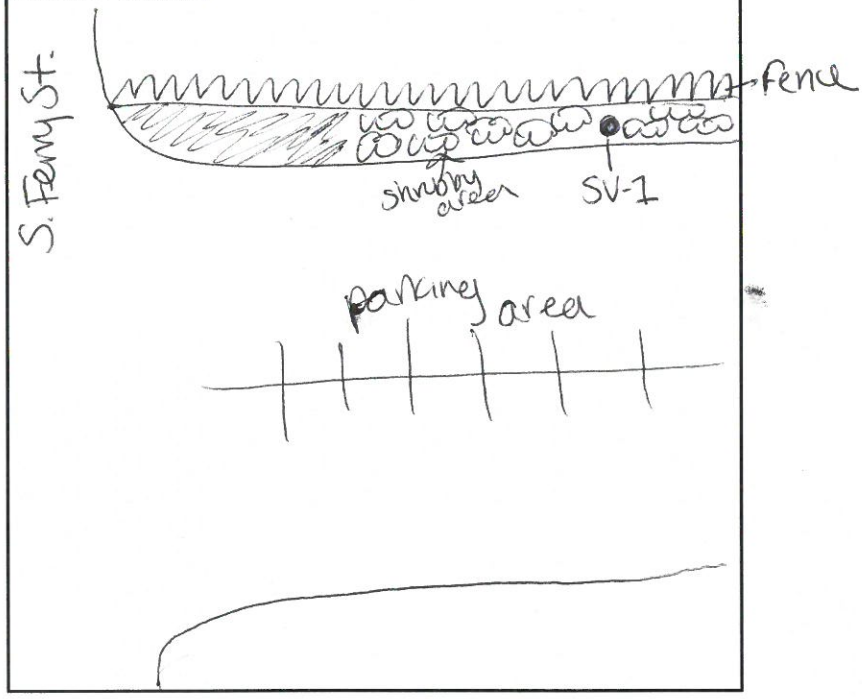
Indoor

Location:
Basement: yes / no
Room size ft x ft:
Floor material: cement / wood / dirt
Slab Thickness (ft):
Visible cracks?: yes / no
Sub-slab material: dirt / gravel

PROBE INSTALLATION:

Date: Installed prior to this
Method: sampling event.
Diameter: Permanent point.
Depth:
Packing material:

Location Sketch:



PURGE:

Date: 11-30-17
Time: 0959
Rate: 2hr regulator
Volume: 6L

SAMPLE COLLECTION:

Sample Time: 0959 | 1210
Sample Rate: 2hr regulator
Sample Volume: 6L

CONTAINER DESCRIPTION:

6 L Summa Canister

Notes: Helium tested. Canister ID: 2876 Flow regulator ID: 3133
Pressure before collection: -30
Pressure after collection: -6

ARCADIS

Soil-Vapor Sample Log

Sample ID: SV-2 (113017)
Date: 11-30-17
Time: 1002
Weather: 30's, sunny

Project/No.: 00216164444.0000
Sampling Personnel: A. Thomas
E. Sousa

DESCRIPTION OF SAMPLE LOCATION:

✓ Outdoor

Location: West side of parking lot
Est. depth to water (ft): 5.5'
Soil type: –
Odor: –
Color: –

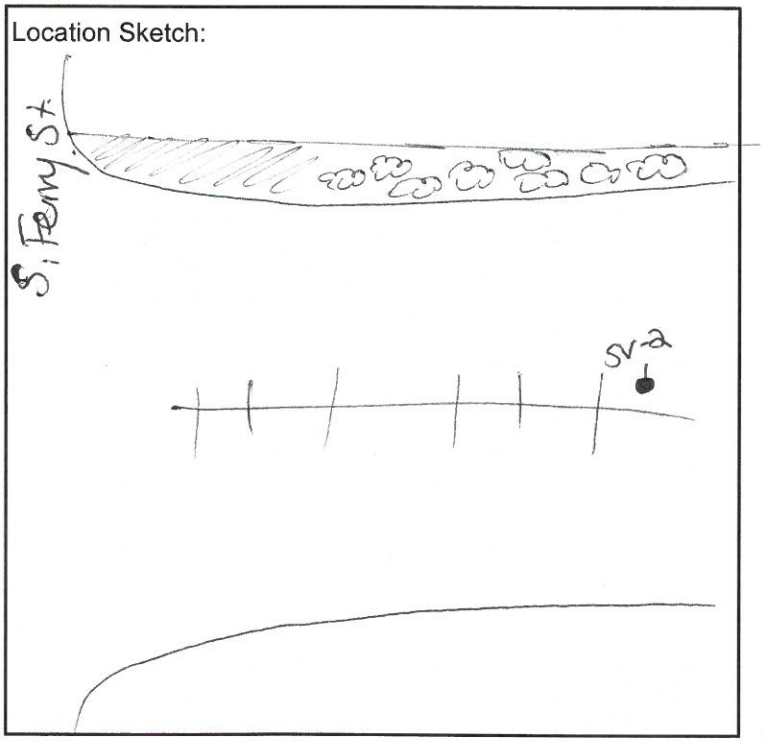
Indoor

Location:
Basement: yes / no
Room size ft x ft:
Floor material: cement / wood / dirt
Slab Thickness (ft):
Visible cracks?: yes / no
Sub-slab material: dirt / gravel

PROBE INSTALLATION:

Date: Installed prior to this
Method: sampling event.
Diameter: Permanent point.
Depth:
Packing material:

Location Sketch:



PURGE:

Date: 11-30-17
Time: 1002
Rate: 2hr regulator
Volume: 6L

SAMPLE COLLECTION:

Sample Time: 1002 / 1229
Sample Rate: 2hr regulator
Sample Volume: 6L

CONTAINER DESCRIPTION:

6 L Summa Canister

Notes: Helium tested. Canister ID: 4118 Flow regulator ID: 5182
Pressure before collection: -30
Pressure after collection: -6

ARCADIS

Soil-Vapor Sample Log

Sample ID: SV-4 (113017)
Date: 11-30-17
Time: 1005
Weather: 30s, sunny

Project/No.: 00266444.0000
Sampling Personnel: A. Thomas
E. Sousa

DESCRIPTION OF SAMPLE LOCATION:

✓ Outdoor

Location: Center of parking lot
Est. depth to water (ft): 5.5'
Soil type: –
Odor: –
Color: –

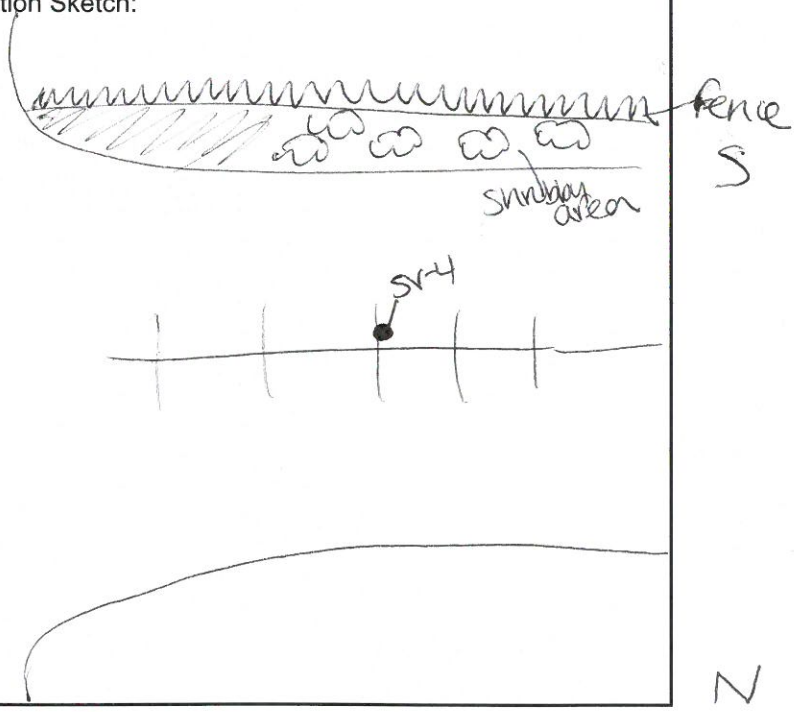
Indoor

Location:
Basement: yes / no
Room size ft x ft:
Floor material: cement / wood / dirt
Slab Thickness (ft):
Visible cracks?: yes / no
Sub-slab material: dirt / gravel

PROBE INSTALLATION:

Date: Installed prior to this
Method: sampling event.
Diameter: Permanent point
Depth:
Packing material:

Location Sketch:



PURGE:

Date: 11-30-17
Time: 1005
Rate: 2hr regulator
Volume: 6L

SAMPLE COLLECTION:

Sample Time: 1005 | 1159
Sample Rate: 2hr ~~control~~ regulator
Sample Volume: 6L

CONTAINER DESCRIPTION:

6 L Summa Canister

Notes: Helium tested Canister ID: 5696 Flow regulator ID: 5212
Pressure before collection: -30
Pressure after collection: -6.5

ARCADIS

Soil-Vapor Sample Log

Sample ID: SV-5 (113017)
Date: 11-30-17
Time: 1014
Weather: 30's, sunny

Project/No.: 03266444.0000
Sampling Personnel: A. Thorney
E. Sauser

DESCRIPTION OF SAMPLE LOCATION:

✓ Outdoor

Location: North edge of parking lot
Est. depth to water (ft): 4.5'
Soil type: -
Odor: -
Color: -

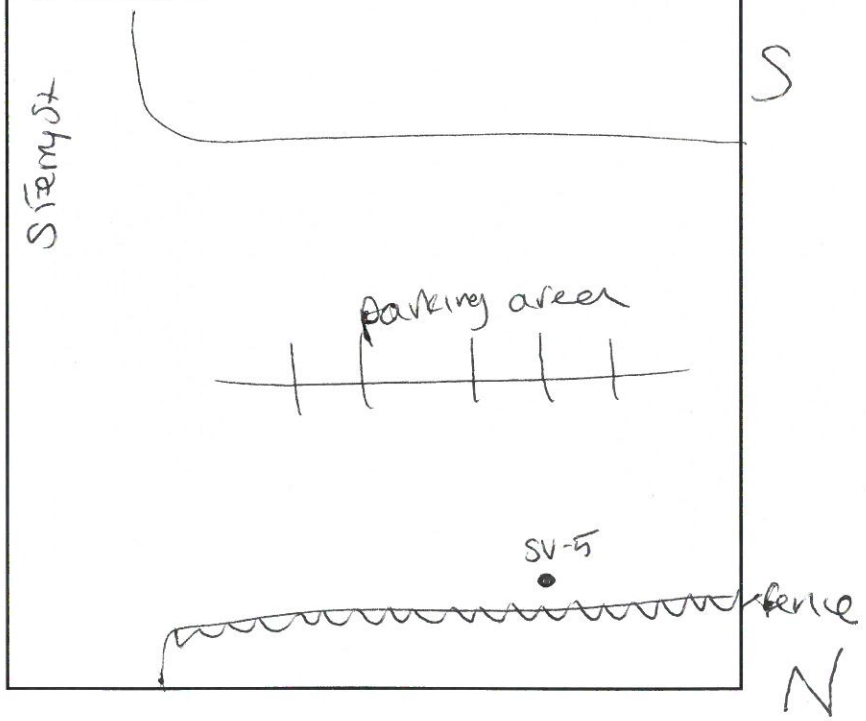
____ Indoor

Location:
Basement: yes / no
Room size ft x ft:
Floor material: cement / wood / dirt
Slab Thickness (ft):
Visible cracks?: yes / no
Sub-slab material: dirt / gravel

PROBE INSTALLATION:

Date: Installed prior to this sampling event.
Method: Permanent point
Diameter:
Depth:
Packing material:

Location Sketch:



PURGE:

Date: 11-30-17
Time: 1014
Rate: 2hr regulator
Volume: 6L

SAMPLE COLLECTION:

Sample Time: 1014 | 1211
Sample Rate: 2hr regulator
Sample Volume: 6L

CONTAINER DESCRIPTION:

6 L Summa Canister

Notes: Helium tested Canister ID: 4791 Flow regulator ID: 21667
Pressure before collection: -30
Pressure after collection: -6

ARCADIS

Soil-Vapor Sample Log

Sample ID: SV-7 (113017)
Date: 11-30-17
Time: 1008
Weather: 30s, sunny

Project/No.: 00216644.0000
Sampling Personnel: A. Thomas
E. Sousa

DESCRIPTION OF SAMPLE LOCATION:

✓ Outdoor

Location: East side of parking lot
Est. depth to water (ft): ~6'
Soil type: –
Odor: –
Color: –

Indoor

Location:
Basement: yes / no
Room size ft x ft:
Floor material: cement / wood / dirt
Slab Thickness (ft):
Visible cracks?: yes / no
Sub-slab material: dirt / gravel

PROBE INSTALLATION:

Date: Installed prior to this sampling event.
Method:
Diameter: Permanent point.
Depth:
Packing material:

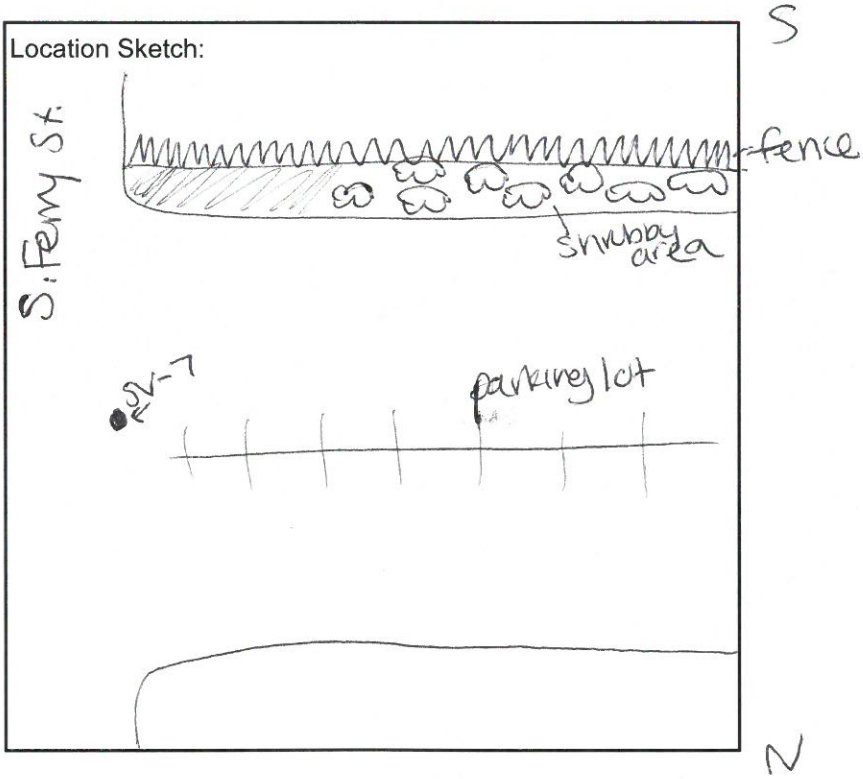
PURGE:

Date: 11-30-17
Time: 1008
Rate: 2hr regulator
Volume: 6L

SAMPLE COLLECTION:

Sample Time: 1008 / 1202
Sample Rate: 2hr regulator
Sample Volume: 6L

Location Sketch:



CONTAINER DESCRIPTION:

6 L Summa Canister

Notes: Helium tested. Canister ID: 3540 Flow regulator ID: 4187
Pressure before collection: -29
Pressure after collection: -6.5

ARCADIS

Soil-Vapor Sample Log

Sample ID: SV-8 (113017)
Date: 11-30-17
Time: 0955
Weather: 30's, sunny

Project/No.: 00266444.0000
Sampling Personnel: A. Thomey, E. Sousa

DESCRIPTION OF SAMPLE LOCATION:

✓ Outdoor

Location: grassy area of parking lot
Est. depth to water (ft): ~ 6'
Soil type: –
Odor: –
Color: –

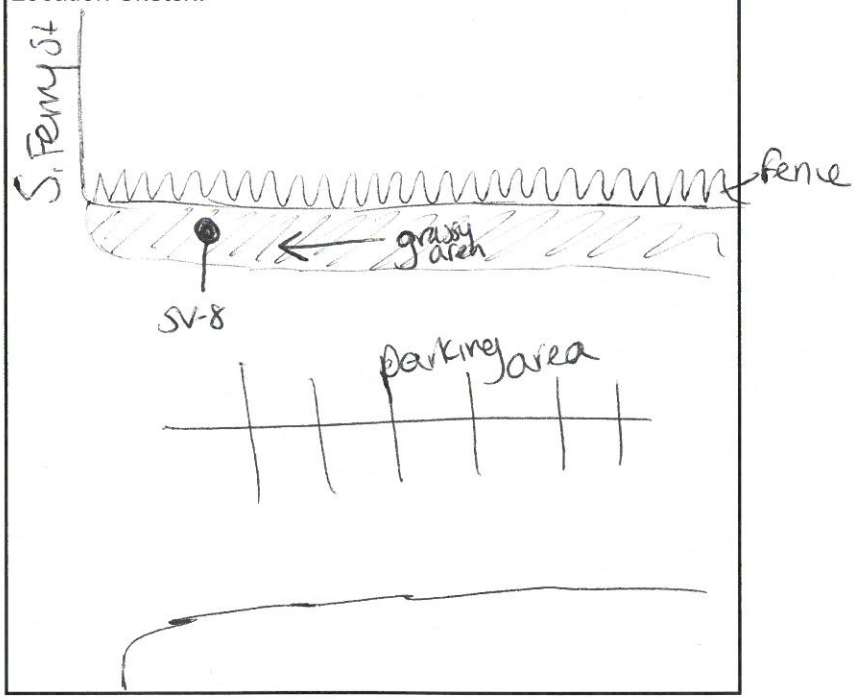
Indoor

Location:
Basement: yes / no
Room size ft x ft:
Floor material: cement / wood / dirt
Slab Thickness (ft):
Visible cracks?: yes / no
Sub-slab material: dirt / gravel

PROBE INSTALLATION: Installed prior to sampling (permanent point)

Date:
Method:
Diameter:
Depth:
Packing material:

Location Sketch:



PURGE:

Date: 11-30-17
Time: 0955 | 1209
Rate: 2hr (controller)
Volume: 6L

SAMPLE COLLECTION:

Sample Time: 0955 | 1209
Sample Rate: 2hr (controller)
Sample Volume: 6L

CONTAINER DESCRIPTION:

6 L Summa Canister

Notes: Helium tested. Canister ID: 5412 Flow Regulator ID: 3683
Pressure Before collection: -30
Pressure After collection: -6.5

ARCADIS

Soil-Vapor Sample Log

Sample ID: SV-10 (113017)
Date: ~~11-30~~ 11-30-17
Time: 1017
Weather: 30's, sunny

Project/No.: 60266444.0000
Sampling Personnel: A. Thomas
E. Souser

DESCRIPTION OF SAMPLE LOCATION:

✓ Outdoor

Location: North side of parking lot
Est. depth to water (ft): ~~4~~ 5'
Soil type: –
Odor: –
Color: –

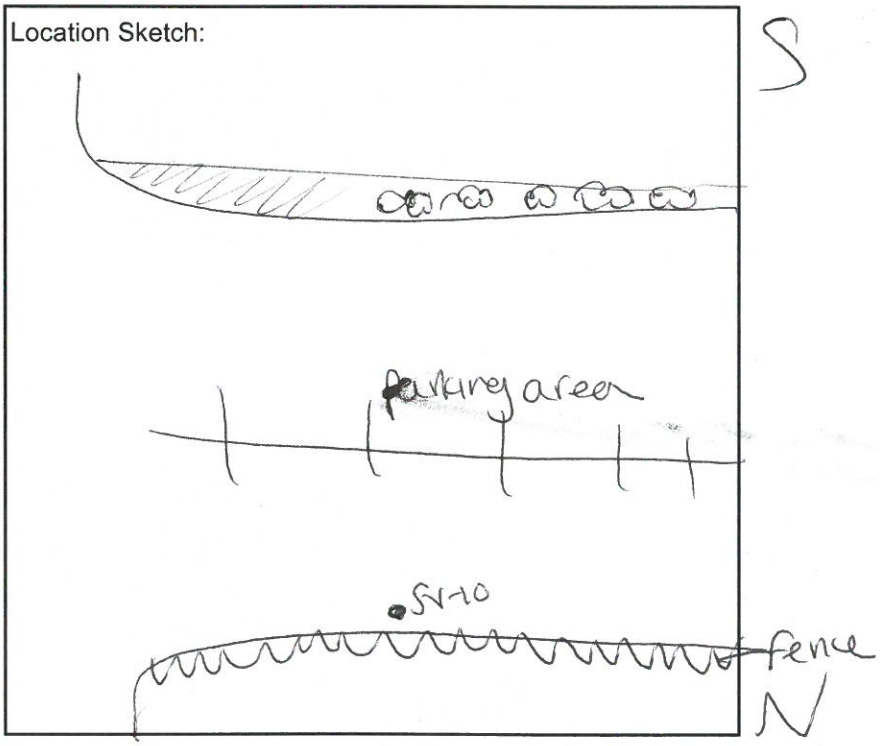
Indoor

Location:
Basement: yes / no
Room size ft x ft:
Floor material: cement / wood / dirt
Slab Thickness (ft):
Visible cracks?: yes / no
Sub-slab material: dirt / gravel

PROBE INSTALLATION:

Date: 11-13-17
Method: hand auger
Diameter: 3" hole
Depth: 4.5' bgs
Packing material: #1 Filpro Sand + Bentonite Bentonite seal

Location Sketch:



PURGE:

Date: 11-30-17
Time: 1017
Rate: 2hr regulator
Volume: 6L

SAMPLE COLLECTION:

Sample Time: 1017 | 1205
Sample Rate: 2hr regulator
Sample Volume: 6L

CONTAINER DESCRIPTION:

6 L Summa Canister

Notes: Helium tested. Canister ID: 5690 Flow regulator ID: 3746
Pressure before collection: -27
Pressure after collection: -1.5

ARCADIS

Soil-Vapor Sample Log

Sample ID: SV-11 (113017)
Date: 11-30-17
Time: 1028
Weather: 30's, sunny

Project/No.: 06266444.0000
Sampling Personnel: A. Thomas
E. Sousa

DESCRIPTION OF SAMPLE LOCATION:

✓ Outdoor

Location: North of parking lot in adjacent roadway
Est. depth to water (ft): ~7'
Soil type: -
Odor: -
Color: -

Indoor

Location:
Basement: yes / no
Room size ft x ft:
Floor material: cement / wood / dirt
Slab Thickness (ft):
Visible cracks?: yes / no
Sub-slab material: dirt / gravel

PROBE INSTALLATION:

Date: 11-13-15
Method: hand digging
Diameter: 3" hole
Depth: 4' bgs
Packing material: #1 Fil Pro Sand & Benseal Bentonite

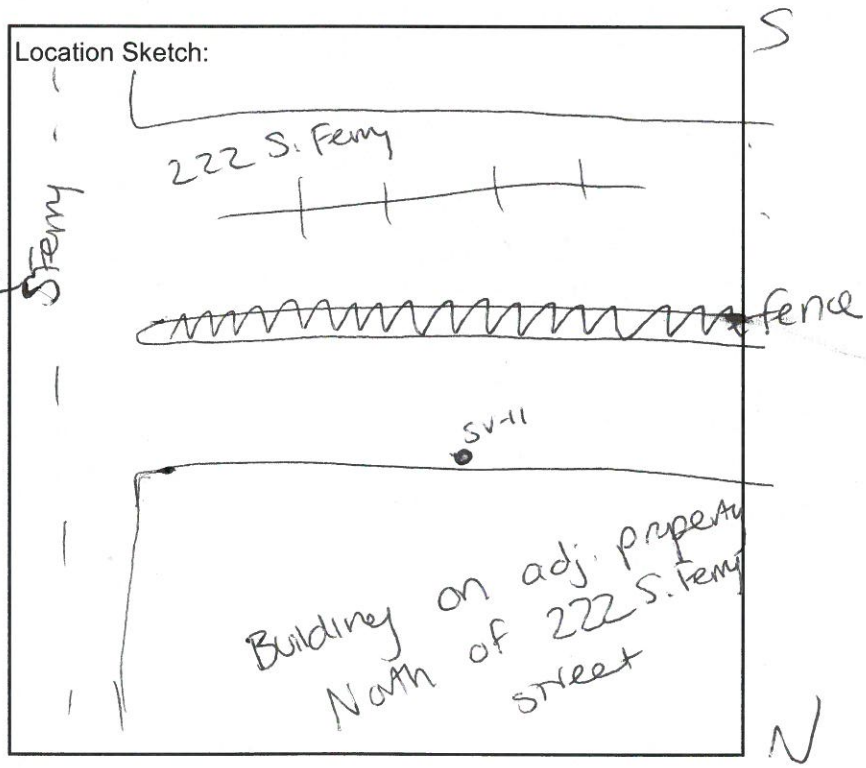
PURGE:

Date: 11-30-17
Time: 1028
Rate: 2hr controller
Volume: 6L

SAMPLE COLLECTION:

Sample Time: 1028 / 1232
Sample Rate: 2hr controller
Sample Volume: 6L

Location Sketch:



CONTAINER DESCRIPTION:

6 L Summa Canister

Notes: Helium tested. Canister ID: 3281 Flow regulator ID: 5179
Pressure before collection: -30 , -30 (DUP)
Pressure after collection: -6.5 -6.5 (DUP)
Collected SVDUP-1 @ this location

ARCADIS

Soil-Vapor Sample Log

Sample ID: SV-12(113017)
Date: 11-30-17
Time: 0956
Weather: 30s, sunny

Project/No.: 30216644.0000
Sampling Personnel: A. Thorney
E. Sauser

DESCRIPTION OF SAMPLE LOCATION:

✓ Outdoor

Location: Shrubby area of parking lot
Est. depth to water (ft): ~6'
Soil type: –
Odor: –
Color: –

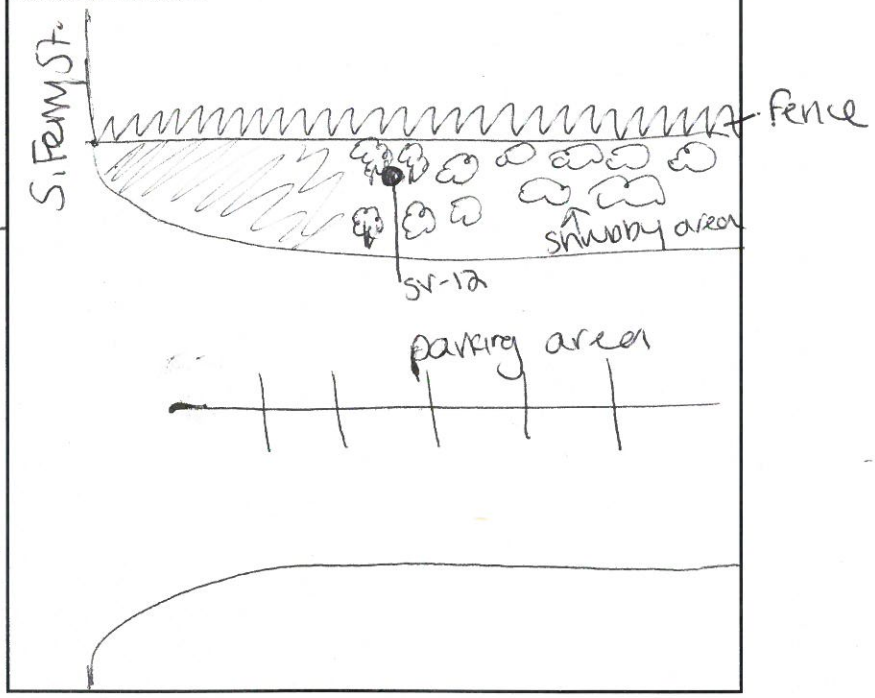
Indoor

Location:
Basement: yes / no
Room size ft x ft:
Floor material: cement / wood / dirt
Slab Thickness (ft):
Visible cracks?: yes / no
Sub-slab material: dirt / gravel

PROBE INSTALLATION:

Date: 11-13-17
Method: Hand digging
Diameter: 3" hole
Depth: 4.5' bgs
Packing material: #1 Fil Pro Sand + Bensead Bentonite

Location Sketch:



PURGE:

Date: 11-30-17
Time: 0956
Rate: 2hr controller
Volume: 6L

SAMPLE COLLECTION:

Sample Time: 0956 | 1156
Sample Rate: 2hr flow controller
Sample Volume: 6L

CONTAINER DESCRIPTION:

6 L Summa Canister

Notes: Helium tested. Canister ID: 5427 Flow regulator ID: 3717
Pressure before collection: -30
Pressure After collection: -6.5

ARCADIS

Soil-Vapor Sample Log

Sample ID: SV-T (113017)
Date: 11-30-17
Time: 1020
Weather: 30s, sunny

Project/No.: 00216044.0000
Sampling Personnel: A. Thomas
E. Sousa

DESCRIPTION OF SAMPLE LOCATION:

✓ Outdoor

Location: North of parking lot on parking island
Est. depth to water (ft): ~~6~~ 6.5'
Soil type: -
Odor: -
Color: -

Indoor

Location:
Basement: yes / no
Room size ft x ft:
Floor material: cement / wood / dirt
Slab Thickness (ft):
Visible cracks?: yes / no
Sub-slab material: dirt / gravel

PROBE INSTALLATION:

Date: 11-30-17
Method: hand digging
Diameter: 3" hole
Depth: 3' bgs.
Packing material: #1 FilPro Sand + Bented Bentonite

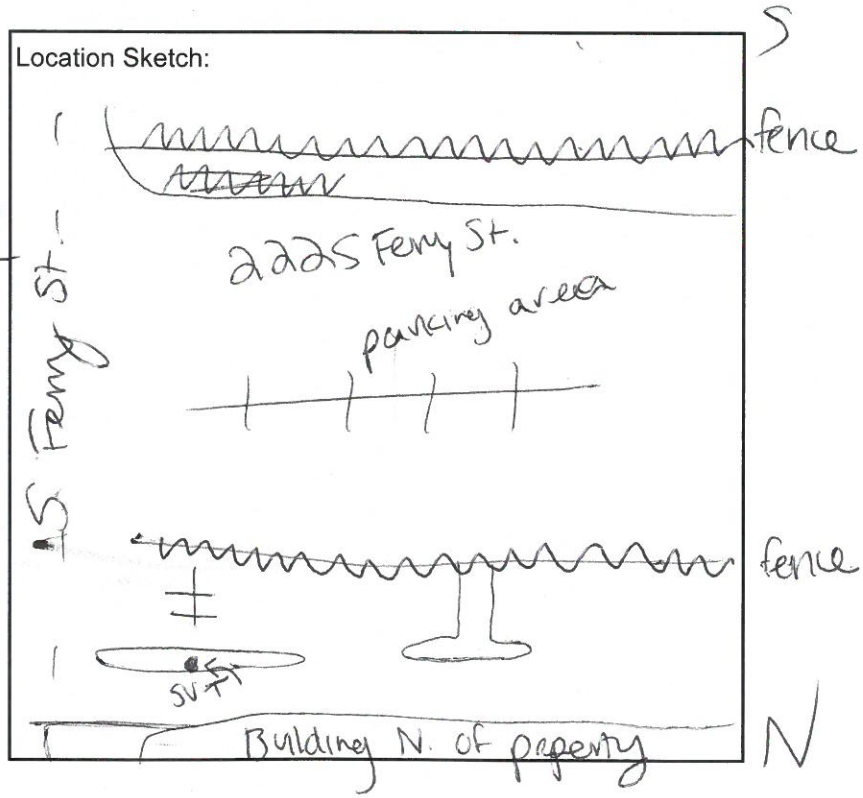
PURGE:

Date: 11-30-17
Time: 1020
Rate: 2hr regulator
Volume: 6L

SAMPLE COLLECTION:

Sample Time: 1020 / 1215
Sample Rate: 2hr regulator
Sample Volume: 6L

Location Sketch:



CONTAINER DESCRIPTION:

6 L Summa Canister

Notes: Helium tested. Canister ID: 3281 Flow regulator ID: 5179
Pressure before collection: -30
Pressure after collection: -6.5

Indoor / Ambient Air Sample Log

ARCADIS Design & Consultancy for natural and built assets

Project Name: 222 Sath Ferry St. Date: 11-30-17

Project Number: 60266444.0000 Samplers: AThomas & ESasser

Weather: 30s, sunny Sample ID: OA-1 (113017)

Wind Speed/Dir ~10-15mph to Sath Precipitation w/in preceeding 12 hours? Y (N)

Current Building Type: Residential Commercial Industrial N/A

Building Construction Characteristics (e.g., rancher, apartment): N/A

General Description of Building Materials (e.g., concrete, cinder block): N/A

CHARACTERISTICS OF SAMPLE LOCATION

Finished	**Floor**	**Foundation Walls**	**Moisture**
Unfinished	Concrete	Concrete	Wet
	Dirt	Block	Damp
	Other _____	Layed up stone	Dry

~~In Parking lot~~

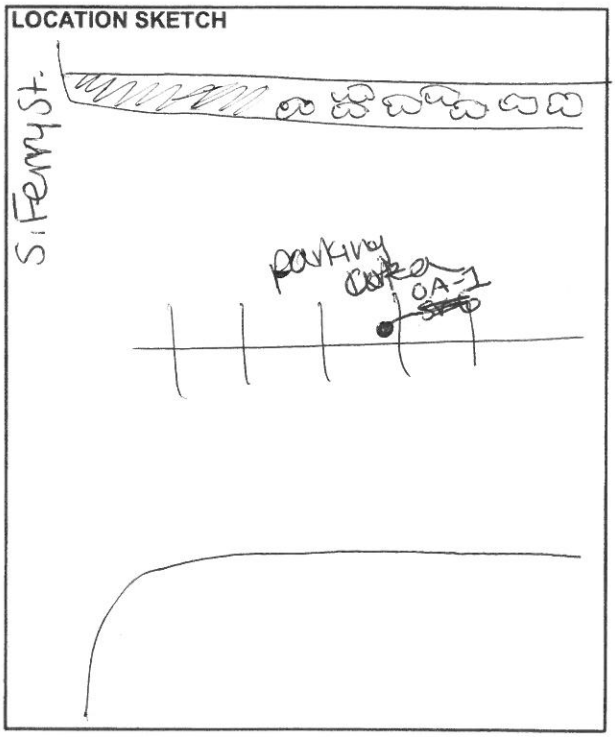
DESCRIPTION OF SAMPLE LOCATION

Location In Parking lot

Floor Level Basement / 1st Floor

Room size ft x ft _____

LOCATION SKETCH



SAMPLE COLLECTION

Sample Time Start: 1011

Sample Time End: 1204

Sample Rate 2hr regulator

Sample Volume 6L

Sample Depth –

CONTAINER DESCRIPTION

Summa Canister 6 L

Flow Regulator 2hr

Canister ID 5116

Canister Press. Before Collection: -27

Canister Press. After Collection: -3.5

ANALYTICAL METHOD

TO-15

GENERAL OBSERVATIONS/NOTES

Placed canister on top of lab cooler, placed cooler directly over SV-6 location.

Helium tested. Canister ID: 5116 Flow regulator ID: 2528

APPENDIX C

Soil Boring and Well Construction Logs

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well **MW-17** Project/No. 00266444.0000 Page **1** of **1**

Site Location **222 South Ferry Street Schenectady NY** Drilling Started **11/14/2017** Drilling Completed **11/14/2017**

Drilling Contractor **Aztech Technologies** Driller **Tim** Helper **Garth/Bill**

Drilling Fluid Used **N/A** Drilling Method **Hollow Stem Auger**

Length and Diameter of Coring Device **5'/1.5" diameter** Sampling Interval 5 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Total Depth Drilled 15.0 Feet Hole Diameter **1.5** Coring Device macrocore

Prepared By **A. Thomas** Hammer Weight _____ Hammer Drop _____ ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

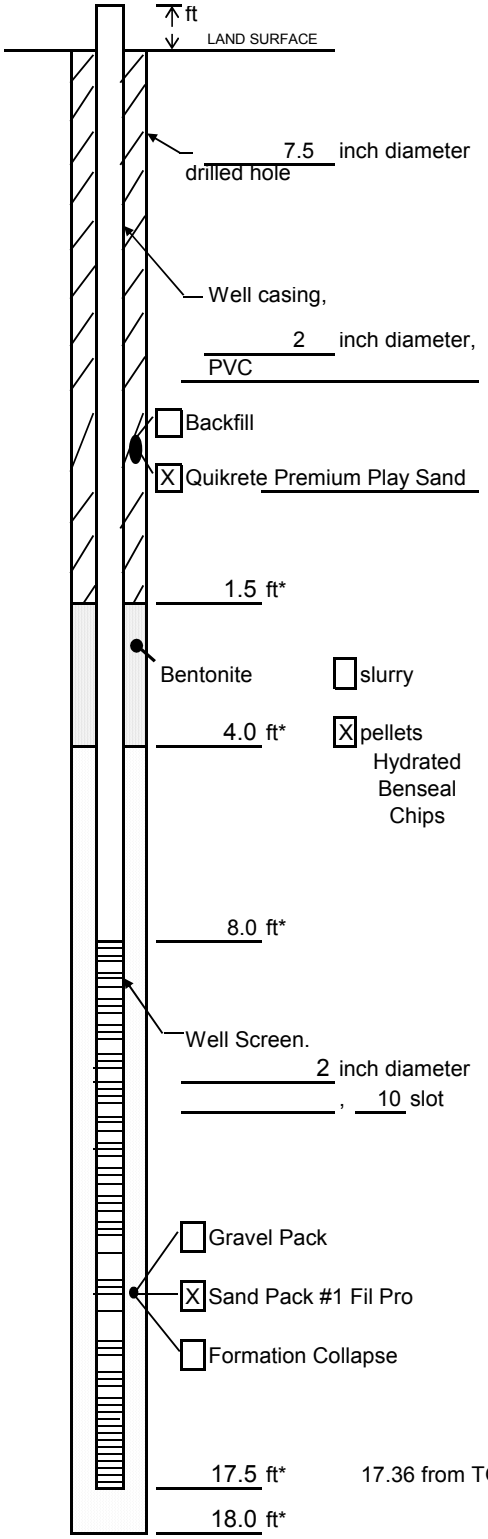
Soil Characterization:

0-5 feet bgs cleared via hand auger.

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)		Sample/Core Description
0.0	5.0	-	0.0		Hand cleared on 11/13/2017 using hand auger tools.
					light brown, med-fine coarse sands. Trace silt
5.0	10.0	2.3	0.0		5-8: light brown, fine-med sands
					8-10: silt, fine sands with some clay, dark brown
10.0	15.0	3	0.0		dark brown/grey silt with little fine sands and clay. Med-low plasticity. Moist.

Well Construction Log

(Unconsolidated)



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project 222 South Ferry Street Well MW-17

Town/City Schenectady

County Schenectady State NY

Permit No.

Land-Surface Elevation and Datum:

feet ☐ Surveyed ☐ Estimated

Installation Date(s) 11/14/2017

Drilling Method Hollow Stem Auger (4 1/4")

Drilling Contractor Aztech Technologies

Drilling Fluid N/A

Development Technique(s) and Date(s)

Pumping & Surging 11/16/2017

Whale Pump Used

Fluid Loss During Drilling gallons

Water Removed During Development 35 gallons

Static Depth to Water 9.1 feet below M.P.

Pumping Depth to Water feet below M.P.

Pumping Duration hours

Yield gpm Date

Specific Capacity gpm/ft

Well Purpose Monitoring Well

Remarks

Prepared by A. Thomas

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well **MW-16** Project/No. 00266444.0000 Page **1** of **1**

Site Location **222 South Ferry Street Schenectady NY** Drilling Started **11/14/2017** Drilling Completed **11/14/2017**

Drilling Contractor **Aztech Technologies** Driller **Tim** Helper **Garth**

Drilling Fluid Used **N/A** Drilling Method **Hollow Stem Auger**

Length and Diameter of Coring Device **5' macrocore / 1.5" diameter** Sampling Interval 5 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Total Depth Drilled 15.0 Feet Hole Diameter **1.5** Coring Device macrocore

Prepared By **A. Thomas** Hammer Weight _____ Hammer Drop _____ ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

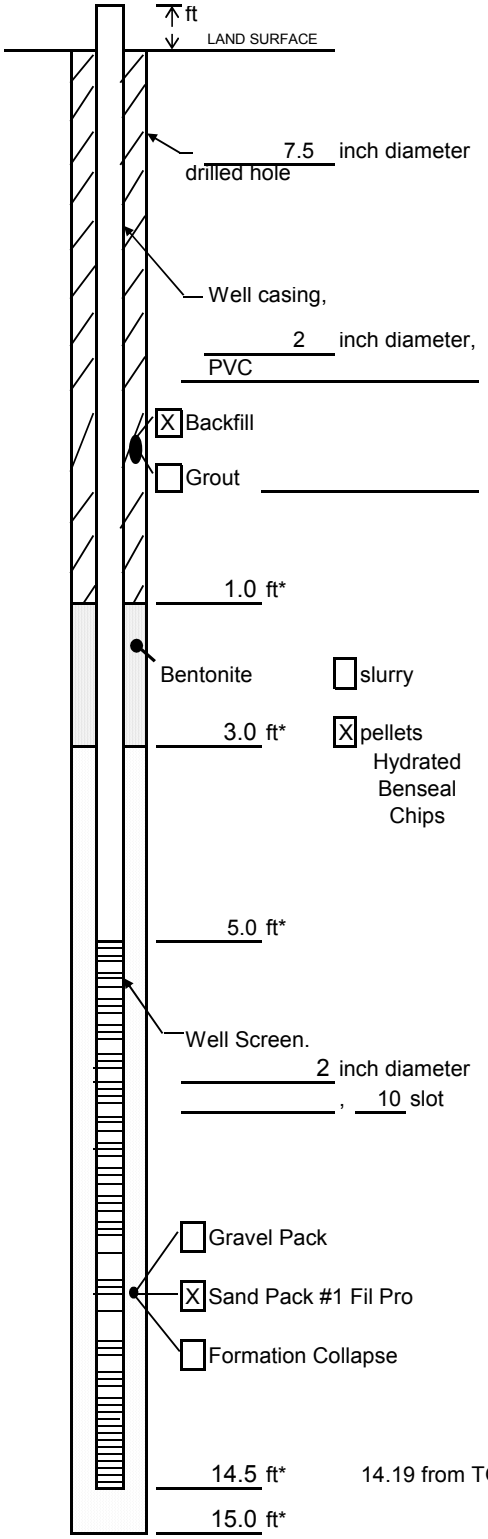
Soil Characterization:

0-5 feet bgs cleared via hand auger.

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)		Sample/Core Description
0.0	5.0	-	0.0	-	Hand cleared on 11/13/2017 to 5' bgs using hand tools/ desc: brown fine-med sands, little silt and little sub rounded gravel/ Trace brick fragments both small and larger. Trace boulder sized particles
5.0	10.0	3'	0.0		7-8.5': light brown, fine-med sands little brick fragments/subangular gravel, trace silts
			0.0		8.5-10': dark grey, fine-med sands, some silt, moist
10.0	15.0	0.5	0.0		dark grey: fine-med sands, some silt. Moist, resit of macrocore filled with water, fell out

Well Construction Log

(Unconsolidated)



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project: 222 South Ferry Street Well: MW-16

Town/City: Schenectady

County: Schenectady State: NY

Permit No.:

Land-Surface Elevation and Datum:

____ feet ☐ Surveyed ☐ Estimated

Installation Date(s): 11/14/2017

Drilling Method: Hollow Stem Auger

Drilling Contractor: Aztech Technologies

Drilling Fluid: N/A

Development Technique(s) and Date(s)

Pumping & Surging 11/16/2017

Whale Pump Used

Fluid Loss During Drilling: ____ gallons

Water Removed During Development: 25 gallons

Static Depth to Water: 5.72 feet below M.P.

Pumping Depth to Water: ____ feet below M.P.

Pumping Duration: ____ hours

Yield: ____ gpm Date: ____

Specific Capacity: ____ gpm/ft

Well Purpose: Monitoring Well

Remarks:

Prepared by: A. Thomas

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well **MW-15** Project/No. **00266444.0000** Page **1** of **1**

Site Location **222 South Ferry Street Schenectady NY** Drilling Started **11/15/2017** Drilling Completed **11/15/2017**

Drilling Contractor **Aztech Technologies** Driller **Tim** Helper **Garth**

Drilling Fluid Used **N/A** Drilling Method **Hollow Stem Auger**

Length and Diameter of Coring Device **5' macrocore, 1.5" diameter** Sampling Interval 5 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Total Depth Drilled 15.0 Feet Hole Diameter **1.5** Coring Device macrocore

Prepared By **A. Thomas** Hammer Weight _____ Hammer Drop _____ ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

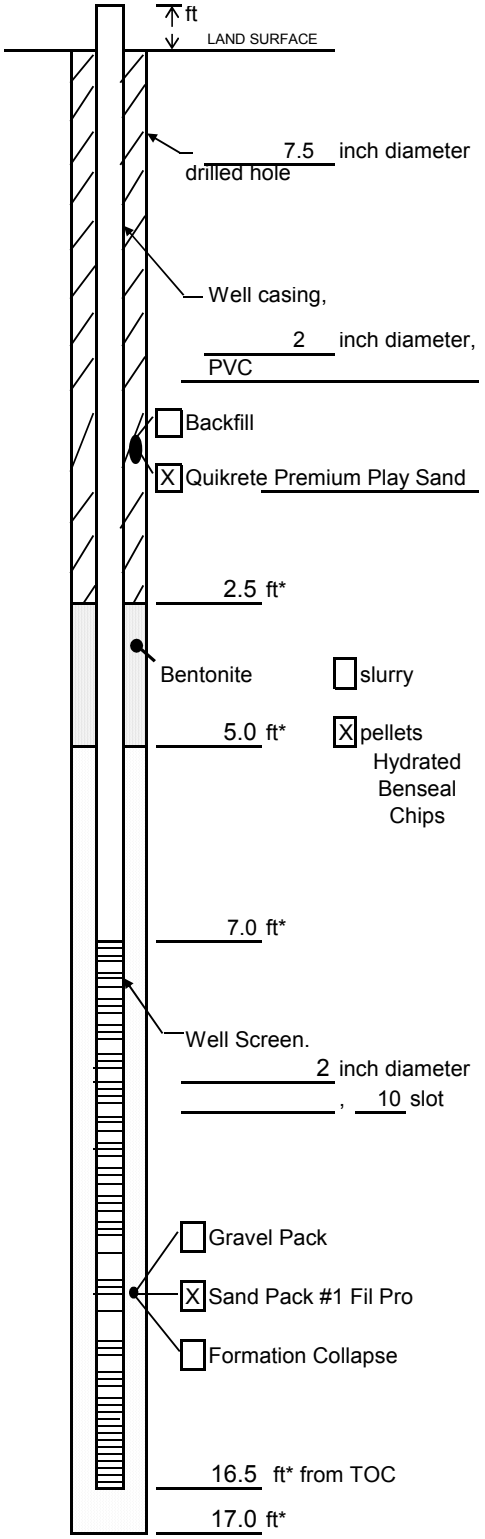
Soil Characterization:

0-5 feet bgs cleared via hand auger.

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)		Sample/Core Description
0.0	5.0		0.0		Handcleared: med. Coarse sands, little subangular grains, trace brick fragments
5.0	10.0	3.5	0.0		5-8' med coarse sands
			0.0		8-9': light brown, fine-med sands, little subangular gravel
			0.0		9-10'" dark grey, fine sands with silt, trace clay, low-med plasticity
10.0	15.0	4	0.0		11-12: dark grey, fine sands with silt, trace clay, saturated
			0.0		12-14': wood, intact, vertically set
			0.1		14-15': dark grey, fine sands with silt, trace clays

Well Construction Log

(Unconsolidated)



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project 222 South Ferry Street Well MW-15

Town/City Schenectady

County Schenectady State NY

Permit No.

Land-Surface Elevation and Datum:

_____ feet ☐ Surveyed ☐ Estimated

Installation Date(s)

Drilling Method Hollow Stem Auger

Drilling Contractor Aztech Technologies

Drilling Fluid N/A

Development Technique(s) and Date(s)

Pump & Surge 11/16/2017

Whale Pump Used

Fluid Loss During Drilling _____ gallons

Water Removed During Development 15 gallons

Static Depth to Water 7.71 feet below M.P.

Pumping Depth to Water _____ feet below M.P.

Pumping Duration _____ hours

Yield _____ gpm Date _____

Specific Capacity _____ gpm/ft

Well Purpose Monitoring Well

Remarks

Prepared by A. Thomas

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well **MW-14** Project/No. 00266444.0000 Page **1** of **1**

Site Location **222 South Ferry Street Schenectady NY** Drilling Started **11/14/2017** Drilling Completed **11/14/2017**

Drilling Contractor **Aztech Technologies** Driller **Tim** Helper **Todd**

Drilling Fluid Used **N/A** Drilling Method **Hollow Stem Auger**

Length and Diameter of Coring Device **5' macro core, 1.5" diameter** Sampling Interval 5 feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Total Depth Drilled **18** Feet Hole Diameter ____ Coring Device macro core

Prepared By **A Thomas** Hammer Weight _____ Hammer Drop _____ ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

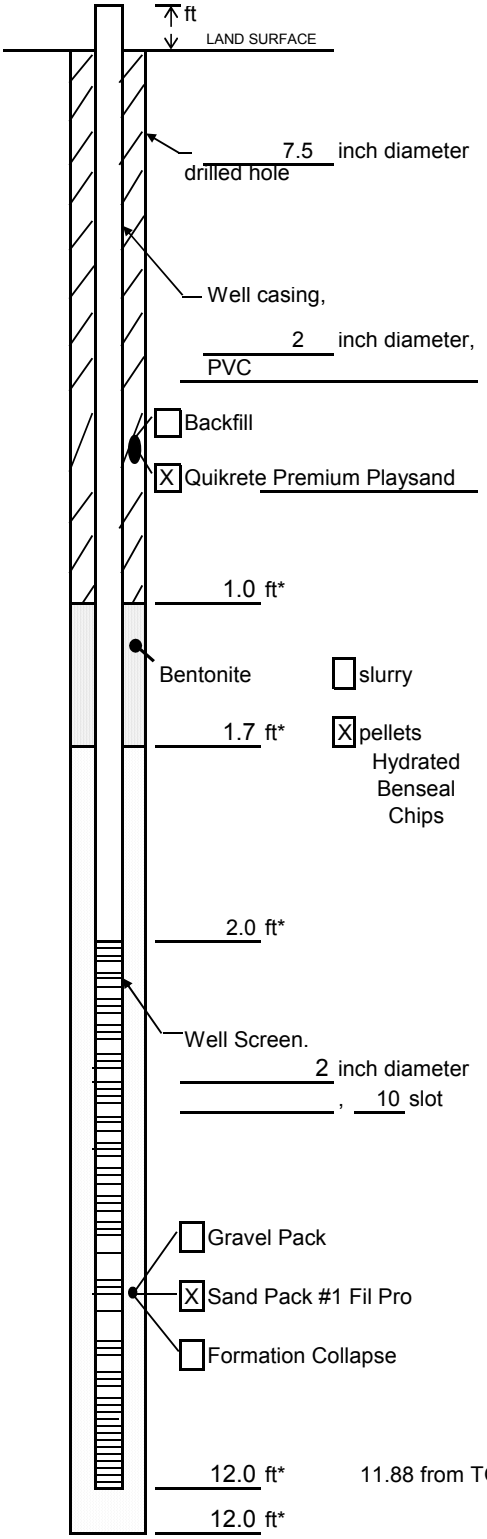
Soil Characterization:

0-5 feet bgs cleared via hand auger.

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)		Sample/Core Description
0.0	5.0	-	0.0		Med-Fine coarse sands, little silt, trace subangular gravel
5.0	10.0	1.25	0.0		dark brown, silty clay, trace pebbles
10.0	15.0	0	0.0		No recovery, running sands, will install well at 18'

Well Construction Log

(Unconsolidated)



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project: 222 South Ferry Street Well: MW-14

Town/City: Schenectady

County: Schenectady State: NY

Permit No.:

Land-Surface Elevation and Datum:

_____ feet ☐ Surveyed ☐ Estimated

Installation Date(s): 11/14/2017

Drilling Method: Hollow Stem Auger (4 1/4")

Drilling Contractor: Aztech Technologies

Drilling Fluid: N/A

Development Technique(s) and Date(s)

Pumping & Surging 11/16/2017

Whale Pump used

Fluid Loss During Drilling: _____ gallons

Water Removed During Development: 24 gallons

Static Depth to Water: 4.63 feet below M.P.

Pumping Depth to Water: _____ feet below M.P.

Pumping Duration: _____ hours

Yield: _____ gpm Date: _____

Specific Capacity: _____ gpm/ft

Well Purpose: Monitoring Well

Remarks:

Prepared by: A. Thomas

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well **MW-6R** Project/No. **00266444.0000** Page **1** of **1**

Site Location **222 South Ferry Street Schenectady NY** Drilling Started **11/14/2017** Drilling Completed **11/15/2017**

Drilling Contractor **Aztech Technologies** Driller **Tim** Helper **Garth**

Drilling Fluid Used **N/A** Drilling Method **hollow stem auger - overdrill**

Length and Diameter of Coring Device _____ Sampling Interval _____ feet

Land-Surface Elev. _____ feet ☐ Surveyed ☐ Estimated Datum _____

Total Depth Drilled _____ Feet Hole Diameter ____ Coring Device _____

Prepared By **A. Thomas** Hammer Weight _____ Hammer Drop _____ ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis

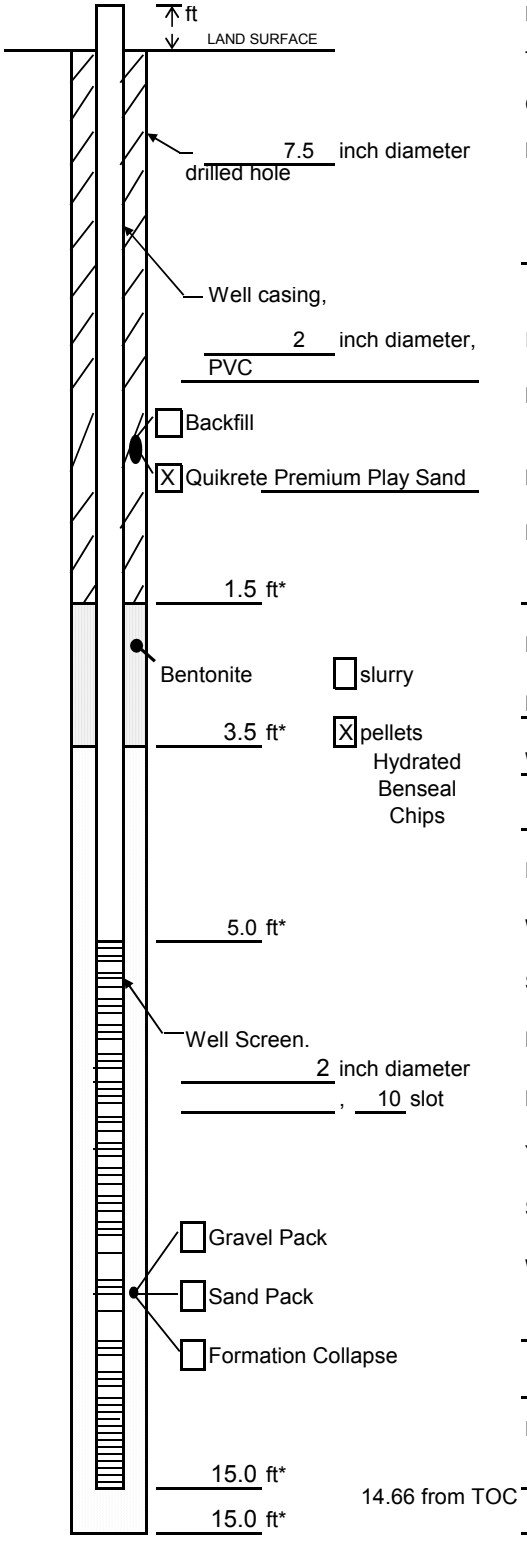
Soil Characterization:

0-5 feet bgs cleared via hand auger.

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)		Sample/Core Description
0.0	15.0	-	-		MW-6R was a replacement well for MW-6. Aztech Technologies overdrilled MW-6 (1" PVC) with 4'14" HAS to a depth of 15' bgs to install MW-6R (2" PVC). Due to overdrilling, no samples were collected during MW-6R installation.

Well Construction Log

(Unconsolidated)



Measuring Point is Top of Well Casing Unless Otherwise Noted.

* Depth Below Land Surface

Project 222 South Ferry Street Well MW-6R

Town/City Schenectady

County Schenectady State NY

Permit No.

Land-Surface Elevation and Datum:

feet ☐ Surveyed ☐ Estimated

Installation Date(s) 11/15/2017

Drilling Method Hollow Stem Auger (4 1/4")

Drilling Contractor Aztech Technologies

Drilling Fluid N/A

Development Technique(s) and Date(s)

Pumping & surging 11/16/2017

Whale pump used

Fluid Loss During Drilling gallons

Water Removed During Development 45 gallons

Static Depth to Water 6.58 feet below M.P.

Pumping Depth to Water feet below M.P.

Pumping Duration hours

Yield gpm Date

Specific Capacity gpm/ft

Well Purpose Monitoring well

Remarks

Prepared by A. Thomas

APPENDIX D

Groundwater Purge Logs

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas **Well ID:** MW-1
Client / Job Number: 00266444.0000 **Date:** 11-28-17
Weather: 40's, sunny **Time In:** 1310 **Time Out:** 1610

Well Information

Depth to Water:	7.35	(feet) (from MP)
Total Depth:	~~-~~	(feet) (from MP)
Length of Water Column:		(feet)
Volume of Water in Well:		(gal)
Intake depth for tubing:		(feet)

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

Purging Information

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

Pump Start Time: 1318
Pump Stop Time: 1322 Water-Quality Meter Type: Horiba
Total Volume Removed: ~~0.1~~ 0.1 (gal) Did well go dry: Yes ☑ No ☐

Conversion Factors

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

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

Unit Stability

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1332								
Volume Purged (Gal)									
Rate (mL/min)									
Depth to Water (ft.)									
pH									
Temp. (C)									
Conductivity (mS/cm)									
Dissolved Oxygen (mg/L)									
ORP (mV)									
Turbidity (NTU)									
Notes:	Well went dry. Horiba not utilized. Well shut off @ 1322. Continued to collect sample until 1610. Had to leave with only 1 sample container filled, lab was closing								

Sampling Information

Analyses	#	n	Laboratory
VOCs 8260	4	1	TestAmerica
PFAs	4	1	TA
Color:			
Odor:			
Appearance:			
Sample ID: MW-1(112817)	Sample Time: 1345		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☐	No ☑		
Duplicate ID —	Dup. Time: —		
Chain of Custody Signed By:			

Problems / Observations

Initial: Mostly cloudy, suspended sediment
No strong odor, no sheen

~~Final~~:

PID = 0.0ppm
Notes: Well went dry. Will sample upon recharge. Well not recently sampled. Old notes list 7.3 ft DTB, There is a blockage there. Tubing pushed past it.

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: ~~MW-2~~ ATherney **Well ID:** MW-2
Client / Job Number: 00266444.0000 **Date:** 11-27-17
Weather: 42°F, windy **Time In:** 1345 **Time Out:** 1455

Well Information

Depth to Water:	[illegible] (feet)	6.67	(from MP)
Total Depth:	12.69 (feet)		(from MP)
Length of Water Column:	(feet)	6.02	
Volume of Water in Well:	(gal)	0.98	
Intake depth for tubing:	~10 (feet)		

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

Purging Information

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

Pump Start Time: 1350
Pump Stop Time: 1445 Water-Quality Meter Type: Horiba
Total Volume Removed: ~~1~~ 3.3 (gal) Did well go dry: Yes ☐ No ☑

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

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1400	1405	1410	1415	1420	1425	1430	1435	S
Volume Purged (Gal)	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2	A
Rate (mL/min)	250	250	250	250	250	250	250	250	M
Depth to Water (ft.)	6.85	6.87	6.87	6.87	6.87	6.87	6.87	6.87	P
pH	6.96	6.94	6.94	6.93	6.93	6.93	6.93	6.93	L
Temp. (C)	15.17	15.42	15.44	15.48	15.43	15.45	15.34	15.30	E
Conductivity (mS/cm)	1.03	1.07	1.02	1.01	1.01	1.01	1.01	1.01	@ 1440
Dissolved Oxygen (mg/L)	3.78	2.78	2.32	1.96	1.82	1.74	1.65	1.61	
ORP (mV)	-99	-110	-114	-116	-117	-119	-120	-120	
Turbidity (NTU)	[illegible]	17.8	7.24	4.02	4.12	0.80	0.94	0.87	
Notes:	66.1								

Sampling Information

Analyses	#	n	Laboratory
VOCs	3	-	TestAmerica

Color:
Odor:
Appearance:
Sample ID: MW-2(112717) Sample Time: 1440
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☐ No ☑
Duplicate ID: - Dup. Time: -
Chain of Custody Signed By:

Problems / Observations

Initial: mostly clear with slight yellow cloudiness and some suspended particles. No sheen. No odor

Final: Clear. No odor or sheen

PID= 0.2ppm

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES
Well ID: MW-4
Client / Job Number: 00266444.0000
Date: 11/27/17
Weather: Partly Cloudy 40°F
Time In: 1220 **Time Out:** 1312

Well Information

Depth to Water:	6.85 (feet)	(from MP)
Total Depth:	11.0 (feet)	(from MP)
Length of Water Column:	(feet) 4.15	
Volume of Water in Well:	(gal) 0.17	
Intake depth for tubing:	(feet) ~10.0' → ~10.5'	

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

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Pump Start Time:	1235					
Pump Stop Time:	1245	Water-Quality Meter Type:	Horiba U-53			
Total Volume Removed:	(gal) ~0.25	Did well go dry:	Yes ☑	No ☐		

Conversion Factors

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

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

Unit Stability

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1240	1245	1310						
Volume Purged (Gal)	—	~0.25							
Rate (mL/min)									
Depth to Water (ft.)	8.40	10.89	7.87						
pH	6.57	6.80							
Temp. (C)	14.84	14.70							
Conductivity (mS/cm)	0.764	0.763							
Dissolved Oxygen (mg/L)	3.62	6.49							
ORP (mV)	17	-18							
Turbidity (NTU)	228	159							
Notes:	Headspace: 0.0 ppm								

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica

Color:	Brown / Gray
Odor:	No Odor
Appearance:	Cloudy
~~Sample ID: [illegible]~~ Sample Time:	1310
MS/MSD: Yes ☐	No ☑
Duplicate: Yes ☐	No ☑
Duplicate ID	Dup. Time:
Chain of Custody Signed By:	

Problems / Observations

1245: Well Dry → Will Allow Recharge ~~Reathar~~ then sample

1310: ES samples for VOCs @ MW-4
sample ID: MW-4(112717)
GW level @ 7.87

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: Attorney
Client / Job Number: 00266444.0000
Weather: 40s, sunny

Well ID: MW-5
Date: 11-28-17
Time In: 1400 **Time Out:** 1520

Well Information

Depth to Water:	6.83 (feet)	(from MP)
Total Depth:	12.22 (feet)	(from MP)
Length of Water Column:	(feet) 5.39	
Volume of Water in Well:	(gal) 0.22	
Intake depth for tubing:	~10 (feet)	

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

Purging Information

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

Pump Start Time: 1415
Pump Stop Time: 1510
Water-Quality Meter Type: Horiba
Total Volume Removed: 1.0 (gal)
Did well go dry: Yes ☐ No ☑

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

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1420	1425	1430	1435	1440	1445	1450	1455	1500
Volume Purged (Gal)	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	S
Rate (mL/min)	50	50	50	50	50	50	50	50	A
Depth to Water (ft.)	9.95	9.95	9.95	9.95	9.95	9.95	9.95	9.95	M
pH	6.50	6.49	6.48	6.48	6.49	6.49	6.49	6.49	P
Temp. (C)	14.71	14.70	14.62	14.64	14.71	15.33	15.43	15.42	L
Conductivity (mS/cm)	0.737	0.799	0.825	0.859	0.898	0.902	0.954	0.952	E
Dissolved Oxygen (mg/L)	6.37	5.84	5.50	5.33	5.14	4.76	4.46	4.35	
ORP (mV)	-2	-8	-10	-11	-12	-14	-16	-17	
Turbidity (NTU)	39	12.8	7.16	3.13	2.09	0.25	0.00	0.48	
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAs	2		TA

Color:
Odor:
Appearance:
Sample ID: MW-5 (112817) Sample Time: 1500
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☐ No ☑
Duplicate ID: – Dup. Time: –
Chain of Custody Signed By:

Problems / Observations

Initial: Somewhat clear with slight cloudiness and suspended particles. No odor. No sheen
Final: clear. No odor. No sheen

PID = 0 ppm

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES **Well ID:** MW-6R

Client / Job Number: 00266444.0000 **Date:** 11/27/17

Weather: Partly Cloudy 40°F **Time In:** 1315 **Time Out:** 1448

Well Information

Depth to Water:	(feet)	6.75	(from MP)
Total Depth:	(feet)	14.65	(from MP)
Length of Water Column:	(feet)	7.90	
Volume of Water in Well:	(gal)	1.28	
Intake depth for tubing:	(feet)	~13.65	

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

Purging Information

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

Pump Start Time: 1328

Pump Stop Time: 1440 Water-Quality Meter Type: Horiba U-53

Total Volume Removed: (gal) 3.0 Did well go dry: Yes ☐ No ☑

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

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1330	1335	1340	1345	1350	1355	1400	1405	1410
Volume Purged (Gal)	—	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00
Rate (mL/min)									
Depth to Water (ft.)	6.76	6.77	6.78	6.78	6.78	6.78	6.78	6.78	6.79
pH	7.00	7.07	7.10	7.12	7.14	7.15	7.14	7.12	7.09
Temp. (C)	13.79	14.20	14.41	14.49	14.49	14.52	14.46	14.49	14.52
Conductivity (mS/cm)	1.16	1.06	0.926	0.840	0.789	0.741	0.722	0.715	0.692
Dissolved Oxygen (mg/L)	2.62	2.42	0.59	0.66	0.68	0.68	0.63	0.64	0.57
ORP (mV)	-122	-134	-143	-148	-152	-153	-153	-153	-153
Turbidity (NTU)	175	121	90.4	88.2	81.2	63.6	46.0	33.8	25.9
Notes:	Head space: 1.3 ppm								

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica

Color: None

Odor: Slight Odor

Appearance: Clear

Sample ID: MW-6(112717) Sample Time: 1435

MS/MSD: Yes ☐ No ☑

Duplicate: Yes ☐ No ☑

Duplicate ID — Dup. Time: —

Chain of Custody Signed By:

Problems / Observations

* Sampled for VOCs

Site: 222 Ferry St. | Event:

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES | Well ID: MW-6R
Client / Job Number: 00266444.0000 | Date: 11/27/17
Weather: Partly Cloudy 40°F | Time In: 1315 | Time Out: 1445

Well Information

Depth to Water:	(feet)	6.75	(from MP)
Total Depth:	(feet)	14.65	(from MP)
Length of Water Column:	(feet)	7.90	
Volume of Water in Well:	(gal)	1.28	
Intake depth for tubing:	(feet)	~13.65	

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

Purging Information

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

Pump Start Time: 1325
Pump Stop Time: 1440
Water-Quality Meter Type: Horiba U-52
Total Volume Removed: (gal) 3.0
Did well go dry: No

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

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1415	1420	1425	1430					
Volume Purged (Gal)	2.25	2.50	2.75	3.00					
Rate (mL/min)									
Depth to Water (ft.)	6.79	6.79	6.79	6.80					
pH	7.08	7.06	7.05	7.04					
Temp. (C)	14.51	14.41	14.58	14.52					
Conductivity (mS/cm)	0.674	0.665	0.658	0.643					
Dissolved Oxygen (mg/L)	0.53	0.53	0.49	0.48					
ORP (mV)	-153	-153	-154	-154					
Turbidity (NTU)	15.0	8.06	3.02	1.73					
Notes:	Headspace: 1.3 ppm								

Sampling Information

Analyses	#	n	Laboratory
TCL VOCs	3		TA
TCL SVOCs			
Total Cyanide			

Color: None
Odor: Slight Odor
Appearance: Clear
Sample ID: MW-6R(112717) Sample Time: 1435
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☐ No ☑
Duplicate ID: — Dup. Time: —
Chain of Custody Signed By:

Problems / Observations

* sampled for VOCs

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: Athamer | **Well ID:** MW-8
Client / Job Number: 00266444.0000 | **Date:** 11-28-17
Weather: 20s, sunny | **Time In:** 0850 **Time Out:** 1015

Well Information

Depth to Water:	6.50 (feet)	(from MP)
Total Depth:	12.39 (feet)	(from MP)
Length of Water Column:	5.89 (feet)	
Volume of Water in Well:	~~0.96~~ 0.24 (gal)	
Intake depth for tubing:	10 (feet)	

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

Purging Information

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

Pump Start Time: 0910
Pump Stop Time: ~~0944~~ 1005 Water-Quality Meter Type: Horiba
Total Volume Removed: 1.1 (gal) Did well go dry: Yes ☐ No ☑

Conversion Factors

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

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

Unit Stability

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	0915	0920	0925	0930	0935	0940	0945	0950	0955
Volume Purged (Gal)	~~3.4~~ 0.1	~~0.2~~ 0.3	0.5	0.6	0.7	0.8	0.9	1.0	S
Rate (mL/min)	50	50	50	50	50	50	50	50	A
Depth to Water (ft.)	8.62	10.24	10.57	10.59	10.59	10.77	10.79	10.79	M
pH		6.51	6.52	6.51	6.56	6.59	6.59	6.59	P
Temp. (C)		12.92	13.04	13.10	13.22	13.63	13.61	13.62	L
Conductivity (mS/cm)		1.40	1.40	1.40	1.21	1.25	1.26	1.25	E
Dissolved Oxygen (mg/L)		4.02	4.76	4.45	4.87	6.14 ★	5.78	5.71	
ORP (mV)		-50	-57	-58	-53	-52	-52	-51	
Turbidity (NTU)		8.94	17.3	~~0.00~~ 17.7	8.52	22.4	0.03	0.06	
Notes:	Horiba plugged in at 0920				★ Higher ~~pH~~ DO could be due to DI dripping to tubing intake				

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAS	2		TA

Color:
Odor:
Appearance:
Sample ID: MW-8 (112817) Sample Time: 0955
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☐ No ☑
Duplicate ID: - Dup. Time: -
Chain of Custody Signed By:

Problems / Observations

Initial: somewhat clear with yellow cloudy tint and some suspended particles. Has an odor. No sheen

Final: clear, No sheen, No oder
PID: 0.4ppm

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas **Well ID:** MW-10
Client / Job Number: 00266444.0000 **Date:** 11-28-17
Weather: 30s, sunny **Time In:** 1135 **Time Out:** 1300

Well Information

Depth to Water:	8.25 (feet)	(from MP)
Total Depth:	18.45 (feet)	(from MP)
Length of Water Column:	(feet) 10.2	
Volume of Water in Well:	(gal) 1.66	
Intake depth for tubing:	15 (feet)	

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

Purging Information

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

Pump Start Time: 1145
Pump Stop Time: 1250 Water-Quality Meter Type: Horiba
Total Volume Removed: 2.2 (gal) Did well go dry: Yes ☐ No ☑

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

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

Parameter:	1	2	3	4	5	6	7	8	9	10
Time	1150	1155	1200	1205	1210	1215	1220	1225	1230	1235
Volume Purged (Gal)	0.2	0.4	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0
Rate (mL/min)	160	160	160	160	160	160	160	160	160	160
Depth to Water (ft.)	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35	8.35
pH	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77	6.77
Temp. (C)	14.86	15.02	15.17	15.24	15.25	15.29	15.34	15.48	15.54	15.65
Conductivity (mS/cm)	1.23	1.21	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Dissolved Oxygen (mg/L)	3.93	~~1.64~~	1.36	1.25	1.19	1.16	1.13	1.11	1.07	1.07
ORP (mV)	-100	-111	-115	-117	-118	-119	-119	-120	-122	-123
Turbidity (NTU)	243	198	190	171	167	151	134	125	107	95.5
Notes:	Turbidity not crucial in either VOCs or PFAs analyses. Will sample even though above 50NTU.									

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAs	2		TA
Color:			
Odor:			
Appearance:			
Sample ID: MW-10(112817)	Sample Time: 1240		
MS/MSD: Yes ☐	No ☑		
Duplicate: Yes ☑	No ☐		
Duplicate ID DUP-01	Dup. Time:		
Chain of Custody Signed By:			

Problems / Observations

Initial: mostly cloudy, light brown/orange tint. Suspended particles. No strong odor or sheen

Final: Somewhat cloudy. No odor or sheen.

PID: 0.0ppm

Notes: Old tubing in well, ran pre-rinse on it

222 South Ferry Street — *Site* — *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas
Client / Job Number: 00266444.0000
Weather: low 40s, windy

Well ID: MW-12
Date: 11-27-17
Time In: 1215 **Time Out:** 1345

Well Information

Depth to Water: 6.90 (feet) (from MP)
Total Depth: 14.14 (feet) (from MP)
Length of Water Column: (feet) 7.24
Volume of Water in Well: (gal) 1.18
Intake depth for tubing: ~12 (feet)

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

Purging Information

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

Pump Start Time: 1230
Pump Stop Time: 1330
Water-Quality Meter Type: Horiba
Total Volume Removed: 2.8 (gal)
Did well go dry: Yes ☐ No ☑

Conversion Factors

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

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

Unit Stability

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1240	1245	1250	1255	1300	1305	1310	1315	1320
Volume Purged (Gal)	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7
Rate (mL/min)	160	160	160	160	160	160	160	160	160
Depth to Water (ft.)	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93	6.93
pH		7.24	7.25	7.25	7.25	7.25	7.25	7.25	7.24
Temp. (C)		15.72	15.58	16.41	16.58	16.58	16.46	16.52	16.66
Conductivity (mS/cm)		1.82	1.77	1.74	1.74	1.73	1.72	1.72	1.72
Dissolved Oxygen (mg/L)		2.29	2.14	2.02	1.94	1.84	1.78	1.75	1.70
ORP (mV)		-159	-162	-165	-166	-168	-169	-169	-170
Turbidity (NTU)		63.3	34.4	35.5	27.8	15.0	9.27	5.62	3.40
Notes:	Horiba not plugged in until 1245							Sample @ 1325	

Sampling Information

Analyses	#	n	Laboratory
VOCs	3	~~2~~	~~TestAmerica~~ TA.

Color:
Odor:
Appearance:
Sample ID: MW-12(112717) Sample Time: 1325
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☐ No ☑
Duplicate ID: Dup. Time:
Chain of Custody Signed By: AThomas

Problems / Observations

Initial: mostly ~~cloudy~~ clear with some suspended particles. No sheen. No strong odor.

Final: clear. No sheen. No strong odor

PID: 0.0 ppm

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: Athomas **Well ID:** MW-13

Client / Job Number: 00266444.0000 **Date:** 11-28-17

Weather: 20s, sunny **Time In:** 1020 **Time Out:** 1130

Well Information

Depth to Water:	5.59	(feet) (from MP)
Total Depth:	13.71	(feet) (from MP)
Length of Water Column:	8.14	(feet)
Volume of Water in Well:	1.32	(gal)
Intake depth for tubing:	~10	(feet)

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

Purging Information

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

Pump Start Time: 1025

Pump Stop Time: 1115 Water-Quality Meter Type: Horiba

Total Volume Removed: 1.6 (gal) Did well go dry: Yes ☐ No ☑

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

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1030	1035	1040	1045	1050	1055	1100	1105	
Volume Purged (Gal)	0.2	0.4	0.6	0.8	1.0	1.2	1.4	S	
Rate (mL/min)	180	180	180	180	180	180	180	A	
Depth to Water (ft.)	5.62	5.62	5.62	5.62	5.62	5.62	5.62	M	
pH	6.60	6.60	6.60	6.61	6.61	6.61	6.62	P	
Temp. (C)	15.68	16.04	16.10	16.26	16.26	16.14	16.12	L	
Conductivity (mS/cm)	1.02	1.02	1.03	1.04	1.04	1.04	1.04	E	
Dissolved Oxygen (mg/L)	2.05	1.65	1.49	1.39	1.31	1.27	1.26		
ORP (mV)	-69	-77	-84	-89	-94	-97	-100		
Turbidity (NTU)	55.3	40.8	34.9	21.7	23.8	39.4	26.2		
Notes:									

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica
PFAs	2		TA

Color:

Odor:

Appearance:

Sample ID: MW-13(112817) Sample Time: 1105

MS/MSD: Yes ☑ No ☐

Duplicate: Yes ☐ No ☑

Duplicate ID – Dup. Time: –

Chain of Custody Signed By:

Problems / Observations

Initial: clear with suspended particles. Some odor. No sheen

Final: clear, slight odor. No sheen

Notes: Old tubing in well

PID: 0.0ppm

222 South Ferry Street
Site

Event

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES
Well ID: MW-14
Client / Job Number: 00266444.0000
Date: 11/28/17
Weather: Partly Cloudy 43°F
Time In: 1215 **Time Out:**

Well Information

Depth to Water:	(feet)	3.39	(from MP)
Total Depth:	(feet)	11.89	(from MP)
Length of Water Column:	(feet)	8.50	
Volume of Water in Well:	(gal)	1.38	
Intake depth for tubing:	(feet)	~10.90	

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

Purging Information

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

Pump Start Time: 1220
Pump Stop Time: 1335
Water-Quality Meter Type: Horiba U-53
Total Volume Removed: (gal) ~3.00 gallons
Did well go dry: Yes ☐ No ☑

Conversion Factors

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

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

Unit Stability

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1225	1230	1235	1240	1245	1250	1255	1300	1305
Volume Purged (Gal)	—	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00
Rate (mL/min)									
Depth to Water (ft.)	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42
pH	7.10	7.08	7.04	7.05	7.05	7.05	7.05	7.05	7.05
Temp. (C)	15.28	15.13	14.69	15.08	15.05	15.00	15.00	14.94	14.89
Conductivity (mS/cm)	0.862	0.742	0.649	0.614	0.596	0.591	0.584	0.574	0.564
Dissolved Oxygen (mg/L)	0.99	0.63	0.54	0.44	0.42	0.41	0.40	0.46	0.40
ORP (mV)	-49	-45	-40	-40	-37	-35	-33	-32	-32
Turbidity (NTU)	141	97.4	177	245	108	68.5	40.8	32.0	27.6
Notes:	Headspace: 0.0 ppm								

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica

Color: None
Odor: No Odor
Appearance: Clear
Sample ID: MW-14(112817) Sample Time: 1330
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☐ No ☑
Duplicate ID — Dup. Time: —
Chain of Custody Signed By:

Problems / Observations

2017 GW Sampling

Site: Ferry St. | Event:

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES
Client / Job Number: 00266444.0000
Weather: Partly Cloudy 43°F

Well ID: MW-14
Date: 11/28/17
Time In: 1215 Time Out: 1340

Well Information

Depth to Water:	(feet)	3.39	(from MP)
Total Depth:	(feet)	11.89	(from MP)
Length of Water Column:	(feet)	8.50	
Volume of Water in Well:	(gal)	1.38	
Intake depth for tubing:	(feet)	~10.90	

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

Purging Information

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

Pump Start Time: 1220
Pump Stop Time: 1335
Water-Quality Meter Type: Horiba U-53
Total Volume Removed: (gal) ~3.00 gallons
Did well go dry: No

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

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1310	1315	1320	1325					
Volume Purged (Gal)	2.25	2.50	2.75	3.00					
Rate (mL/min)									
Depth to Water (ft.)	4.42	4.42	4.42	4.42					
pH	7.05	7.05	7.05	7.05					
Temp. (C)	14.91	14.87	14.84	14.83					
Conductivity (mS/cm)	0.560	0.558	0.548	0.545					
Dissolved Oxygen (mg/L)	0.39	0.38	0.37	0.37					
ORP (mV)	-32	-32	-32	-32					
Turbidity (NTU)	25.6	22.0	22.3	22.4					
Notes:	Headspace: 0.0 ppm								

Sampling Information

Analyses	#	n	Laboratory
TCL VOCs	3		TA
TCL SVOCs			
Total Cyanide			

Color: None
Odor: No Odor
Appearance: Clear
Sample ID: MW-14(112817) Sample Time: 1330
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☐ No ☑
Duplicate ID: — Dup. Time: —
Chain of Custody Signed By:

Problems / Observations

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES **Well ID:** MW-15

Client / Job Number: 00266444.0000 **Date:** 11/28/17

Weather: Partly Cloudy **Time In:** 1010 **Time Out:** 1105

Well Information

Depth to Water:	(feet)	7.89	(from MP)
Total Depth:	(feet)	16.50	(from MP)
Length of Water Column:	(feet)	8.61	
Volume of Water in Well:	(gal)	1.40	
Intake depth for tubing:	(feet)	~15.50	

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

Purging Information

Purging Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Tubing/Bailer Material:	Steel ☐	Polyethylene ☑	Teflon ☐	Other:		
Sampling Method:	Bailer ☐	Peristaltic ☑	Monsoon ☐	Other:		
Pump Start Time:	1015					
Pump Stop Time:	1100	Water-Quality Meter Type:	Horiba U-52			
Total Volume Removed:	(gal) ~1.5 gal.	Did well go dry:	Yes ☐	No ☑		

Conversion Factors

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

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

Unit Stability

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1020	1025	1030	1035	1040	1045	1050		
Volume Purged (Gal)	—	0.25	0.50	0.75	1.00	1.25	1.50		
Rate (mL/min)									
Depth to Water (ft.)	8.02	8.11	8.18	8.20	8.23	8.24	8.24		
pH	6.80	6.75	6.74	6.73	6.73	6.73	6.74		
Temp. (C)	13.31	13.94	14.20	14.22	14.21	13.84	13.79		
Conductivity (mS/cm)	1.25	1.16	1.12	1.11	1.11	1.10	1.09		
Dissolved Oxygen (mg/L)	1.67	0.64	0.51	0.45	0.43	0.42	0.40		
ORP (mV)	-92	-108	-113	-115	-117	-117	-117		
Turbidity (NTU)	19.2	14.6	27.4	37.8	45.3	49.9	46.7		
Notes:	Headspace: 0.3 ppm								

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica

Color: No Color

Odor: No Odor

Appearance: Clear

Sample ID: MW-15(112817) Sample Time: 1055

MS/MSD: Yes ☐ No ☑

Duplicate: Yes ☐ No ☑

Duplicate ID — Dup. Time: —

Chain of Custody Signed By:

Problems / Observations

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES
Well ID: MW-16
Client / Job Number: 00266444.0000
Date: 11/28/17
Weather: Partly Cloudy 23°F
Time In: 0850 **Time Out:** 1005

Well Information

Depth to Water:	(feet)	5.83	(from MP)
Total Depth:	(feet)	14.19	(from MP)
Length of Water Column:	(feet)	8.36	
Volume of Water in Well:	(gal)	1.36	
Intake depth for tubing:	(feet)	~13.20	

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

Purging Information

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

Pump Start Time: 0900
Pump Stop Time: 1000
Water-Quality Meter Type: Horiba U-53
Total Volume Removed: (gal) ~2.25 gal. Did well go dry: Yes ☐ No ☑

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

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

Parameter:	1	2	3	4	5	6	7	8	9	
Time	0905	0910	0915	0920	0925	0930	0935	0940	0945	0950
Volume Purged (Gal)	—	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25
Rate (mL/min)										
Depth to Water (ft.)	5.89	5.89	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90
pH	6.82	6.91	6.94	6.96	6.97	6.98	6.99	6.99	6.99	6.99
Temp. (C)	13.60	14.06	14.24	14.34	14.48	14.48	14.66	14.69	14.71	14.67
Conductivity (mS/cm)	5.10	4.63	4.20	4.04	3.89	3.80	3.72	3.68	3.65	3.62
Dissolved Oxygen (mg/L)	1.89	0.71	0.57	0.52	0.50	0.48	0.46	0.44	0.43	0.42
ORP (mV)	-67	-104	-113	-117	-120	-121	-122	-123	-124	-125
Turbidity (NTU)	85.3	63.2	54.4	48.6	37.9	34.2	31.7	28.8	27.3	26.9
Notes:	Headspace : 0.5 ppm									

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica

Color: Slightly Tan
Odor: No Odor
Appearance: Slightly Cloudy
Sample ID: MW-16(112817) Sample Time: 0955
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☐ No ☑
Duplicate ID — Dup. Time: —
Chain of Custody Signed By:

Problems / Observations

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES **Well ID:** MW-17

Client / Job Number: 00266444.0000 **Date:** 4/28/17

Weather: Partly Cloudy **Time In:** 1110 **Time Out:** 1210

Well Information

Depth to Water:	(feet)	9.38	(from MP)
Total Depth:	(feet)	17.39	(from MP)
Length of Water Column:	(feet)	8.01	
Volume of Water in Well:	(gal)	1.30	
Intake depth for tubing:	(feet)	~ 16.40	

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

Purging Information

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

Pump Start Time: 1115

Pump Stop Time: 1205 Water-Quality Meter Type: Horiba U-53

Total Volume Removed: (gal) ~ 1.75 gallons Did well go dry: Yes ☐ No ☑

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

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1120	1125	1130	1135	1140	1145	1150	1155	
Volume Purged (Gal)	—	0.25	0.50	0.75	1.00	1.25	1.50	1.75	
Rate (mL/min)									
Depth to Water (ft.)	9.38	9.39	9.40	9.40	9.40	9.40	9.40	9.40	
pH	7.00	6.99	6.99	7.00	7.00	7.01	7.01	7.01	
Temp. (C)	15.11	15.61	15.83	15.99	16.17	16.33	16.33	16.37	
Conductivity (mS/cm)	1.93	1.69	1.53	1.50	1.53	1.54	1.55	1.55	
Dissolved Oxygen (mg/L)	0.93	0.54	0.46	0.41	0.39	0.36	0.35	0.34	
ORP (mV)	-117	-131	-137	-140	-143	-144	-145	-146	
Turbidity (NTU)	173	126	55.0	32.4	23.8	20.7	19.1	20.7	
Notes:	Headspace: 0.0 ppm								

Sampling Information

Analyses	#	n	Laboratory
VOCs	3		TestAmerica

Color: Clear / Slightly Tan

Odor: No Odor

Appearance: Clear / Slightly Cloudy

Sample ID: MW-17(112817) Sample Time: 1200

MS/MSD: Yes ☐ No ☑

Duplicate: Yes ☐ No ☑

Duplicate ID — Dup. Time: —

Chain of Custody Signed By:

Problems / Observations

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES
Well ID: MW-5
Client / Job Number: 00266444.0000
Date: 4/3/18
Weather: Rain 44°F
Time In: 1210 **Time Out:** 1300

Well Information

Depth to Water:	(feet)	5.20	(from MP)
Total Depth:	(feet)	10.60	(from MP)
Length of Water Column:	(feet)	5.40	
Volume of Water in Well:	(gal)	0.22	
Intake depth for tubing:	(feet)	~10'	

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

Purging Information

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

Pump Start Time: 1215
Pump Stop Time: 1255
Water-Quality Meter Type: Horiba U-53
Total Volume Removed: (gal) ~1.25
Did well go dry: Yes ☐ No ☑

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

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1220	1225	1230	1235	1240	1245			
Volume Purged (Gal)	0	0.25	0.50	0.75	1.00	1.25			
Rate (mL/min)				7.92					
Depth to Water (ft.)	6.36	9.08	9.62	~~8.69~~	7.12	6.75			
pH	6.78	6.57	6.53	6.52	6.50	6.51			
Temp. (C)	9.58	9.22	8.71	8.69	8.67	8.63			
Conductivity (mS/cm)	1.87	1.87	1.90	1.87	1.85	1.86			
Dissolved Oxygen (mg/L)	6.14	4.27	4.53	4.39	4.28	4.08			
ORP (mV)	74	85	70	69	74	~~88~~			
Turbidity (NTU)	84.0	65.0	49.7	26.4	18.0	9.04			
Notes:									

Sampling Information

Analyses	#	n	Laboratory
			TestAmerica

Color: Slightly Yellow / Tan
Odor: Slight Odor
Appearance: Clear
Sample ID: MW-5-040318 Sample Time: 1250
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☑ No ~~☐~~
Duplicate ID DUP-1-040318 Dup. Time:
Chain of Custody Signed By:

Problems / Observations

*@1235 flow rate turned down due to dropping WL

DUP-1-040318 collected here

Sampled for 1-4 Dioxane

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: A. Thames & E Sousa **Well ID:** MW-8

Client / Job Number: 00266444.0000 **Date:** 4-3-18

Weather: 40°s raining **Time In:** 1310 **Time Out:** 1430

Well Information

Depth to Water:	5.04	(feet) (from MP)
Total Depth:	12.48	(feet) (from MP)
Length of Water Column:	7.44	(feet)
Volume of Water in Well:	0.305	(gal)
Intake depth for tubing:	~11	(feet)

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

Purging Information

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

Pump Start Time: 1317

Pump Stop Time: 1422 Water-Quality Meter Type: Honda FA02077

Total Volume Removed: 2.8 (gal) Did well go dry: Yes ☐ No ☐

Conversion Factors

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

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

Unit Stability

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

Parameter:	1	2	3	4	5	6	7	8	9	10
Time	1325	1330	1335	1340	1345	1350	1355	1400	1405	1410
Volume Purged (Gal)	0.7	1.0	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7
Rate (mL/min)	200	200	200	200	200	200	200	200	200	200
Depth to Water (ft.)	10.23	10.78	10.88 ★	10.64	10.21	9.59	9.23	8.71	8.68	8.57
pH	7.11	7.10	7.11	7.12	7.10	7.09	7.10	7.09	7.08	7.09
Temp. (C)	8.82	8.78	8.81	8.71	8.55	8.50	8.59	8.56	8.66	8.57
Conductivity (mS/cm)	0.874	0.866	0.864	0.865	0.871	0.869	0.863	0.859	0.842	0.824
Dissolved Oxygen (mg/L)	3.27	3.55	3.91	3.78	3.29	3.01	2.81	2.55	2.47	2.59
ORP (mV)	-113	-116	-120	-121	-122	-122	-123	-125	-124	-124
Turbidity (NTU)	50.6	84.2	43.8	41.8	33.8	41.0	36.8	38.3	38.8	38.0
Notes:	★ Note: WL began to rise. No change in rate. Rainfall all morning into afternoon									

Sampling Information

Analyses	#	n	Laboratory
1,4 Dioxane			TestAmerica
			8270 SIM
			2 liter Ambers
Color:			
Odor:			
Appearance:			
Sample ID: MW-8-040318			Sample Time: 1415
MS/MSD: Yes ☐			No ☑
Duplicate: Yes ☐			No ☑
Duplicate ID —			Dup. Time: —
Chain of Custody Signed By: ES			

Problems / Observations

Initial: Mostly clear. Odorless. No sheen

PID: 0.0ppm

Final: clear, no odor, no sheen

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas + ESousa **Well ID:** MW-10
Client / Job Number: 00266444.0000 **Date:** 4-3-18
Weather: 30-40's, light rain **Time In:** 1120 **Time Out:** 1300

Well Information

Depth to Water:	7.50 (feet)	(from MP)
Total Depth:	18.51 (feet)	(from MP)
Length of Water Column:	(feet) 11.01	
Volume of Water in Well:	(gal) 1.79	
Intake depth for tubing:	(feet) ~16'	

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

Purging Information

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

Pump Start Time: 1128
Pump Stop Time: 1253 Water-Quality Meter Type: Horiba FA 02077
Total Volume Removed: 2.6 (gal) Did well go dry: Yes ☐ No ☑

Conversion Factors

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

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

Unit Stability

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1133	1138	1143	1148	1153	1158	1203	1208	1213
Volume Purged (Gal)	0.3	0.6	0.9	1.2	1.5	1.8	2.0	2.3	2.5
Rate (mL/min)	200	200	200	200	200	200	200	200	200
Depth to Water (ft.)	7.73	7.75	7.77	7.77	7.77	7.77	7.77	7.77	7.77
pH	6.77	6.92	6.84	7.02	7.17	7.13	7.16	7.16	7.23
Temp. (C)	14.88	12.11	11.80	11.54	11.38	11.19	11.05	11.00	10.81
Conductivity (mS/cm)	0.992	1.02	1.01	1.01	1.01	1.01	1.02	1.01	1.01
Dissolved Oxygen (mg/L)	5.89	4.58	4.15	3.07	2.48	1.83	1.46	1.27	0.98
ORP (mV)	-171	-182	-180	-193	-199	-201	-204	-205	-209
Turbidity (NTU)	49.2	101	124	258	223	147	123	105	84.7
Notes:									

Sampling Information

Analyses	#	n	Laboratory
1,4 Dioxane			TestAmerica
			8270SIM
			2 Amber liters
Color: Clear			
Odor: none			
Appearance:			
Sample ID: MW-10-040318 Sample Time: 1245			
MS/MSD: Yes ☐ No ☑			
Duplicate: Yes ☐ No ☑			
Duplicate ID – Dup. Time: –			
Chain of Custody Signed By: ES			

Problems / Observations

Initial: very turbid, cleared up quickly to be slightly cloudy. no odor. no sheen

PID = 0.0ppm

Final: clear, odorless, no sheen

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: AThomas + ESousa **Well ID:** MW-10

Client / Job Number: 00266444.0000 **Date:** 4-3-18

Weather: 30's-40's light rain **Time In:** 1120 **Time Out:** 1300

Well Information

Depth to Water:	7.50	(feet) (from MP)
Total Depth:	18.51	(feet) (from MP)
Length of Water Column:	11.01	(feet)
Volume of Water in Well:	1.79	(gal)
Intake depth for tubing:	~16'	(feet)

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

Purging Information

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

Pump Start Time: 1128

Pump Stop Time: 1253 Water-Quality Meter Type: Horiba #702077

Total Volume Removed: 3.8 (gal) Did well go dry: Yes ☐ No ☑

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

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

Parameter:	10	11	3	4	5	6	7	8	9
Time	1218	1223	1228	1233	1238	S			
Volume Purged (Gal)	2.8	3.0	3.2	3.5	3.7	A			
Rate (mL/min)	200	200	200	200	200	M			
Depth to Water (ft.)	7.77	7.77	7.77	7.77	7.77	P			
pH	7.22	7.25	7.27	7.25	7.25	L			
Temp. (C)	10.65	10.45	10.43	10.50	10.48	E			
Conductivity (mS/cm)	1.00	1.01	1.01	1.00	1.00	@			
Dissolved Oxygen (mg/L)	0.93	0.77	0.77	0.72	0.73	1245			
ORP (mV)	-209	-212	-210	-209	-210				
Turbidity (NTU)	69.5	63.4	58.7	54.7	53.9				
Notes:									

Sampling Information

Analyses	#	n	Laboratory
1,4 Dioxane			TestAmerica
			8270SIM
			2 Amber liters
Color:			
Odor:			
Appearance:			
Sample ID: MW-10-040318 Sample Time: 1245			
MS/MSD: Yes ☐ No ☑			
Duplicate: Yes ☐ No ☑			
Duplicate ID — Dup. Time: —			
Chain of Custody Signed By:			

Problems / Observations

Initial: Very turbid, cleared up quickly to be slightly cloudy. no odor. no sheen.

PID: 0.0ppm

Final: clear, odorless, no sheen

Site: 222 S. Ferry St. | Event:

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES | Well ID: MW-12
Client / Job Number: 00266444.0000 | Date: 4/3/18
Weather: Rainy 44°F | Time In: 1310 | Time Out: 1410

Well Information

Depth to Water:	(feet)	5.36	(from MP)
Total Depth:	(feet)	14.14	(from MP)
Length of Water Column:	(feet)	8.78	
Volume of Water in Well:	(gal)	1.43	
Intake depth for tubing:	(feet)	~13'	

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

Purging Information

Purging Method:	Bailer	☐	Bladder	☐	Peristaltic	☑
Tubing/Bailer Material:	Steel	☐	Polyethylene	☐	Teflon	☐ HDPE ☑
Sampling Method:	Bailer	☐	Peristaltic	☑	Bladder	☐

Pump Start Time: 1315
Pump Stop Time: 1405
Water-Quality Meter Type: Horiba U-53
Total Volume Removed: (gal) ~1.75
Did well go dry: No

Conversion Factors

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

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

Unit Stability

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1320	1325	1330	1335	1340	1345	1350	1355	
Volume Purged (Gal)	0	0.25	0.50	0.75	1.00	1.25	1.50	1.75	
Rate (mL/min)									
Depth to Water (ft.)	5.36	5.36	5.36	5.36	5.36	5.36	5.36	5.36	
pH	7.08	7.11	7.10	7.10	7.09	7.09	7.09	7.08	
Temp. (C)	9.12	9.38	9.44	9.43	9.43	9.40	9.39	9.34	
Conductivity (mS/cm)	1.90	1.88	1.88	1.88	1.87	1.87	1.87	1.87	
Dissolved Oxygen (mg/L)	4.20	2.34	1.99	1.95	1.94	1.94	1.89	1.83	
ORP (mV)	-101	-124	-130	-133	-136	-139	-139	-141	
Turbidity (NTU)	162	127	99.5	81.6	67.5	55.4	50.9	46.0	
Notes:									

Sampling Information

Analyses	#	n	Laboratory
TCL VOCs			
TCL SVOCs			
Total Cyanide			

Color: None
Odor: Slight Odor
Appearance: ~~Clear~~ Slightly Cloudy
Sample ID: MW-12-040318 Sample Time: 1400
MS/MSD: Yes ☐ No ☑
Duplicate: Yes ☐ No ☑
Duplicate ID: Dup. Time:
Chain of Custody Signed By:

Problems / Observations

* Sampled for 1-4 Dioxane *

222 South Ferry Street

Site *Event*

GROUNDWATER SAMPLING LOG

Sampling Personnel: ES
Well ID: MW-13
Client / Job Number: 00266444.0000
Date: 4/3/18
Weather: Cloudy 44°F
Time In: 1110 **Time Out:** 1155

Well Information

Depth to Water:	(feet)	4.40	(from MP)
Total Depth:	(feet)	13.73	(from MP)
Length of Water Column:	(feet)	9.33	
Volume of Water in Well:	(gal)	1.49	
Intake depth for tubing:	(feet)	~13	

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

Purging Information

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

Pump Start Time: 1115
Pump Stop Time: 1150
Water-Quality Meter Type: Horiba U-53
Total Volume Removed: (gal) ~1.0
Did well go dry: Yes ☐ No ☑

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

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

Parameter:	1	2	3	4	5	6	7	8	9
Time	1120	1125	1130	1135	1140				
Volume Purged (Gal)	0	0.25	0.50	0.75	1.0				
Rate (mL/min)									
Depth to Water (ft.)	4.43	4.44	4.44	4.44	4.44				
pH	6.59	6.61	6.62	6.62	6.62				
Temp. (C)	13.60	12.56	11.92	11.50	11.47				
Conductivity (mS/cm)	1.28	1.28	1.28	1.28	1.28				
Dissolved Oxygen (mg/L)	4.99	2.54	2.28	2.14	2.05				
ORP (mV)	-49	-54	-55	-60	-63				
Turbidity (NTU)	71.3	51.8	42.6	41.1	39.9				
Notes:									

Sampling Information

Analyses	#	n	Laboratory
			TestAmerica

Color: No Color
Odor: Slight Odor
Appearance: Clear
Sample ID: MW-13-040318 Sample Time: 1145
MS/MSD: Yes ☑ No ☐
Duplicate: Yes ☐ No ☑
Duplicate ID Dup. Time:
Chain of Custody Signed By:

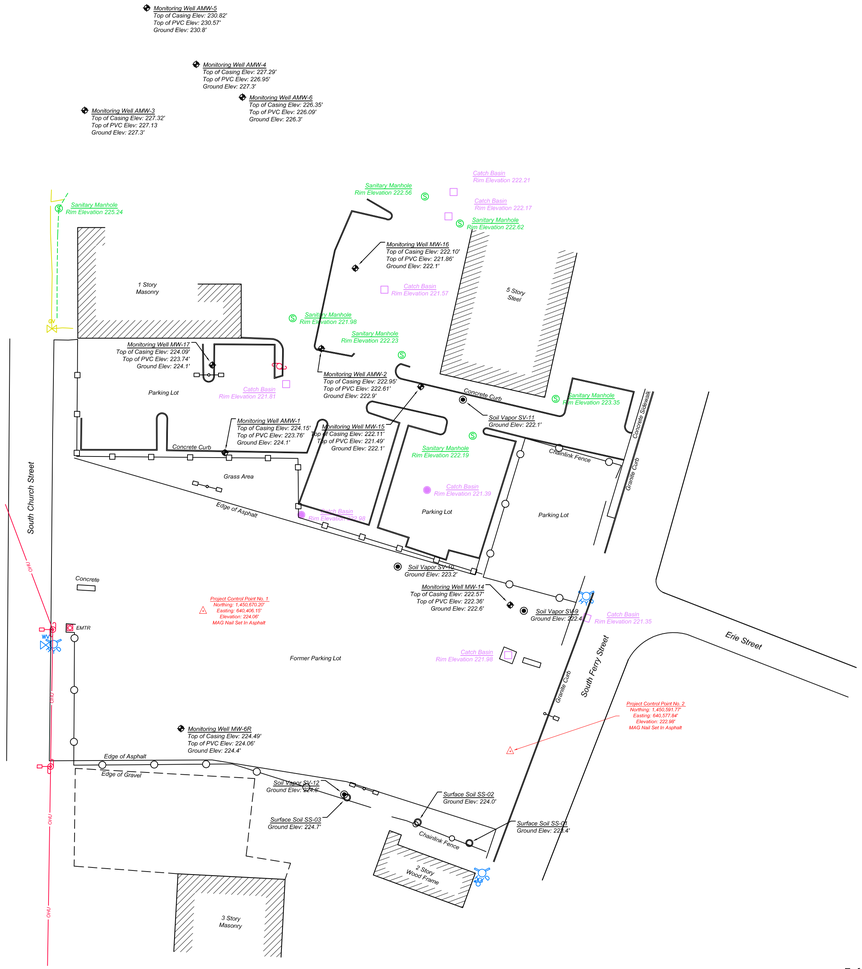
Problems / Observations

* MS/MSD Collected Here *

sampled for 1-4 Dioxane

APPENDIX E

Survey Map





Google Earth Imagery
Schenectady, New York
Not To Scale

Legend:

- Sanitary Sewer (designated by others)
- Overhead Utilities
- Natural Gas Line (designated by others)
- Chainlink Fence
- Stockade Fence
- Electric Meter
- Gas Valve
- Water Shut Off
- Hydrant
- Catch Basin
- Sanitary Manhole
- Utility Pole
- Utility Pole With Street Light
- Light Pole
- Survey Horizontal and Vertical Control Point
- Monitor Well
- Surface Soil Sample
- Soil Vapor Point

Identifier	Northing	Easting	Top of Protective Casing	Top of PVC Casing	Ground Elevation
Monitor Wells					
AMW-1	1,450,758.7	640,418.3	224.15	223.76	224.1
AMW-2	1,450,816.9	640,472.2	222.95	222.61	222.9
AMW-3	1,450,950.1	640,340.0	227.32	227.13	227.3
AMW-4	1,450,975.8	640,402.2	227.29	226.95	227.3
AMW-5	1,451,007.4	640,374.6	230.82	230.57	230.8
AMW-6	1,450,957.5	640,428.1	226.35	226.09	226.3
MW-6R	1,450,604.5	640,393.8	224.49	224.06	224.4
MW-14	1,450,673.5	640,577.8	222.57	222.36	222.6
MW-15	1,450,795.6	640,527.8	222.11	221.49	222.1
MW-16	1,450,861.9	640,491.2	222.1	221.86	222.1
MW-17	1,450,807.7	640,411.3	224.09	223.74	224.1

Identifier	Northing	Easting	Ground Elevation
Surface Soil Sample			
SS-01	1,450,540.5	640,554.9	223.4
SS-02	1,450,552.1	640,526.1	224.0
SS-03	1,450,566.0	640,486.6	224.7

Identifier	Northing	Easting	Ground Elevation
Soil Vapor Points			
SV-9	1,450,670.3	640,585.4	222.4
SV-10	1,450,695.1	640,514.9	223.2
SV-11	1,450,788.4	640,551.3	222.1
SV-12	1,450,567.7	640,485.0	224.8

The coordinates shown above are referenced horizontally to the North American Datum of 1983, 2011 adjustment (NAD83/2011) and projected on the New York State Plane Coordinate System (East Zone), expressed in U.S. survey feet.

Elevations shown above are referenced vertically to the North American Vertical Datum of 1988 (NAVD88 - Geoid12B), expressed in feet.

General Notes:

1. *This survey is referenced horizontally to the North American Datum of 1983, 2011 adjustment (NAD83/2011) and projected on the New York State Plane Coordinate System (East Zone) and vertically to the North American Vertical Datum of 1988 (NAVD88 - Geoid 12B).*
2. *North arrow as shown indicates Grid North referenced to NAD83 and projected on the New York State Plane Coordinate System (East Zone).*
3. *The reference horizontal and vertical control station is a Continuously Operating Reference Station (CORS) designated as "NYAB". NYAB was established by the New York State Department of Transportation and adjusted by the National Geodetic Survey in 2011. Differential (RTK) GPS survey techniques were utilized to establish the coordinates and elevations for the project control.*
4. *The planimetric and geotechnical information shown hereon is based on a field survey completed on November 17, 2017, utilizing a combination of differential RTK GPS and conventional surveying techniques.*
5. *RTK GPS has positional accuracies of ±2 centimeters (0.07 feet) +1ppm.*

Reference Project Control:

Project Control Point No. 1

Project Control Point No. 1 is a MAG Nail set flush in an asphalt parking lot located 84.7 feet easterly of an utility pole with a street light, 69.7 feet southerly of a double head light pole, and 66.8 feet northerly of Monitor Well No. MW-6R.

Northing: 1,450,670.20'
Easting: 640,406.15'
Elevation: 224.06'

Project Control Point No. 2

Project Control Point No. 2 is a MAG Nail set flush in an asphalt parking lot located 70.8 feet northerly of the northeasterly corner of a two story residence, 28.6 feet southwesterly of a street light pole, and 53.8 feet southerly of a catch basin.

Northing: 1,450,591.77'
Easting: 640,577.84'
Elevation: 222.96'

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

Unauthorized alteration or addition to a survey map bearing a licensed land surveyors seal is a violation of Section 7209, Subdivision 2 of the New York State Education Law.

Only copies from the original of this survey marked with an original of the surveyor's inked seal or his embossed seal shall be considered to be valid and true copies.

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REV	DESCRIPTION	DATE

PROJECT NUMBER: UK663-10-17

DRAWN: R.H.K.
CHECKED:
SCALE: 1" = 40'
DATE: 12/12/2017

Map Showing
Remedial Investigation
NYS DEC Number 447047
222 South Ferry Street
City of Schenectady
County of Schenectady
State of New York

Thew Associates LAND SURVEYORS
www.ThewAssociates.com
P.O. Box 463
6431 US Highway 11
Canton, New York 13617
T: 315/386-2776
F: 315/386-1012
9478 River Road
Marcy, New York 13403
T: 315/733-1278
F: 315/797-1957

NYS DEC No. 447047
Monitor Well, Surface Soil Sample, and Soil Vapor Points Locations and Elevations

Identifier	*Northing*	*Easting*	*Top of Protective Casing*	*Top of PVC Casing*	*Ground Elevation*
Monitor Wells					
AMW-1	1,450,758.7	640,418.3	224.15	223.76	224.1
AMW-2	1,450,816.9	640,472.2	222.95	222.61	222.9
AMW-3	1,450,950.1	640,340.0	227.32	227.13	227.3
AMW-4	1,450,975.8	640,402.2	227.29	226.95	227.3
AMW-5	1,451,007.4	640,374.6	230.82	230.57	230.8
AMW-6	1,450,957.5	640,428.1	226.35	226.09	226.3
MW-6R	1,450,604.5	640,393.8	224.49	224.06	224.4
MW-14	1,450,673.5	640,577.8	222.57	222.36	222.6
MW-15	1,450,795.6	640,527.8	222.11	221.49	222.1
MW-16	1,450,861.9	640,491.2	222.1	221.86	222.1
MW-17	1,450,807.7	640,411.3	224.09	223.74	224.1

Identifier	*Northing*	*Easting*	*Ground Elevation*
Surface Soil Sample			
SS-01	1,450,540.5	640,554.9	223.4
SS-02	1,450,552.1	640,526.1	224.0
SS-03	1,450,566.0	640,486.6	224.7

Identifier	*Northing*	*Easting*	*Ground Elevation*
Soil Vapor Points			
SV-9	1,450,670.3	640,585.4	222.4
SV-10	1,450,695.1	640,514.9	223.2
SV-11	1,450,788.4	640,551.3	222.1
SV-12	1,450,567.7	640,485.0	224.8

The coordinates shown above are referenced horizontally to the North American Datum of 1983, 2011 adjustment (NAD83/2011) and projected on the New York State Plane Coordinate System (East Zone), expressed in U.S. survey feet.

Elevations shown above are referenced vertically to the North American Vertical Datum of 1988 (NAVD88 - Geoid12B), expressed in feet.

APPENDIX F

Waste Disposal Manifests

Non Hazardous Manifest/Bill Of Lading

All Correspondence and Invoices to:
Environmental Waste Minimization, Inc.
& Rapid Response, Inc.
14 Brick Kiln Court
Northampton, PA 18067
Phone 484-275-6900
Fax 484-275-6970

Document # 87277

Job/Project # 111998

THIS SECTION TO BE COMPLETED BY GENERATOR:

COMPANY NAME/ADDRESS

NYSDEC
625 Broadway
Albany, NY 12233

NYSDEC
222 South Ferry St
Schenectady, NY 12305

IN CASE OF EMERGENCY OR SPILL CONTACT
Rapid Response Inc.

24 HOUR EMERGENCY PHONE #
877-460-1038

QUANTITY	SIZE/TYPE	DESCRIPTION	APPROVAL CODE	WEIGHT/VOLUME
~~3~~ 5	55 DM	1) Non-Hazardous Solids (Soil), DOT/RCRA Non-Regulated	1803 00779 SPS	2815 P
3	55 DM	2) Non-Hazardous Liquids (Purge Water), DOT/RCRA Non-Regulated	1803 00778	600 P

I Hereby certify that the above named waste(s) are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the DOT and the EPA.

GENERATOR'S SIGNATURE X Stef Bat ON BEHALF OF NYSDEC

PRINT NAME X STEFAN BAGNATO ON BEHALF OF NYSDEC

DATE 03-22-18

THIS SECTION TO BE COMPLETED BY HAULER / TRANSPORTER:

COMPANY NAME: Environmental Waste Minimization, Inc.

ADDRESS: 14 Brick Kiln Court, Northampton, PA 18067

PHONE NO. 484-275-6900 ( ) -

VEHICLE I.D. NO.	STATE	BOX NUMBER-IN	BOX NUMBER-OUT	COMMENTS
T-147	PA			

I Hereby certify that the above described waste(s) were accepted for transportation at the producer's site for delivery to the waste facility. Both as listed hereupon.

DRIVER'S SIGNATURE

PRINT DRIVER'S NAME David A Cancellier

DATE 03-22-18

THIS SECTION TO BE COMPLETED BY RECEIVER AT DISPOSAL FACILITY: (ONCE SIGNED, A COPY MUST BE FORWARDED TO EWMI AND GENERATOR)

FACILITY NAME: Environmental Recovery Corporation

ADDRESS: 1076 Old Manheim Pike, Lancaster, PA 17601

PHONE NO. 717-393-2627

COMMENTS

I Hereby certify that the above described wastes were delivered to this Facility, that the Facility is authorized and permitted to receive such wastes.

AUTHORIZED SIGNATURE

PRINT NAME

DATE

APPENDIX G

Data Usability Summary Reports

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY:	ARCADIS U.S., Inc.
SITE NAME:	222 South Ferry Street
CONTRACTED LAB:	TestAmerica-Buffalo
QA/QC LEVEL:	DUSR
EPA SOW/METHODS:	SW-846
VALIDATION GUIDELINES:	USEPA Region II data validation SOPs
SAMPLE MATRIX:	Air
TYPES OF ANALYSES:	Volatile Organics (VOA)

SDG NUMBER: 200-41232-1

SAMPLES:

Client Sample #	Lab Sample #	Matrix	VOA
SV-8 (113017)	200-41232-1	Air	X
SV-12 (113017)	200-41232-2	Air	X
SV-1 (113017)	200-41232-3	Air	X
SV-2 (113017)	200-41232-4	Air	X
SV-4 (113017)	200-41232-5	Air	X
SV-7 (113017)	200-41232-6	Air	X
OA-1 (113017)	200-41232-7	Air	X
SV-5 (113017)	200-41232-8	Air	X
SV-10 (113017)	200-41232-9	Air	X
SV-11 (113017)	200-41232-10	Air	X
SV-T (113017)	200-41232-11	Air	X
SVDUP-1 (113017)	200-41232-12	Air	X

SUFFIX CODES: MD = MATRIX DUPLICATE, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE

DATA REVIEWER(S): Amy L. Hogan, Theresa Tipe

SECONDARY REVIEWER(S): Kevin C. Harmon, Ann Poon

Data Qualifier Definitions

J	-	The associated numerical value is an estimated quantity.
JN	-	The compound/analyte was tentatively identified with estimated concentration.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA USABILITY SUMMARY

TestAmerica – Burlington – 200-41232-1 – Organics

VOLATILE ORGANICS

SUMMARY

I.) General:

The analyses for Volatile Organics were performed by GC / MS according to SW-846 Method TO-15.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualification.

It should be noted that the ppbv data has not been qualified in accordance with the validation and should not be used by the data user.

III.) Holding Times:

All Holding Time criteria were met. No data qualification was necessary.

IV.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was required.

Initial Calibration Verification:

All Initial Calibration verification criteria were met. No data qualification was necessary.

Continuing Calibration:

All Continuing Calibration criteria were met. No data qualification was necessary.

VI.) Blanks:

Method Blanks:

There were no detections in the method blank associated with this SDG. No data qualification was necessary.

Tentatively Identified Compounds (TIC):

There were no TIC detections reported in the blanks associated with this SDG. No data qualification was necessary.

VII.) Surrogate Recoveries:

Surrogate Recovery data were not required for this method. No data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this SDG. All criteria were met. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses data were not required for this method. No action was taken.

X.) Field Duplicates:

One set of field duplicates (SV-11(113017) / SVDUP-1) was identified in this SDG. The calculable Relative Percent Differences (RPDs) were:

1,2,4-trimethylbenzene	134%
1,3,5-trimethylbenzene	136%
2,2,4-trimethylpentane	128%
4-ethyltoluene	136%
acetone	76%
chloroform	130%
ethylbenzene	125%
m,p-xylene	127%
methyl ethyl ketone	100%
n-butane	86%
n-heptane	120%
n-hexane	118%
tetrachloroethene	149%
tetrahydrofuran	100%

toluene	115%
trichlorofluoromethane	138%
o-xylene	124%
total xylene	127%

All RPDs were exceeded the advisory 60% QC limit for air samples. Data qualification based on field duplicate criteria was not required, so no data qualification was necessary.

XI.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No action was required.

XII.) TCL Compound Identification:

All sample data were reported in accordance with the cited method.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No action was required.

Appendix A
Qualified Form Is

*** - The ppbv data has not been qualified in accordance with the validation and should not be used by the data user.**

Client Sample ID: SV-8 (113017)
Lab Sample ID: 200-41232-1

Date Collected: 11/30/17 12:09
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.026	ppb v/v			12/04/17 20:54	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/04/17 20:54	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/04/17 20:54	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/04/17 20:54	1
1,1-Dichloroethene	ND		0.20	0.035	ppb v/v			12/04/17 20:54	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/04/17 20:54	1
1,2,4-Trimethylbenzene	**0.058**	**J**	0.20	0.057	ppb v/v			12/04/17 20:54	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/04/17 20:54	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/04/17 20:54	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/04/17 20:54	1
1,2-Dichloroethene, Total	**0.035**	**J**	0.40	0.029	ppb v/v			12/04/17 20:54	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/04/17 20:54	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/04/17 20:54	1
1,3,5-Trimethylbenzene	ND		0.20	0.040	ppb v/v			12/04/17 20:54	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/04/17 20:54	1
1,3-Dichlorobenzene	ND		0.20	0.050	ppb v/v			12/04/17 20:54	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/04/17 20:54	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/04/17 20:54	1
2,2,4-Trimethylpentane	ND		0.20	0.043	ppb v/v			12/04/17 20:54	1
2-Chlorotoluene	ND		0.20	0.035	ppb v/v			12/04/17 20:54	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/04/17 20:54	1
4-Ethyltoluene	ND		0.20	0.040	ppb v/v			12/04/17 20:54	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/04/17 20:54	1
Acetone	**11**		5.0	1.3	ppb v/v			12/04/17 20:54	1
Benzene	**0.12**	**J**	0.20	0.028	ppb v/v			12/04/17 20:54	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/04/17 20:54	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/04/17 20:54	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/04/17 20:54	1
Bromoform	ND		0.20	0.035	ppb v/v			12/04/17 20:54	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/04/17 20:54	1
Carbon disulfide	**0.064**	**J**	0.50	0.028	ppb v/v			12/04/17 20:54	1
Carbon tetrachloride	ND		0.20	0.011	ppb v/v			12/04/17 20:54	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/04/17 20:54	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/04/17 20:54	1
Chloroform	**0.29**		0.20	0.025	ppb v/v			12/04/17 20:54	1
Chloromethane	**0.22**	**J**	0.50	0.16	ppb v/v			12/04/17 20:54	1
cis-1,2-Dichloroethene	**0.035**	**J**	0.20	0.029	ppb v/v			12/04/17 20:54	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/04/17 20:54	1
Cumene	ND		0.20	0.039	ppb v/v			12/04/17 20:54	1
Cyclohexane	ND		0.20	0.045	ppb v/v			12/04/17 20:54	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/04/17 20:54	1
Dichlorodifluoromethane	**0.35**	**J**	0.50	0.047	ppb v/v			12/04/17 20:54	1
Ethylbenzene	**0.091**	**J**	0.20	0.034	ppb v/v			12/04/17 20:54	1
Freon 22	ND		0.50	0.20	ppb v/v			12/04/17 20:54	1
Freon TF	**0.049**	**J**	0.20	0.027	ppb v/v			12/04/17 20:54	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/04/17 20:54	1
Isopropyl alcohol	**0.48**	**J**	5.0	0.13	ppb v/v			12/04/17 20:54	1
m,p-Xylene	**0.14**	**J**	0.50	0.077	ppb v/v			12/04/17 20:54	1

Client Sample ID: SV-8 (113017)
Lab Sample ID: 200-41232-1

Date Collected: 11/30/17 12:09
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.086	ppb v/v			12/04/17 20:54	1
Methyl Ethyl Ketone	**0.60**		0.50	0.11	ppb v/v			12/04/17 20:54	1
methyl isobutyl ketone	**0.096**	**J**	0.50	0.065	ppb v/v			12/04/17 20:54	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/04/17 20:54	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/04/17 20:54	1
Methylene Chloride	ND		0.50	0.068	ppb v/v			12/04/17 20:54	1
Naphthalene	ND		0.50	0.10	ppb v/v			12/04/17 20:54	1
n-Butane	**0.47**	**J**	0.50	0.046	ppb v/v			12/04/17 20:54	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/04/17 20:54	1
n-Heptane	**0.073**	**J**	0.20	0.068	ppb v/v			12/04/17 20:54	1
n-Hexane	**0.10**	**J**	0.20	0.046	ppb v/v			12/04/17 20:54	1
n-Propylbenzene	ND		0.20	0.040	ppb v/v			12/04/17 20:54	1
sec-Butylbenzene	ND		0.20	0.037	ppb v/v			12/04/17 20:54	1
Styrene	ND		0.20	0.035	ppb v/v			12/04/17 20:54	1
tert-Butyl alcohol	**2.7**	**J**	5.0	1.7	ppb v/v			12/04/17 20:54	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/04/17 20:54	1
Tetrachloroethene	**0.47**		0.20	0.0098	ppb v/v			12/04/17 20:54	1
Tetrahydrofuran	ND		5.0	1.2	ppb v/v			12/04/17 20:54	1
Toluene	**0.17**	**J**	0.20	0.035	ppb v/v			12/04/17 20:54	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/04/17 20:54	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/04/17 20:54	1
Trichloroethene	**22**		0.20	0.0091	ppb v/v			12/04/17 20:54	1
Trichlorofluoromethane	**0.14**	**J**	0.20	0.031	ppb v/v			12/04/17 20:54	1
Vinyl chloride	ND		0.20	0.018	ppb v/v			12/04/17 20:54	1
Xylene (total)	**0.19**	**J**	0.70	0.040	ppb v/v			12/04/17 20:54	1
Xylene, o-	**0.054**	**J**	0.20	0.040	ppb v/v			12/04/17 20:54	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.14	ug/m3			12/04/17 20:54	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/04/17 20:54	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/04/17 20:54	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/04/17 20:54	1
1,1-Dichloroethene	ND		0.79	0.14	ug/m3			12/04/17 20:54	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/04/17 20:54	1
1,2,4-Trimethylbenzene	**0.29**	**J**	0.98	0.28	ug/m3			12/04/17 20:54	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/04/17 20:54	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/04/17 20:54	1
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/04/17 20:54	1
1,2-Dichloroethene, Total	**0.14**	**J**	1.6	0.11	ug/m3			12/04/17 20:54	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/04/17 20:54	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/04/17 20:54	1
1,3,5-Trimethylbenzene	ND		0.98	0.20	ug/m3			12/04/17 20:54	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/04/17 20:54	1
1,3-Dichlorobenzene	ND		1.2	0.30	ug/m3			12/04/17 20:54	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/04/17 20:54	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/04/17 20:54	1
2,2,4-Trimethylpentane	ND		0.93	0.20	ug/m3			12/04/17 20:54	1
2-Chlorotoluene	ND		1.0	0.18	ug/m3			12/04/17 20:54	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/04/17 20:54	1

Client Sample ID: SV-8 (113017)
Lab Sample ID: 200-41232-1

Date Collected: 11/30/17 12:09
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	ND		0.98	0.20	ug/m3			12/04/17 20:54	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/04/17 20:54	1
Acetone	**27**		12	3.1	ug/m3			12/04/17 20:54	1
Benzene	**0.39**	**J**	0.64	0.089	ug/m3			12/04/17 20:54	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/04/17 20:54	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/04/17 20:54	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/04/17 20:54	1
Bromoform	ND		2.1	0.36	ug/m3			12/04/17 20:54	1
Bromomethane	ND		0.78	0.14	ug/m3			12/04/17 20:54	1
Carbon disulfide	**0.20**	**J**	1.6	0.087	ug/m3			12/04/17 20:54	1
Carbon tetrachloride	ND		1.3	0.069	ug/m3			12/04/17 20:54	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/04/17 20:54	1
Chloroethane	ND		1.3	0.34	ug/m3			12/04/17 20:54	1
Chloroform	**1.4**		0.98	0.12	ug/m3			12/04/17 20:54	1
Chloromethane	**0.45**	**J**	1.0	0.33	ug/m3			12/04/17 20:54	1
cis-1,2-Dichloroethene	**0.14**	**J**	0.79	0.11	ug/m3			12/04/17 20:54	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/04/17 20:54	1
Cumene	ND		0.98	0.19	ug/m3			12/04/17 20:54	1
Cyclohexane	ND		0.69	0.15	ug/m3			12/04/17 20:54	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/04/17 20:54	1
Dichlorodifluoromethane	**1.8**	**J**	2.5	0.23	ug/m3			12/04/17 20:54	1
Ethylbenzene	**0.39**	**J**	0.87	0.15	ug/m3			12/04/17 20:54	1
Freon 22	ND		1.8	0.71	ug/m3			12/04/17 20:54	1
Freon TF	**0.37**	**J**	1.5	0.21	ug/m3			12/04/17 20:54	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/04/17 20:54	1
Isopropyl alcohol	**1.2**	**J**	12	0.32	ug/m3			12/04/17 20:54	1
m,p-Xylene	**0.60**	**J**	2.2	0.33	ug/m3			12/04/17 20:54	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.35	ug/m3			12/04/17 20:54	1
Methyl Ethyl Ketone	**1.8**		1.5	0.32	ug/m3			12/04/17 20:54	1
methyl isobutyl ketone	**0.39**	**J**	2.0	0.27	ug/m3			12/04/17 20:54	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/04/17 20:54	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/04/17 20:54	1
Methylene Chloride	ND		1.7	0.24	ug/m3			12/04/17 20:54	1
Naphthalene	ND		2.6	0.52	ug/m3			12/04/17 20:54	1
n-Butane	**1.1**	**J**	1.2	0.11	ug/m3			12/04/17 20:54	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/04/17 20:54	1
n-Heptane	**0.30**	**J**	0.82	0.28	ug/m3			12/04/17 20:54	1
n-Hexane	**0.36**	**J**	0.70	0.16	ug/m3			12/04/17 20:54	1
n-Propylbenzene	ND		0.98	0.20	ug/m3			12/04/17 20:54	1
sec-Butylbenzene	ND		1.1	0.20	ug/m3			12/04/17 20:54	1
Styrene	ND		0.85	0.15	ug/m3			12/04/17 20:54	1
tert-Butyl alcohol	**8.2**	**J**	15	5.2	ug/m3			12/04/17 20:54	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/04/17 20:54	1
Tetrachloroethene	**3.2**		1.4	0.066	ug/m3			12/04/17 20:54	1
Tetrahydrofuran	ND		15	3.5	ug/m3			12/04/17 20:54	1
Toluene	**0.66**	**J**	0.75	0.13	ug/m3			12/04/17 20:54	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/04/17 20:54	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/04/17 20:54	1

Client Sample ID: SV-8 (113017)
Lab Sample ID: 200-41232-1

Date Collected: 11/30/17 12:09
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**120**		1.1	0.049	ug/m3			12/04/17 20:54	1
Trichlorofluoromethane	**0.78**	**J**	1.1	0.17	ug/m3			12/04/17 20:54	1
Vinyl chloride	ND		0.51	0.046	ug/m3			12/04/17 20:54	1
Xylene (total)	**0.84**	**J**	3.0	0.17	ug/m3			12/04/17 20:54	1
Xylene, o-	**0.24**	**J**	0.87	0.17	ug/m3			12/04/17 20:54	1

Client Sample ID: SV-12 (113017)
Lab Sample ID: 200-41232-2

Date Collected: 11/30/17 11:56
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.026	ppb v/v			12/04/17 21:44	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/04/17 21:44	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/04/17 21:44	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/04/17 21:44	1
1,1-Dichloroethene	ND		0.20	0.035	ppb v/v			12/04/17 21:44	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/04/17 21:44	1
1,2,4-Trimethylbenzene	**2.6**		0.20	0.057	ppb v/v			12/04/17 21:44	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/04/17 21:44	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/04/17 21:44	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/04/17 21:44	1
1,2-Dichloroethene, Total	ND		0.40	0.029	ppb v/v			12/04/17 21:44	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/04/17 21:44	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/04/17 21:44	1
1,3,5-Trimethylbenzene	**0.70**		0.20	0.040	ppb v/v			12/04/17 21:44	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/04/17 21:44	1
1,3-Dichlorobenzene	ND		0.20	0.050	ppb v/v			12/04/17 21:44	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/04/17 21:44	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/04/17 21:44	1
2,2,4-Trimethylpentane	**0.099**	**J**	0.20	0.043	ppb v/v			12/04/17 21:44	1
2-Chlorotoluene	**0.10**	**J**	0.20	0.035	ppb v/v			12/04/17 21:44	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/04/17 21:44	1
4-Ethyltoluene	**0.75**		0.20	0.040	ppb v/v			12/04/17 21:44	1
4-Isopropyltoluene	**0.065**	**J**	0.20	0.052	ppb v/v			12/04/17 21:44	1
Acetone	**6.5**		5.0	1.3	ppb v/v			12/04/17 21:44	1
Benzene	**0.26**		0.20	0.028	ppb v/v			12/04/17 21:44	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/04/17 21:44	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/04/17 21:44	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/04/17 21:44	1
Bromoform	ND		0.20	0.035	ppb v/v			12/04/17 21:44	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/04/17 21:44	1
Carbon disulfide	**0.089**	**J**	0.50	0.028	ppb v/v			12/04/17 21:44	1
Carbon tetrachloride	ND		0.20	0.011	ppb v/v			12/04/17 21:44	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/04/17 21:44	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/04/17 21:44	1
Chloroform	**0.028**	**J**	0.20	0.025	ppb v/v			12/04/17 21:44	1
Chloromethane	ND		0.50	0.16	ppb v/v			12/04/17 21:44	1

Client Sample ID: SV-12 (113017)
Lab Sample ID: 200-41232-2

Date Collected: 11/30/17 11:56
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.20	0.029	ppb v/v			12/04/17 21:44	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/04/17 21:44	1
Cumene	**0.11**	**J**	0.20	0.039	ppb v/v			12/04/17 21:44	1
Cyclohexane	**0.15**	**J**	0.20	0.045	ppb v/v			12/04/17 21:44	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/04/17 21:44	1
Dichlorodifluoromethane	**0.35**	**J**	0.50	0.047	ppb v/v			12/04/17 21:44	1
Ethylbenzene	**1.6**		0.20	0.034	ppb v/v			12/04/17 21:44	1
Freon 22	ND		0.50	0.20	ppb v/v			12/04/17 21:44	1
Freon TF	**0.048**	**J**	0.20	0.027	ppb v/v			12/04/17 21:44	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/04/17 21:44	1
Isopropyl alcohol	**0.18**	**J**	5.0	0.13	ppb v/v			12/04/17 21:44	1
m,p-Xylene	**5.8**		0.50	0.077	ppb v/v			12/04/17 21:44	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.086	ppb v/v			12/04/17 21:44	1
Methyl Ethyl Ketone	**0.47**	**J**	0.50	0.11	ppb v/v			12/04/17 21:44	1
methyl isobutyl ketone	ND		0.50	0.065	ppb v/v			12/04/17 21:44	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/04/17 21:44	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/04/17 21:44	1
Methylene Chloride	ND		0.50	0.068	ppb v/v			12/04/17 21:44	1
Naphthalene	**0.15**	**J**	0.50	0.10	ppb v/v			12/04/17 21:44	1
n-Butane	**0.13**	**J**	0.50	0.046	ppb v/v			12/04/17 21:44	1
n-Butylbenzene	**0.11**	**J**	0.20	0.068	ppb v/v			12/04/17 21:44	1
n-Heptane	**0.45**		0.20	0.068	ppb v/v			12/04/17 21:44	1
n-Hexane	**0.43**		0.20	0.046	ppb v/v			12/04/17 21:44	1
n-Propylbenzene	**0.52**		0.20	0.040	ppb v/v			12/04/17 21:44	1
sec-Butylbenzene	**0.046**	**J**	0.20	0.037	ppb v/v			12/04/17 21:44	1
Styrene	**0.039**	**J**	0.20	0.035	ppb v/v			12/04/17 21:44	1
tert-Butyl alcohol	ND		5.0	1.7	ppb v/v			12/04/17 21:44	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/04/17 21:44	1
Tetrachloroethene	**0.082**	**J**	0.20	0.0098	ppb v/v			12/04/17 21:44	1
Tetrahydrofuran	ND		5.0	1.2	ppb v/v			12/04/17 21:44	1
Toluene	**4.4**		0.20	0.035	ppb v/v			12/04/17 21:44	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/04/17 21:44	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/04/17 21:44	1
Trichloroethene	**23**		0.20	0.0091	ppb v/v			12/04/17 21:44	1
Trichlorofluoromethane	**0.15**	**J**	0.20	0.031	ppb v/v			12/04/17 21:44	1
Vinyl chloride	ND		0.20	0.018	ppb v/v			12/04/17 21:44	1
Xylene (total)	**7.9**		0.70	0.040	ppb v/v			12/04/17 21:44	1
Xylene, o-	**2.1**		0.20	0.040	ppb v/v			12/04/17 21:44	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.14	ug/m3			12/04/17 21:44	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/04/17 21:44	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/04/17 21:44	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/04/17 21:44	1
1,1-Dichloroethene	ND		0.79	0.14	ug/m3			12/04/17 21:44	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/04/17 21:44	1
1,2,4-Trimethylbenzene	**13**		0.98	0.28	ug/m3			12/04/17 21:44	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/04/17 21:44	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/04/17 21:44	1

Client Sample ID: SV-12 (113017)
Lab Sample ID: 200-41232-2
Date Collected: 11/30/17 11:56
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/04/17 21:44	1
1,2-Dichloroethene, Total	ND		1.6	0.11	ug/m3			12/04/17 21:44	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/04/17 21:44	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/04/17 21:44	1
1,3,5-Trimethylbenzene	**3.4**		0.98	0.20	ug/m3			12/04/17 21:44	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/04/17 21:44	1
1,3-Dichlorobenzene	ND		1.2	0.30	ug/m3			12/04/17 21:44	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/04/17 21:44	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/04/17 21:44	1
2,2,4-Trimethylpentane	**0.46**	**J**	0.93	0.20	ug/m3			12/04/17 21:44	1
2-Chlorotoluene	**0.52**	**J**	1.0	0.18	ug/m3			12/04/17 21:44	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/04/17 21:44	1
4-Ethyltoluene	**3.7**		0.98	0.20	ug/m3			12/04/17 21:44	1
4-Isopropyltoluene	**0.36**	**J**	1.1	0.29	ug/m3			12/04/17 21:44	1
Acetone	**16**		12	3.1	ug/m3			12/04/17 21:44	1
Benzene	**0.83**		0.64	0.089	ug/m3			12/04/17 21:44	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/04/17 21:44	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/04/17 21:44	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/04/17 21:44	1
Bromoform	ND		2.1	0.36	ug/m3			12/04/17 21:44	1
Bromomethane	ND		0.78	0.14	ug/m3			12/04/17 21:44	1
Carbon disulfide	**0.28**	**J**	1.6	0.087	ug/m3			12/04/17 21:44	1
Carbon tetrachloride	ND		1.3	0.069	ug/m3			12/04/17 21:44	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/04/17 21:44	1
Chloroethane	ND		1.3	0.34	ug/m3			12/04/17 21:44	1
Chloroform	**0.14**	**J**	0.98	0.12	ug/m3			12/04/17 21:44	1
Chloromethane	ND		1.0	0.33	ug/m3			12/04/17 21:44	1
cis-1,2-Dichloroethene	ND		0.79	0.11	ug/m3			12/04/17 21:44	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/04/17 21:44	1
Cumene	**0.56**	**J**	0.98	0.19	ug/m3			12/04/17 21:44	1
Cyclohexane	**0.50**	**J**	0.69	0.15	ug/m3			12/04/17 21:44	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/04/17 21:44	1
Dichlorodifluoromethane	**1.7**	**J**	2.5	0.23	ug/m3			12/04/17 21:44	1
Ethylbenzene	**7.1**		0.87	0.15	ug/m3			12/04/17 21:44	1
Freon 22	ND		1.8	0.71	ug/m3			12/04/17 21:44	1
Freon TF	**0.37**	**J**	1.5	0.21	ug/m3			12/04/17 21:44	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/04/17 21:44	1
Isopropyl alcohol	**0.45**	**J**	12	0.32	ug/m3			12/04/17 21:44	1
m,p-Xylene	**25**		2.2	0.33	ug/m3			12/04/17 21:44	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.35	ug/m3			12/04/17 21:44	1
Methyl Ethyl Ketone	**1.4**	**J**	1.5	0.32	ug/m3			12/04/17 21:44	1
methyl isobutyl ketone	ND		2.0	0.27	ug/m3			12/04/17 21:44	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/04/17 21:44	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/04/17 21:44	1
Methylene Chloride	ND		1.7	0.24	ug/m3			12/04/17 21:44	1
Naphthalene	**0.80**	**J**	2.6	0.52	ug/m3			12/04/17 21:44	1
n-Butane	**0.30**	**J**	1.2	0.11	ug/m3			12/04/17 21:44	1
n-Butylbenzene	**0.62**	**J**	1.1	0.37	ug/m3			12/04/17 21:44	1

Client Sample ID: SV-12 (113017)
Lab Sample ID: 200-41232-2

Date Collected: 11/30/17 11:56
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Heptane	**1.8**		0.82	0.28	ug/m3			12/04/17 21:44	1
n-Hexane	**1.5**		0.70	0.16	ug/m3			12/04/17 21:44	1
n-Propylbenzene	**2.5**		0.98	0.20	ug/m3			12/04/17 21:44	1
sec-Butylbenzene	**0.25**	**J**	1.1	0.20	ug/m3			12/04/17 21:44	1
Styrene	**0.17**	**J**	0.85	0.15	ug/m3			12/04/17 21:44	1
tert-Butyl alcohol	ND		15	5.2	ug/m3			12/04/17 21:44	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/04/17 21:44	1
Tetrachloroethene	**0.55**	**J**	1.4	0.066	ug/m3			12/04/17 21:44	1
Tetrahydrofuran	ND		15	3.5	ug/m3			12/04/17 21:44	1
Toluene	**16**		0.75	0.13	ug/m3			12/04/17 21:44	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/04/17 21:44	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/04/17 21:44	1
Trichloroethene	**120**		1.1	0.049	ug/m3			12/04/17 21:44	1
Trichlorofluoromethane	**0.84**	**J**	1.1	0.17	ug/m3			12/04/17 21:44	1
Vinyl chloride	ND		0.51	0.046	ug/m3			12/04/17 21:44	1
Xylene (total)	**34**		3.0	0.17	ug/m3			12/04/17 21:44	1
Xylene, o-	**9.2**		0.87	0.17	ug/m3			12/04/17 21:44	1

Client Sample ID: SV-1 (113017)
Lab Sample ID: 200-41232-3

Date Collected: 11/30/17 12:10
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		11	1.5	ppb v/v			12/04/17 22:35	56.9
1,1,2,2-Tetrachloroethane	ND		11	1.5	ppb v/v			12/04/17 22:35	56.9
1,1,2-Trichloroethane	ND		11	0.97	ppb v/v			12/04/17 22:35	56.9
1,1-Dichloroethane	ND		11	0.97	ppb v/v			12/04/17 22:35	56.9
1,1-Dichloroethene	ND		11	2.0	ppb v/v			12/04/17 22:35	56.9
1,2,4-Trichlorobenzene	ND		28	11	ppb v/v			12/04/17 22:35	56.9
1,2,4-Trimethylbenzene	ND		11	3.2	ppb v/v			12/04/17 22:35	56.9
1,2-Dibromoethane	ND		11	1.3	ppb v/v			12/04/17 22:35	56.9
1,2-Dichlorobenzene	ND		11	2.6	ppb v/v			12/04/17 22:35	56.9
1,2-Dichloroethane	ND		11	1.9	ppb v/v			12/04/17 22:35	56.9
1,2-Dichloroethene, Total	ND		23	1.7	ppb v/v			12/04/17 22:35	56.9
1,2-Dichloropropane	ND		11	2.0	ppb v/v			12/04/17 22:35	56.9
1,2-Dichlorotetrafluoroethane	ND		11	2.3	ppb v/v			12/04/17 22:35	56.9
1,3,5-Trimethylbenzene	ND		11	2.3	ppb v/v			12/04/17 22:35	56.9
1,3-Butadiene	ND		11	2.1	ppb v/v			12/04/17 22:35	56.9
1,3-Dichlorobenzene	ND		11	2.8	ppb v/v			12/04/17 22:35	56.9
1,4-Dichlorobenzene	ND		11	3.6	ppb v/v			12/04/17 22:35	56.9
1,4-Dioxane	ND		280	43	ppb v/v			12/04/17 22:35	56.9
2,2,4-Trimethylpentane	ND		11	2.4	ppb v/v			12/04/17 22:35	56.9
2-Chlorotoluene	ND		11	2.0	ppb v/v			12/04/17 22:35	56.9
3-Chloropropene	ND		28	3.6	ppb v/v			12/04/17 22:35	56.9
4-Ethyltoluene	ND		11	2.3	ppb v/v			12/04/17 22:35	56.9
4-Isopropyltoluene	ND		11	3.0	ppb v/v			12/04/17 22:35	56.9
Acetone	ND		280	74	ppb v/v			12/04/17 22:35	56.9

Client Sample ID: SV-1 (113017)
Lab Sample ID: 200-41232-3

Date Collected: 11/30/17 12:10
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		11	1.6	ppb v/v			12/04/17 22:35	56.9
Benzyl chloride	ND		11	3.8	ppb v/v			12/04/17 22:35	56.9
Bromodichloromethane	ND		11	3.4	ppb v/v			12/04/17 22:35	56.9
Bromoethene(Vinyl Bromide)	ND		11	1.3	ppb v/v			12/04/17 22:35	56.9
Bromoform	ND		11	2.0	ppb v/v			12/04/17 22:35	56.9
Bromomethane	ND		11	2.0	ppb v/v			12/04/17 22:35	56.9
Carbon disulfide	ND		28	1.6	ppb v/v			12/04/17 22:35	56.9
Carbon tetrachloride	ND		11	0.63	ppb v/v			12/04/17 22:35	56.9
Chlorobenzene	ND		11	1.4	ppb v/v			12/04/17 22:35	56.9
Chloroethane	ND		28	7.4	ppb v/v			12/04/17 22:35	56.9
Chloroform	ND		11	1.4	ppb v/v			12/04/17 22:35	56.9
Chloromethane	ND		28	9.1	ppb v/v			12/04/17 22:35	56.9
cis-1,2-Dichloroethene	ND		11	1.7	ppb v/v			12/04/17 22:35	56.9
cis-1,3-Dichloropropene	ND		11	2.0	ppb v/v			12/04/17 22:35	56.9
Cumene	ND		11	2.2	ppb v/v			12/04/17 22:35	56.9
Cyclohexane	ND		11	2.6	ppb v/v			12/04/17 22:35	56.9
Dibromochloromethane	ND		11	0.97	ppb v/v			12/04/17 22:35	56.9
Dichlorodifluoromethane	ND		28	2.7	ppb v/v			12/04/17 22:35	56.9
Ethylbenzene	ND		11	1.9	ppb v/v			12/04/17 22:35	56.9
Freon 22	ND		28	11	ppb v/v			12/04/17 22:35	56.9
Freon TF	ND		11	1.5	ppb v/v			12/04/17 22:35	56.9
Hexachlorobutadiene	ND		11	3.6	ppb v/v			12/04/17 22:35	56.9
Isopropyl alcohol	ND		280	7.4	ppb v/v			12/04/17 22:35	56.9
m,p-Xylene	ND		28	4.4	ppb v/v			12/04/17 22:35	56.9
Methyl Butyl Ketone (2-Hexanone)	ND		28	4.9	ppb v/v			12/04/17 22:35	56.9
Methyl Ethyl Ketone	ND		28	6.3	ppb v/v			12/04/17 22:35	56.9
methyl isobutyl ketone	ND		28	3.7	ppb v/v			12/04/17 22:35	56.9
Methyl methacrylate	ND		28	6.3	ppb v/v			12/04/17 22:35	56.9
Methyl tert-butyl ether	ND		11	2.3	ppb v/v			12/04/17 22:35	56.9
Methylene Chloride	ND		28	3.9	ppb v/v			12/04/17 22:35	56.9
Naphthalene	ND		28	5.7	ppb v/v			12/04/17 22:35	56.9
n-Butane	ND		28	2.6	ppb v/v			12/04/17 22:35	56.9
n-Butylbenzene	ND		11	3.9	ppb v/v			12/04/17 22:35	56.9
n-Heptane	ND		11	3.9	ppb v/v			12/04/17 22:35	56.9
n-Hexane	ND		11	2.6	ppb v/v			12/04/17 22:35	56.9
n-Propylbenzene	ND		11	2.3	ppb v/v			12/04/17 22:35	56.9
sec-Butylbenzene	ND		11	2.1	ppb v/v			12/04/17 22:35	56.9
Styrene	ND		11	2.0	ppb v/v			12/04/17 22:35	56.9
tert-Butyl alcohol	ND		280	97	ppb v/v			12/04/17 22:35	56.9
tert-Butylbenzene	ND		11	2.1	ppb v/v			12/04/17 22:35	56.9
Tetrachloroethene	**1.6**	**J**	11	0.56	ppb v/v			12/04/17 22:35	56.9
Tetrahydrofuran	ND		280	68	ppb v/v			12/04/17 22:35	56.9
Toluene	ND		11	2.0	ppb v/v			12/04/17 22:35	56.9
trans-1,2-Dichloroethene	ND		11	2.8	ppb v/v			12/04/17 22:35	56.9
trans-1,3-Dichloropropene	ND		11	2.2	ppb v/v			12/04/17 22:35	56.9
Trichloroethene	**1000**		11	0.52	ppb v/v			12/04/17 22:35	56.9
Trichlorofluoromethane	ND		11	1.8	ppb v/v			12/04/17 22:35	56.9
Vinyl chloride	ND		11	1.0	ppb v/v			12/04/17 22:35	56.9

Client Sample ID: SV-1 (113017)
Lab Sample ID: 200-41232-3

Date Collected: 11/30/17 12:10
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (total)	ND		40	2.3	ppb v/v			12/04/17 22:35	56.9
Xylene, o-	ND		11	2.3	ppb v/v			12/04/17 22:35	56.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		62	8.1	ug/m3			12/04/17 22:35	56.9
1,1,2,2-Tetrachloroethane	ND		78	10	ug/m3			12/04/17 22:35	56.9
1,1,2-Trichloroethane	ND		62	5.3	ug/m3			12/04/17 22:35	56.9
1,1-Dichloroethane	ND		46	3.9	ug/m3			12/04/17 22:35	56.9
1,1-Dichloroethene	ND		45	7.9	ug/m3			12/04/17 22:35	56.9
1,2,4-Trichlorobenzene	ND		210	80	ug/m3			12/04/17 22:35	56.9
1,2,4-Trimethylbenzene	ND		56	16	ug/m3			12/04/17 22:35	56.9
1,2-Dibromoethane	ND		87	10	ug/m3			12/04/17 22:35	56.9
1,2-Dichlorobenzene	ND		68	15	ug/m3			12/04/17 22:35	56.9
1,2-Dichloroethane	ND		46	7.8	ug/m3			12/04/17 22:35	56.9
1,2-Dichloroethene, Total	ND		90	6.5	ug/m3			12/04/17 22:35	56.9
1,2-Dichloropropane	ND		53	9.2	ug/m3			12/04/17 22:35	56.9
1,2-Dichlorotetrafluoroethane	ND		80	16	ug/m3			12/04/17 22:35	56.9
1,3,5-Trimethylbenzene	ND		56	11	ug/m3			12/04/17 22:35	56.9
1,3-Butadiene	ND		25	4.7	ug/m3			12/04/17 22:35	56.9
1,3-Dichlorobenzene	ND		68	17	ug/m3			12/04/17 22:35	56.9
1,4-Dichlorobenzene	ND		68	22	ug/m3			12/04/17 22:35	56.9
1,4-Dioxane	ND		1000	160	ug/m3			12/04/17 22:35	56.9
2,2,4-Trimethylpentane	ND		53	11	ug/m3			12/04/17 22:35	56.9
2-Chlorotoluene	ND		59	10	ug/m3			12/04/17 22:35	56.9
3-Chloropropene	ND		89	11	ug/m3			12/04/17 22:35	56.9
4-Ethyltoluene	ND		56	11	ug/m3			12/04/17 22:35	56.9
4-Isopropyltoluene	ND		62	16	ug/m3			12/04/17 22:35	56.9
Acetone	ND		680	180	ug/m3			12/04/17 22:35	56.9
Benzene	ND		36	5.1	ug/m3			12/04/17 22:35	56.9
Benzyl chloride	ND		59	20	ug/m3			12/04/17 22:35	56.9
Bromodichloromethane	ND		76	22	ug/m3			12/04/17 22:35	56.9
Bromoethene(Vinyl Bromide)	ND		50	5.5	ug/m3			12/04/17 22:35	56.9
Bromoform	ND		120	21	ug/m3			12/04/17 22:35	56.9
Bromomethane	ND		44	8.0	ug/m3			12/04/17 22:35	56.9
Carbon disulfide	ND		89	5.0	ug/m3			12/04/17 22:35	56.9
Carbon tetrachloride	ND		72	3.9	ug/m3			12/04/17 22:35	56.9
Chlorobenzene	ND		52	6.5	ug/m3			12/04/17 22:35	56.9
Chloroethane	ND		75	20	ug/m3			12/04/17 22:35	56.9
Chloroform	ND		56	6.9	ug/m3			12/04/17 22:35	56.9
Chloromethane	ND		59	19	ug/m3			12/04/17 22:35	56.9
cis-1,2-Dichloroethene	ND		45	6.5	ug/m3			12/04/17 22:35	56.9
cis-1,3-Dichloropropene	ND		52	9.3	ug/m3			12/04/17 22:35	56.9
Cumene	ND		56	11	ug/m3			12/04/17 22:35	56.9
Cyclohexane	ND		39	8.8	ug/m3			12/04/17 22:35	56.9
Dibromochloromethane	ND		97	8.2	ug/m3			12/04/17 22:35	56.9
Dichlorodifluoromethane	ND		140	13	ug/m3			12/04/17 22:35	56.9
Ethylbenzene	ND		49	8.4	ug/m3			12/04/17 22:35	56.9
Freon 22	ND		100	40	ug/m3			12/04/17 22:35	56.9
Freon TF	ND		87	12	ug/m3			12/04/17 22:35	56.9

Client Sample ID: SV-1 (113017)
Lab Sample ID: 200-41232-3

Date Collected: 11/30/17 12:10
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		120	39	ug/m3			12/04/17 22:35	56.9
Isopropyl alcohol	ND		700	18	ug/m3			12/04/17 22:35	56.9
m,p-Xylene	ND		120	19	ug/m3			12/04/17 22:35	56.9
Methyl Butyl Ketone (2-Hexanone)	ND		120	20	ug/m3			12/04/17 22:35	56.9
Methyl Ethyl Ketone	ND		84	18	ug/m3			12/04/17 22:35	56.9
methyl isobutyl ketone	ND		120	15	ug/m3			12/04/17 22:35	56.9
Methyl methacrylate	ND		120	26	ug/m3			12/04/17 22:35	56.9
Methyl tert-butyl ether	ND		41	8.4	ug/m3			12/04/17 22:35	56.9
Methylene Chloride	ND		99	13	ug/m3			12/04/17 22:35	56.9
Naphthalene	ND		150	30	ug/m3			12/04/17 22:35	56.9
n-Butane	ND		68	6.2	ug/m3			12/04/17 22:35	56.9
n-Butylbenzene	ND		62	21	ug/m3			12/04/17 22:35	56.9
n-Heptane	ND		47	16	ug/m3			12/04/17 22:35	56.9
n-Hexane	ND		40	9.2	ug/m3			12/04/17 22:35	56.9
n-Propylbenzene	ND		56	11	ug/m3			12/04/17 22:35	56.9
sec-Butylbenzene	ND		62	12	ug/m3			12/04/17 22:35	56.9
Styrene	ND		48	8.5	ug/m3			12/04/17 22:35	56.9
tert-Butyl alcohol	ND		860	290	ug/m3			12/04/17 22:35	56.9
tert-Butylbenzene	ND		62	12	ug/m3			12/04/17 22:35	56.9
Tetrachloroethene	**11**	**J**	77	3.8	ug/m3			12/04/17 22:35	56.9
Tetrahydrofuran	ND		840	200	ug/m3			12/04/17 22:35	56.9
Toluene	ND		43	7.5	ug/m3			12/04/17 22:35	56.9
trans-1,2-Dichloroethene	ND		45	11	ug/m3			12/04/17 22:35	56.9
trans-1,3-Dichloropropene	ND		52	9.8	ug/m3			12/04/17 22:35	56.9
Trichloroethene	**5400**		61	2.8	ug/m3			12/04/17 22:35	56.9
Trichlorofluoromethane	ND		64	9.9	ug/m3			12/04/17 22:35	56.9
Vinyl chloride	ND		29	2.6	ug/m3			12/04/17 22:35	56.9
Xylene (total)	ND		170	9.9	ug/m3			12/04/17 22:35	56.9
Xylene, o-	ND		49	9.9	ug/m3			12/04/17 22:35	56.9

Client Sample ID: SV-2 (113017)
Lab Sample ID: 200-41232-4

Date Collected: 11/30/17 12:29
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.026	ppb v/v			12/04/17 23:26	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/04/17 23:26	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/04/17 23:26	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/04/17 23:26	1
1,1-Dichloroethene	ND		0.20	0.035	ppb v/v			12/04/17 23:26	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/04/17 23:26	1
1,2,4-Trimethylbenzene	ND		0.20	0.057	ppb v/v			12/04/17 23:26	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/04/17 23:26	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/04/17 23:26	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/04/17 23:26	1
1,2-Dichloroethene, Total	ND		0.40	0.029	ppb v/v			12/04/17 23:26	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/04/17 23:26	1

Client Sample ID: SV-2 (113017)
Lab Sample ID: 200-41232-4

Date Collected: 11/30/17 12:29
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/04/17 23:26	1
1,3,5-Trimethylbenzene	ND		0.20	0.040	ppb v/v			12/04/17 23:26	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/04/17 23:26	1
1,3-Dichlorobenzene	ND		0.20	0.050	ppb v/v			12/04/17 23:26	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/04/17 23:26	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/04/17 23:26	1
2,2,4-Trimethylpentane	ND		0.20	0.043	ppb v/v			12/04/17 23:26	1
2-Chlorotoluene	ND		0.20	0.035	ppb v/v			12/04/17 23:26	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/04/17 23:26	1
4-Ethyltoluene	ND		0.20	0.040	ppb v/v			12/04/17 23:26	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/04/17 23:26	1
Acetone	**9.9**		5.0	1.3	ppb v/v			12/04/17 23:26	1
Benzene	**0.60**		0.20	0.028	ppb v/v			12/04/17 23:26	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/04/17 23:26	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/04/17 23:26	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/04/17 23:26	1
Bromoform	ND		0.20	0.035	ppb v/v			12/04/17 23:26	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/04/17 23:26	1
Carbon disulfide	**0.14**	**J**	0.50	0.028	ppb v/v			12/04/17 23:26	1
Carbon tetrachloride	ND		0.20	0.011	ppb v/v			12/04/17 23:26	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/04/17 23:26	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/04/17 23:26	1
Chloroform	**0.11**	**J**	0.20	0.025	ppb v/v			12/04/17 23:26	1
Chloromethane	ND		0.50	0.16	ppb v/v			12/04/17 23:26	1
cis-1,2-Dichloroethene	ND		0.20	0.029	ppb v/v			12/04/17 23:26	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/04/17 23:26	1
Cumene	ND		0.20	0.039	ppb v/v			12/04/17 23:26	1
Cyclohexane	ND		0.20	0.045	ppb v/v			12/04/17 23:26	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/04/17 23:26	1
Dichlorodifluoromethane	**0.24**	**J**	0.50	0.047	ppb v/v			12/04/17 23:26	1
Ethylbenzene	**0.048**	**J**	0.20	0.034	ppb v/v			12/04/17 23:26	1
Freon 22	ND		0.50	0.20	ppb v/v			12/04/17 23:26	1
Freon TF	**0.031**	**J**	0.20	0.027	ppb v/v			12/04/17 23:26	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/04/17 23:26	1
Isopropyl alcohol	**1.0**	**J**	5.0	0.13	ppb v/v			12/04/17 23:26	1
m,p-Xylene	**0.17**	**J**	0.50	0.077	ppb v/v			12/04/17 23:26	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.086	ppb v/v			12/04/17 23:26	1
Methyl Ethyl Ketone	**0.38**	**J**	0.50	0.11	ppb v/v			12/04/17 23:26	1
methyl isobutyl ketone	ND		0.50	0.065	ppb v/v			12/04/17 23:26	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/04/17 23:26	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/04/17 23:26	1
Methylene Chloride	ND		0.50	0.068	ppb v/v			12/04/17 23:26	1
Naphthalene	ND		0.50	0.10	ppb v/v			12/04/17 23:26	1
n-Butane	**0.37**	**J**	0.50	0.046	ppb v/v			12/04/17 23:26	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/04/17 23:26	1
n-Heptane	ND		0.20	0.068	ppb v/v			12/04/17 23:26	1
n-Hexane	**0.070**	**J**	0.20	0.046	ppb v/v			12/04/17 23:26	1
n-Propylbenzene	ND		0.20	0.040	ppb v/v			12/04/17 23:26	1

Client Sample ID: SV-2 (113017)
Lab Sample ID: 200-41232-4

Date Collected: 11/30/17 12:29
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.20	0.037	ppb v/v			12/04/17 23:26	1
Styrene	ND		0.20	0.035	ppb v/v			12/04/17 23:26	1
tert-Butyl alcohol	ND		5.0	1.7	ppb v/v			12/04/17 23:26	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/04/17 23:26	1
Tetrachloroethene	**0.25**		0.20	0.0098	ppb v/v			12/04/17 23:26	1
Tetrahydrofuran	ND		5.0	1.2	ppb v/v			12/04/17 23:26	1
Toluene	**0.91**		0.20	0.035	ppb v/v			12/04/17 23:26	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/04/17 23:26	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/04/17 23:26	1
Trichloroethene	**29**		0.20	0.0091	ppb v/v			12/04/17 23:26	1
Trichlorofluoromethane	**0.068**	**J**	0.20	0.031	ppb v/v			12/04/17 23:26	1
Vinyl chloride	ND		0.20	0.018	ppb v/v			12/04/17 23:26	1
Xylene (total)	**0.22**	**J**	0.70	0.040	ppb v/v			12/04/17 23:26	1
Xylene, o-	**0.048**	**J**	0.20	0.040	ppb v/v			12/04/17 23:26	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.14	ug/m3			12/04/17 23:26	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/04/17 23:26	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/04/17 23:26	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/04/17 23:26	1
1,1-Dichloroethene	ND		0.79	0.14	ug/m3			12/04/17 23:26	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/04/17 23:26	1
1,2,4-Trimethylbenzene	ND		0.98	0.28	ug/m3			12/04/17 23:26	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/04/17 23:26	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/04/17 23:26	1
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/04/17 23:26	1
1,2-Dichloroethene, Total	ND		1.6	0.11	ug/m3			12/04/17 23:26	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/04/17 23:26	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/04/17 23:26	1
1,3,5-Trimethylbenzene	ND		0.98	0.20	ug/m3			12/04/17 23:26	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/04/17 23:26	1
1,3-Dichlorobenzene	ND		1.2	0.30	ug/m3			12/04/17 23:26	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/04/17 23:26	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/04/17 23:26	1
2,2,4-Trimethylpentane	ND		0.93	0.20	ug/m3			12/04/17 23:26	1
2-Chlorotoluene	ND		1.0	0.18	ug/m3			12/04/17 23:26	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/04/17 23:26	1
4-Ethyltoluene	ND		0.98	0.20	ug/m3			12/04/17 23:26	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/04/17 23:26	1
Acetone	**24**		12	3.1	ug/m3			12/04/17 23:26	1
Benzene	**1.9**		0.64	0.089	ug/m3			12/04/17 23:26	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/04/17 23:26	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/04/17 23:26	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/04/17 23:26	1
Bromoform	ND		2.1	0.36	ug/m3			12/04/17 23:26	1
Bromomethane	ND		0.78	0.14	ug/m3			12/04/17 23:26	1
Carbon disulfide	**0.43**	**J**	1.6	0.087	ug/m3			12/04/17 23:26	1
Carbon tetrachloride	ND		1.3	0.069	ug/m3			12/04/17 23:26	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/04/17 23:26	1

Client Sample ID: SV-2 (113017)
Lab Sample ID: 200-41232-4

Date Collected: 11/30/17 12:29
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.3	0.34	ug/m3			12/04/17 23:26	1
Chloroform	**0.52**	**J**	0.98	0.12	ug/m3			12/04/17 23:26	1
Chloromethane	ND		1.0	0.33	ug/m3			12/04/17 23:26	1
cis-1,2-Dichloroethene	ND		0.79	0.11	ug/m3			12/04/17 23:26	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/04/17 23:26	1
Cumene	ND		0.98	0.19	ug/m3			12/04/17 23:26	1
Cyclohexane	ND		0.69	0.15	ug/m3			12/04/17 23:26	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/04/17 23:26	1
Dichlorodifluoromethane	**1.2**	**J**	2.5	0.23	ug/m3			12/04/17 23:26	1
Ethylbenzene	**0.21**	**J**	0.87	0.15	ug/m3			12/04/17 23:26	1
Freon 22	ND		1.8	0.71	ug/m3			12/04/17 23:26	1
Freon TF	**0.24**	**J**	1.5	0.21	ug/m3			12/04/17 23:26	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/04/17 23:26	1
Isopropyl alcohol	**2.6**	**J**	12	0.32	ug/m3			12/04/17 23:26	1
m,p-Xylene	**0.72**	**J**	2.2	0.33	ug/m3			12/04/17 23:26	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.35	ug/m3			12/04/17 23:26	1
Methyl Ethyl Ketone	**1.1**	**J**	1.5	0.32	ug/m3			12/04/17 23:26	1
methyl isobutyl ketone	ND		2.0	0.27	ug/m3			12/04/17 23:26	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/04/17 23:26	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/04/17 23:26	1
Methylene Chloride	ND		1.7	0.24	ug/m3			12/04/17 23:26	1
Naphthalene	ND		2.6	0.52	ug/m3			12/04/17 23:26	1
n-Butane	**0.87**	**J**	1.2	0.11	ug/m3			12/04/17 23:26	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/04/17 23:26	1
n-Heptane	ND		0.82	0.28	ug/m3			12/04/17 23:26	1
n-Hexane	**0.25**	**J**	0.70	0.16	ug/m3			12/04/17 23:26	1
n-Propylbenzene	ND		0.98	0.20	ug/m3			12/04/17 23:26	1
sec-Butylbenzene	ND		1.1	0.20	ug/m3			12/04/17 23:26	1
Styrene	ND		0.85	0.15	ug/m3			12/04/17 23:26	1
tert-Butyl alcohol	ND		15	5.2	ug/m3			12/04/17 23:26	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/04/17 23:26	1
Tetrachloroethene	**1.7**		1.4	0.066	ug/m3			12/04/17 23:26	1
Tetrahydrofuran	ND		15	3.5	ug/m3			12/04/17 23:26	1
Toluene	**3.4**		0.75	0.13	ug/m3			12/04/17 23:26	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/04/17 23:26	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/04/17 23:26	1
Trichloroethene	**160**		1.1	0.049	ug/m3			12/04/17 23:26	1
Trichlorofluoromethane	**0.38**	**J**	1.1	0.17	ug/m3			12/04/17 23:26	1
Vinyl chloride	ND		0.51	0.046	ug/m3			12/04/17 23:26	1
Xylene (total)	**0.95**	**J**	3.0	0.17	ug/m3			12/04/17 23:26	1
Xylene, o-	**0.21**	**J**	0.87	0.17	ug/m3			12/04/17 23:26	1

Client Sample ID: SV-4 (113017)
Lab Sample ID: 200-41232-5

Date Collected: 11/30/17 11:59
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		310	40	ppb v/v			12/05/17 00:16	1541
1,1,2,2-Tetrachloroethane	ND		310	40	ppb v/v			12/05/17 00:16	1541
1,1,2-Trichloroethane	ND		310	26	ppb v/v			12/05/17 00:16	1541
1,1-Dichloroethane	ND		310	26	ppb v/v			12/05/17 00:16	1541
1,1-Dichloroethene	**90**	**J**	310	54	ppb v/v			12/05/17 00:16	1541
1,2,4-Trichlorobenzene	ND		770	290	ppb v/v			12/05/17 00:16	1541
1,2,4-Trimethylbenzene	ND		310	88	ppb v/v			12/05/17 00:16	1541
1,2-Dibromoethane	ND		310	35	ppb v/v			12/05/17 00:16	1541
1,2-Dichlorobenzene	ND		310	69	ppb v/v			12/05/17 00:16	1541
1,2-Dichloroethane	ND		310	52	ppb v/v			12/05/17 00:16	1541
1,2-Dichloroethene, Total	**3300**		620	45	ppb v/v			12/05/17 00:16	1541
1,2-Dichloropropane	ND		310	54	ppb v/v			12/05/17 00:16	1541
1,2-Dichlorotetrafluoroethane	ND		310	63	ppb v/v			12/05/17 00:16	1541
1,3,5-Trimethylbenzene	ND		310	62	ppb v/v			12/05/17 00:16	1541
1,3-Butadiene	ND		310	57	ppb v/v			12/05/17 00:16	1541
1,3-Dichlorobenzene	ND		310	77	ppb v/v			12/05/17 00:16	1541
1,4-Dichlorobenzene	ND		310	97	ppb v/v			12/05/17 00:16	1541
1,4-Dioxane	ND		7700	1200	ppb v/v			12/05/17 00:16	1541
2,2,4-Trimethylpentane	ND		310	66	ppb v/v			12/05/17 00:16	1541
2-Chlorotoluene	ND		310	54	ppb v/v			12/05/17 00:16	1541
3-Chloropropene	ND		770	97	ppb v/v			12/05/17 00:16	1541
4-Ethyltoluene	ND		310	62	ppb v/v			12/05/17 00:16	1541
4-Isopropyltoluene	ND		310	80	ppb v/v			12/05/17 00:16	1541
Acetone	ND		7700	2000	ppb v/v			12/05/17 00:16	1541
Benzene	ND		310	43	ppb v/v			12/05/17 00:16	1541
Benzyl chloride	ND		310	100	ppb v/v			12/05/17 00:16	1541
Bromodichloromethane	ND		310	91	ppb v/v			12/05/17 00:16	1541
Bromoethene(Vinyl Bromide)	ND		310	34	ppb v/v			12/05/17 00:16	1541
Bromoform	ND		310	54	ppb v/v			12/05/17 00:16	1541
Bromomethane	ND		310	55	ppb v/v			12/05/17 00:16	1541
Carbon disulfide	ND		770	43	ppb v/v			12/05/17 00:16	1541
Carbon tetrachloride	ND		310	17	ppb v/v			12/05/17 00:16	1541
Chlorobenzene	ND		310	39	ppb v/v			12/05/17 00:16	1541
Chloroethane	ND		770	200	ppb v/v			12/05/17 00:16	1541
Chloroform	ND		310	39	ppb v/v			12/05/17 00:16	1541
Chloromethane	ND		770	250	ppb v/v			12/05/17 00:16	1541
cis-1,2-Dichloroethene	**3300**		310	45	ppb v/v			12/05/17 00:16	1541
cis-1,3-Dichloropropene	ND		310	55	ppb v/v			12/05/17 00:16	1541
Cumene	ND		310	60	ppb v/v			12/05/17 00:16	1541
Cyclohexane	ND		310	69	ppb v/v			12/05/17 00:16	1541
Dibromochloromethane	ND		310	26	ppb v/v			12/05/17 00:16	1541
Dichlorodifluoromethane	ND		770	72	ppb v/v			12/05/17 00:16	1541
Ethylbenzene	ND		310	52	ppb v/v			12/05/17 00:16	1541
Freon 22	ND		770	310	ppb v/v			12/05/17 00:16	1541
Freon TF	ND		310	42	ppb v/v			12/05/17 00:16	1541
Hexachlorobutadiene	ND		310	99	ppb v/v			12/05/17 00:16	1541
Isopropyl alcohol	ND		7700	200	ppb v/v			12/05/17 00:16	1541
m,p-Xylene	ND		770	120	ppb v/v			12/05/17 00:16	1541

Client Sample ID: SV-4 (113017)
Lab Sample ID: 200-41232-5
Date Collected: 11/30/17 11:59
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		770	130	ppb v/v			12/05/17 00:16	1541
Methyl Ethyl Ketone	ND		770	170	ppb v/v			12/05/17 00:16	1541
methyl isobutyl ketone	ND		770	100	ppb v/v			12/05/17 00:16	1541
Methyl methacrylate	ND		770	170	ppb v/v			12/05/17 00:16	1541
Methyl tert-butyl ether	ND		310	63	ppb v/v			12/05/17 00:16	1541
Methylene Chloride	ND		770	100	ppb v/v			12/05/17 00:16	1541
Naphthalene	ND		770	150	ppb v/v			12/05/17 00:16	1541
n-Butane	ND		770	71	ppb v/v			12/05/17 00:16	1541
n-Butylbenzene	ND		310	100	ppb v/v			12/05/17 00:16	1541
n-Heptane	ND		310	100	ppb v/v			12/05/17 00:16	1541
n-Hexane	ND		310	71	ppb v/v			12/05/17 00:16	1541
n-Propylbenzene	ND		310	62	ppb v/v			12/05/17 00:16	1541
sec-Butylbenzene	ND		310	57	ppb v/v			12/05/17 00:16	1541
Styrene	ND		310	54	ppb v/v			12/05/17 00:16	1541
tert-Butyl alcohol	ND		7700	2600	ppb v/v			12/05/17 00:16	1541
tert-Butylbenzene	ND		310	57	ppb v/v			12/05/17 00:16	1541
Tetrachloroethene	ND		310	15	ppb v/v			12/05/17 00:16	1541
Tetrahydrofuran	ND		7700	1800	ppb v/v			12/05/17 00:16	1541
Toluene	ND		310	54	ppb v/v			12/05/17 00:16	1541
trans-1,2-Dichloroethene	ND		310	77	ppb v/v			12/05/17 00:16	1541
trans-1,3-Dichloropropene	ND		310	59	ppb v/v			12/05/17 00:16	1541
Trichloroethene	**31000**		310	14	ppb v/v			12/05/17 00:16	1541
Trichlorofluoromethane	ND		310	48	ppb v/v			12/05/17 00:16	1541
Vinyl chloride	ND		310	28	ppb v/v			12/05/17 00:16	1541
Xylene (total)	ND		1100	62	ppb v/v			12/05/17 00:16	1541
Xylene, o-	ND		310	62	ppb v/v			12/05/17 00:16	1541

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1700	220	ug/m3			12/05/17 00:16	1541
1,1,2,2-Tetrachloroethane	ND		2100	280	ug/m3			12/05/17 00:16	1541
1,1,2-Trichloroethane	ND		1700	140	ug/m3			12/05/17 00:16	1541
1,1-Dichloroethane	ND		1200	110	ug/m3			12/05/17 00:16	1541
1,1-Dichloroethene	**360**	**J**	1200	210	ug/m3			12/05/17 00:16	1541
1,2,4-Trichlorobenzene	ND		5700	2200	ug/m3			12/05/17 00:16	1541
1,2,4-Trimethylbenzene	ND		1500	430	ug/m3			12/05/17 00:16	1541
1,2-Dibromoethane	ND		2400	270	ug/m3			12/05/17 00:16	1541
1,2-Dichlorobenzene	ND		1900	420	ug/m3			12/05/17 00:16	1541
1,2-Dichloroethane	ND		1200	210	ug/m3			12/05/17 00:16	1541
1,2-Dichloroethene, Total	**13000**		2400	180	ug/m3			12/05/17 00:16	1541
1,2-Dichloropropane	ND		1400	250	ug/m3			12/05/17 00:16	1541
1,2-Dichlorotetrafluoroethane	ND		2200	440	ug/m3			12/05/17 00:16	1541
1,3,5-Trimethylbenzene	ND		1500	300	ug/m3			12/05/17 00:16	1541
1,3-Butadiene	ND		680	130	ug/m3			12/05/17 00:16	1541
1,3-Dichlorobenzene	ND		1900	460	ug/m3			12/05/17 00:16	1541
1,4-Dichlorobenzene	ND		1900	580	ug/m3			12/05/17 00:16	1541
1,4-Dioxane	ND		28000	4200	ug/m3			12/05/17 00:16	1541
2,2,4-Trimethylpentane	ND		1400	310	ug/m3			12/05/17 00:16	1541
2-Chlorotoluene	ND		1600	280	ug/m3			12/05/17 00:16	1541
3-Chloropropene	ND		2400	300	ug/m3			12/05/17 00:16	1541

Client Sample ID: SV-4 (113017)
Lab Sample ID: 200-41232-5

Date Collected: 11/30/17 11:59
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	ND		1500	300	ug/m3			12/05/17 00:16	1541
4-Isopropyltoluene	ND		1700	440	ug/m3			12/05/17 00:16	1541
Acetone	ND		18000	4800	ug/m3			12/05/17 00:16	1541
Benzene	ND		980	140	ug/m3			12/05/17 00:16	1541
Benzyl chloride	ND		1600	530	ug/m3			12/05/17 00:16	1541
Bromodichloromethane	ND		2100	610	ug/m3			12/05/17 00:16	1541
Bromoethene(Vinyl Bromide)	ND		1300	150	ug/m3			12/05/17 00:16	1541
Bromoform	ND		3200	560	ug/m3			12/05/17 00:16	1541
Bromomethane	ND		1200	220	ug/m3			12/05/17 00:16	1541
Carbon disulfide	ND		2400	130	ug/m3			12/05/17 00:16	1541
Carbon tetrachloride	ND		1900	110	ug/m3			12/05/17 00:16	1541
Chlorobenzene	ND		1400	180	ug/m3			12/05/17 00:16	1541
Chloroethane	ND		2000	530	ug/m3			12/05/17 00:16	1541
Chloroform	ND		1500	190	ug/m3			12/05/17 00:16	1541
Chloromethane	ND		1600	510	ug/m3			12/05/17 00:16	1541
cis-1,2-Dichloroethene	**13000**		1200	180	ug/m3			12/05/17 00:16	1541
cis-1,3-Dichloropropene	ND		1400	250	ug/m3			12/05/17 00:16	1541
Cumene	ND		1500	300	ug/m3			12/05/17 00:16	1541
Cyclohexane	ND		1100	240	ug/m3			12/05/17 00:16	1541
Dibromochloromethane	ND		2600	220	ug/m3			12/05/17 00:16	1541
Dichlorodifluoromethane	ND		3800	360	ug/m3			12/05/17 00:16	1541
Ethylbenzene	ND		1300	230	ug/m3			12/05/17 00:16	1541
Freon 22	ND		2700	1100	ug/m3			12/05/17 00:16	1541
Freon TF	ND		2400	320	ug/m3			12/05/17 00:16	1541
Hexachlorobutadiene	ND		3300	1100	ug/m3			12/05/17 00:16	1541
Isopropyl alcohol	ND		19000	490	ug/m3			12/05/17 00:16	1541
m,p-Xylene	ND		3300	520	ug/m3			12/05/17 00:16	1541
Methyl Butyl Ketone (2-Hexanone)	ND		3200	540	ug/m3			12/05/17 00:16	1541
Methyl Ethyl Ketone	ND		2300	500	ug/m3			12/05/17 00:16	1541
methyl isobutyl ketone	ND		3200	410	ug/m3			12/05/17 00:16	1541
Methyl methacrylate	ND		3200	690	ug/m3			12/05/17 00:16	1541
Methyl tert-butyl ether	ND		1100	230	ug/m3			12/05/17 00:16	1541
Methylene Chloride	ND		2700	360	ug/m3			12/05/17 00:16	1541
Naphthalene	ND		4000	810	ug/m3			12/05/17 00:16	1541
n-Butane	ND		1800	170	ug/m3			12/05/17 00:16	1541
n-Butylbenzene	ND		1700	580	ug/m3			12/05/17 00:16	1541
n-Heptane	ND		1300	430	ug/m3			12/05/17 00:16	1541
n-Hexane	ND		1100	250	ug/m3			12/05/17 00:16	1541
n-Propylbenzene	ND		1500	300	ug/m3			12/05/17 00:16	1541
sec-Butylbenzene	ND		1700	310	ug/m3			12/05/17 00:16	1541
Styrene	ND		1300	230	ug/m3			12/05/17 00:16	1541
tert-Butyl alcohol	ND		23000	7900	ug/m3			12/05/17 00:16	1541
tert-Butylbenzene	ND		1700	310	ug/m3			12/05/17 00:16	1541
Tetrachloroethene	ND		2100	100	ug/m3			12/05/17 00:16	1541
Tetrahydrofuran	ND		23000	5500	ug/m3			12/05/17 00:16	1541
Toluene	ND		1200	200	ug/m3			12/05/17 00:16	1541
trans-1,2-Dichloroethene	ND		1200	310	ug/m3			12/05/17 00:16	1541
trans-1,3-Dichloropropene	ND		1400	270	ug/m3			12/05/17 00:16	1541

Client Sample ID: SV-4 (113017)
Lab Sample ID: 200-41232-5

Date Collected: 11/30/17 11:59
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**160000**		1700	75	ug/m3			12/05/17 00:16	1541
Trichlorofluoromethane	ND		1700	270	ug/m3			12/05/17 00:16	1541
Vinyl chloride	ND		790	71	ug/m3			12/05/17 00:16	1541
Xylene (total)	ND		4700	270	ug/m3			12/05/17 00:16	1541
Xylene, o-	ND		1300	270	ug/m3			12/05/17 00:16	1541

Client Sample ID: SV-7 (113017)
Lab Sample ID: 200-41232-6

Date Collected: 11/30/17 12:02
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.026	ppb v/v			12/05/17 01:05	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/05/17 01:05	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 01:05	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 01:05	1
1,1-Dichloroethene	ND		0.20	0.035	ppb v/v			12/05/17 01:05	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/05/17 01:05	1
1,2,4-Trimethylbenzene	ND		0.20	0.057	ppb v/v			12/05/17 01:05	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/05/17 01:05	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/05/17 01:05	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/05/17 01:05	1
1,2-Dichloroethene, Total	ND		0.40	0.029	ppb v/v			12/05/17 01:05	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/05/17 01:05	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/05/17 01:05	1
1,3,5-Trimethylbenzene	ND		0.20	0.040	ppb v/v			12/05/17 01:05	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/05/17 01:05	1
1,3-Dichlorobenzene	ND		0.20	0.050	ppb v/v			12/05/17 01:05	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/05/17 01:05	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/05/17 01:05	1
2,2,4-Trimethylpentane	ND		0.20	0.043	ppb v/v			12/05/17 01:05	1
2-Chlorotoluene	ND		0.20	0.035	ppb v/v			12/05/17 01:05	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/05/17 01:05	1
4-Ethyltoluene	ND		0.20	0.040	ppb v/v			12/05/17 01:05	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/05/17 01:05	1
Acetone	**17**		5.0	1.3	ppb v/v			12/05/17 01:05	1
Benzene	**0.52**		0.20	0.028	ppb v/v			12/05/17 01:05	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/05/17 01:05	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/05/17 01:05	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/05/17 01:05	1
Bromoform	ND		0.20	0.035	ppb v/v			12/05/17 01:05	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/05/17 01:05	1
Carbon disulfide	**0.044**	**J**	0.50	0.028	ppb v/v			12/05/17 01:05	1
Carbon tetrachloride	ND		0.20	0.011	ppb v/v			12/05/17 01:05	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/05/17 01:05	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/05/17 01:05	1
Chloroform	**0.37**		0.20	0.025	ppb v/v			12/05/17 01:05	1
Chloromethane	ND		0.50	0.16	ppb v/v			12/05/17 01:05	1

Client Sample ID: SV-7 (113017)
Lab Sample ID: 200-41232-6

Date Collected: 11/30/17 12:02
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.20	0.029	ppb v/v			12/05/17 01:05	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/05/17 01:05	1
Cumene	ND		0.20	0.039	ppb v/v			12/05/17 01:05	1
Cyclohexane	ND		0.20	0.045	ppb v/v			12/05/17 01:05	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/05/17 01:05	1
Dichlorodifluoromethane	**0.26**	**J**	0.50	0.047	ppb v/v			12/05/17 01:05	1
Ethylbenzene	ND		0.20	0.034	ppb v/v			12/05/17 01:05	1
Freon 22	ND		0.50	0.20	ppb v/v			12/05/17 01:05	1
Freon TF	**0.034**	**J**	0.20	0.027	ppb v/v			12/05/17 01:05	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/05/17 01:05	1
Isopropyl alcohol	**1.3**	**J**	5.0	0.13	ppb v/v			12/05/17 01:05	1
m,p-Xylene	**0.11**	**J**	0.50	0.077	ppb v/v			12/05/17 01:05	1
Methyl Butyl Ketone (2-Hexanone)	**0.12**	**J**	0.50	0.086	ppb v/v			12/05/17 01:05	1
Methyl Ethyl Ketone	**2.1**		0.50	0.11	ppb v/v			12/05/17 01:05	1
methyl isobutyl ketone	ND		0.50	0.065	ppb v/v			12/05/17 01:05	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/05/17 01:05	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/05/17 01:05	1
Methylene Chloride	**0.12**	**J**	0.50	0.068	ppb v/v			12/05/17 01:05	1
Naphthalene	ND		0.50	0.10	ppb v/v			12/05/17 01:05	1
n-Butane	**0.66**		0.50	0.046	ppb v/v			12/05/17 01:05	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/05/17 01:05	1
n-Heptane	ND		0.20	0.068	ppb v/v			12/05/17 01:05	1
n-Hexane	**0.077**	**J**	0.20	0.046	ppb v/v			12/05/17 01:05	1
n-Propylbenzene	ND		0.20	0.040	ppb v/v			12/05/17 01:05	1
sec-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 01:05	1
Styrene	ND		0.20	0.035	ppb v/v			12/05/17 01:05	1
tert-Butyl alcohol	**2.9**	**J**	5.0	1.7	ppb v/v			12/05/17 01:05	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 01:05	1
Tetrachloroethene	**0.021**	**J**	0.20	0.0098	ppb v/v			12/05/17 01:05	1
Tetrahydrofuran	ND		5.0	1.2	ppb v/v			12/05/17 01:05	1
Toluene	**0.13**	**J**	0.20	0.035	ppb v/v			12/05/17 01:05	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/05/17 01:05	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/05/17 01:05	1
Trichloroethene	**0.074**	**J**	0.20	0.0091	ppb v/v			12/05/17 01:05	1
Trichlorofluoromethane	**0.080**	**J**	0.20	0.031	ppb v/v			12/05/17 01:05	1
Vinyl chloride	ND		0.20	0.018	ppb v/v			12/05/17 01:05	1
Xylene (total)	**0.11**	**J**	0.70	0.040	ppb v/v			12/05/17 01:05	1
Xylene, o-	ND		0.20	0.040	ppb v/v			12/05/17 01:05	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.14	ug/m3			12/05/17 01:05	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/05/17 01:05	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/05/17 01:05	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/05/17 01:05	1
1,1-Dichloroethene	ND		0.79	0.14	ug/m3			12/05/17 01:05	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/05/17 01:05	1
1,2,4-Trimethylbenzene	ND		0.98	0.28	ug/m3			12/05/17 01:05	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/05/17 01:05	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/05/17 01:05	1

Client Sample ID: SV-7 (113017)
Lab Sample ID: 200-41232-6

Date Collected: 11/30/17 12:02
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/05/17 01:05	1
1,2-Dichloroethene, Total	ND		1.6	0.11	ug/m3			12/05/17 01:05	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/05/17 01:05	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/05/17 01:05	1
1,3,5-Trimethylbenzene	ND		0.98	0.20	ug/m3			12/05/17 01:05	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/05/17 01:05	1
1,3-Dichlorobenzene	ND		1.2	0.30	ug/m3			12/05/17 01:05	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/05/17 01:05	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/05/17 01:05	1
2,2,4-Trimethylpentane	ND		0.93	0.20	ug/m3			12/05/17 01:05	1
2-Chlorotoluene	ND		1.0	0.18	ug/m3			12/05/17 01:05	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/05/17 01:05	1
4-Ethyltoluene	ND		0.98	0.20	ug/m3			12/05/17 01:05	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/05/17 01:05	1
Acetone	**42**		12	3.1	ug/m3			12/05/17 01:05	1
Benzene	**1.7**		0.64	0.089	ug/m3			12/05/17 01:05	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/05/17 01:05	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/05/17 01:05	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/05/17 01:05	1
Bromoform	ND		2.1	0.36	ug/m3			12/05/17 01:05	1
Bromomethane	ND		0.78	0.14	ug/m3			12/05/17 01:05	1
Carbon disulfide	**0.14**	**J**	1.6	0.087	ug/m3			12/05/17 01:05	1
Carbon tetrachloride	ND		1.3	0.069	ug/m3			12/05/17 01:05	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/05/17 01:05	1
Chloroethane	ND		1.3	0.34	ug/m3			12/05/17 01:05	1
Chloroform	**1.8**		0.98	0.12	ug/m3			12/05/17 01:05	1
Chloromethane	ND		1.0	0.33	ug/m3			12/05/17 01:05	1
cis-1,2-Dichloroethene	ND		0.79	0.11	ug/m3			12/05/17 01:05	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/05/17 01:05	1
Cumene	ND		0.98	0.19	ug/m3			12/05/17 01:05	1
Cyclohexane	ND		0.69	0.15	ug/m3			12/05/17 01:05	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/05/17 01:05	1
Dichlorodifluoromethane	**1.3**	**J**	2.5	0.23	ug/m3			12/05/17 01:05	1
Ethylbenzene	ND		0.87	0.15	ug/m3			12/05/17 01:05	1
Freon 22	ND		1.8	0.71	ug/m3			12/05/17 01:05	1
Freon TF	**0.26**	**J**	1.5	0.21	ug/m3			12/05/17 01:05	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/05/17 01:05	1
Isopropyl alcohol	**3.3**	**J**	12	0.32	ug/m3			12/05/17 01:05	1
m,p-Xylene	**0.46**	**J**	2.2	0.33	ug/m3			12/05/17 01:05	1
Methyl Butyl Ketone (2-Hexanone)	**0.49**	**J**	2.0	0.35	ug/m3			12/05/17 01:05	1
Methyl Ethyl Ketone	**6.2**		1.5	0.32	ug/m3			12/05/17 01:05	1
methyl isobutyl ketone	ND		2.0	0.27	ug/m3			12/05/17 01:05	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/05/17 01:05	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/05/17 01:05	1
Methylene Chloride	**0.40**	**J**	1.7	0.24	ug/m3			12/05/17 01:05	1
Naphthalene	ND		2.6	0.52	ug/m3			12/05/17 01:05	1
n-Butane	**1.6**		1.2	0.11	ug/m3			12/05/17 01:05	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/05/17 01:05	1

Client Sample ID: SV-7 (113017)
Lab Sample ID: 200-41232-6

Date Collected: 11/30/17 12:02
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Heptane	ND		0.82	0.28	ug/m3			12/05/17 01:05	1
n-Hexane	**0.27**	**J**	0.70	0.16	ug/m3			12/05/17 01:05	1
n-Propylbenzene	ND		0.98	0.20	ug/m3			12/05/17 01:05	1
sec-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 01:05	1
Styrene	ND		0.85	0.15	ug/m3			12/05/17 01:05	1
tert-Butyl alcohol	**8.8**	**J**	15	5.2	ug/m3			12/05/17 01:05	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 01:05	1
Tetrachloroethene	**0.14**	**J**	1.4	0.066	ug/m3			12/05/17 01:05	1
Tetrahydrofuran	ND		15	3.5	ug/m3			12/05/17 01:05	1
Toluene	**0.49**	**J**	0.75	0.13	ug/m3			12/05/17 01:05	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/05/17 01:05	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/05/17 01:05	1
Trichloroethene	**0.40**	**J**	1.1	0.049	ug/m3			12/05/17 01:05	1
Trichlorofluoromethane	**0.45**	**J**	1.1	0.17	ug/m3			12/05/17 01:05	1
Vinyl chloride	ND		0.51	0.046	ug/m3			12/05/17 01:05	1
Xylene (total)	**0.48**	**J**	3.0	0.17	ug/m3			12/05/17 01:05	1
Xylene, o-	ND		0.87	0.17	ug/m3			12/05/17 01:05	1

Client Sample ID: OA-1 (113017)
Lab Sample ID: 200-41232-7

Date Collected: 11/30/17 12:04
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.026	ppb v/v			12/05/17 01:55	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/05/17 01:55	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 01:55	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 01:55	1
1,1-Dichloroethene	ND		0.20	0.035	ppb v/v			12/05/17 01:55	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/05/17 01:55	1
1,2,4-Trimethylbenzene	ND		0.20	0.057	ppb v/v			12/05/17 01:55	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/05/17 01:55	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/05/17 01:55	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/05/17 01:55	1
1,2-Dichloroethene, Total	ND		0.40	0.029	ppb v/v			12/05/17 01:55	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/05/17 01:55	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/05/17 01:55	1
1,3,5-Trimethylbenzene	ND		0.20	0.040	ppb v/v			12/05/17 01:55	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/05/17 01:55	1
1,3-Dichlorobenzene	ND		0.20	0.050	ppb v/v			12/05/17 01:55	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/05/17 01:55	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/05/17 01:55	1
2,2,4-Trimethylpentane	ND		0.20	0.043	ppb v/v			12/05/17 01:55	1
2-Chlorotoluene	ND		0.20	0.035	ppb v/v			12/05/17 01:55	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/05/17 01:55	1
4-Ethyltoluene	ND		0.20	0.040	ppb v/v			12/05/17 01:55	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/05/17 01:55	1
Acetone	**2.6**	**J**	5.0	1.3	ppb v/v			12/05/17 01:55	1

Client Sample ID: OA-1 (113017)
Lab Sample ID: 200-41232-7

Date Collected: 11/30/17 12:04
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.13**	**J**	0.20	0.028	ppb v/v			12/05/17 01:55	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/05/17 01:55	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/05/17 01:55	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/05/17 01:55	1
Bromoform	ND		0.20	0.035	ppb v/v			12/05/17 01:55	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/05/17 01:55	1
Carbon disulfide	ND		0.50	0.028	ppb v/v			12/05/17 01:55	1
Carbon tetrachloride	**0.059**	**J**	0.20	0.011	ppb v/v			12/05/17 01:55	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/05/17 01:55	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/05/17 01:55	1
Chloroform	ND		0.20	0.025	ppb v/v			12/05/17 01:55	1
Chloromethane	**0.48**	**J**	0.50	0.16	ppb v/v			12/05/17 01:55	1
cis-1,2-Dichloroethene	ND		0.20	0.029	ppb v/v			12/05/17 01:55	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/05/17 01:55	1
Cumene	ND		0.20	0.039	ppb v/v			12/05/17 01:55	1
Cyclohexane	ND		0.20	0.045	ppb v/v			12/05/17 01:55	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/05/17 01:55	1
Dichlorodifluoromethane	**0.42**	**J**	0.50	0.047	ppb v/v			12/05/17 01:55	1
Ethylbenzene	ND		0.20	0.034	ppb v/v			12/05/17 01:55	1
Freon 22	**0.43**	**J**	0.50	0.20	ppb v/v			12/05/17 01:55	1
Freon TF	**0.062**	**J**	0.20	0.027	ppb v/v			12/05/17 01:55	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/05/17 01:55	1
Isopropyl alcohol	**0.25**	**J**	5.0	0.13	ppb v/v			12/05/17 01:55	1
m,p-Xylene	ND		0.50	0.077	ppb v/v			12/05/17 01:55	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.086	ppb v/v			12/05/17 01:55	1
Methyl Ethyl Ketone	**0.26**	**J**	0.50	0.11	ppb v/v			12/05/17 01:55	1
methyl isobutyl ketone	ND		0.50	0.065	ppb v/v			12/05/17 01:55	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/05/17 01:55	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/05/17 01:55	1
Methylene Chloride	**0.63**		0.50	0.068	ppb v/v			12/05/17 01:55	1
Naphthalene	ND		0.50	0.10	ppb v/v			12/05/17 01:55	1
n-Butane	**0.84**		0.50	0.046	ppb v/v			12/05/17 01:55	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/05/17 01:55	1
n-Heptane	ND		0.20	0.068	ppb v/v			12/05/17 01:55	1
n-Hexane	**0.11**	**J**	0.20	0.046	ppb v/v			12/05/17 01:55	1
n-Propylbenzene	ND		0.20	0.040	ppb v/v			12/05/17 01:55	1
sec-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 01:55	1
Styrene	ND		0.20	0.035	ppb v/v			12/05/17 01:55	1
tert-Butyl alcohol	ND		5.0	1.7	ppb v/v			12/05/17 01:55	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 01:55	1
Tetrachloroethene	ND		0.20	0.0098	ppb v/v			12/05/17 01:55	1
Tetrahydrofuran	ND		5.0	1.2	ppb v/v			12/05/17 01:55	1
Toluene	**0.18**	**J**	0.20	0.035	ppb v/v			12/05/17 01:55	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/05/17 01:55	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/05/17 01:55	1
Trichloroethene	ND		0.20	0.0091	ppb v/v			12/05/17 01:55	1
Trichlorofluoromethane	**0.19**	**J**	0.20	0.031	ppb v/v			12/05/17 01:55	1
Vinyl chloride	ND		0.20	0.018	ppb v/v			12/05/17 01:55	1

Client Sample ID: OA-1 (113017)
Lab Sample ID: 200-41232-7

Date Collected: 11/30/17 12:04
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (total)	ND		0.70	0.040	ppb v/v			12/05/17 01:55	1
Xylene, o-	ND		0.20	0.040	ppb v/v			12/05/17 01:55	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.14	ug/m3			12/05/17 01:55	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/05/17 01:55	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/05/17 01:55	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/05/17 01:55	1
1,1-Dichloroethene	ND		0.79	0.14	ug/m3			12/05/17 01:55	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/05/17 01:55	1
1,2,4-Trimethylbenzene	ND		0.98	0.28	ug/m3			12/05/17 01:55	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/05/17 01:55	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/05/17 01:55	1
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/05/17 01:55	1
1,2-Dichloroethene, Total	ND		1.6	0.11	ug/m3			12/05/17 01:55	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/05/17 01:55	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/05/17 01:55	1
1,3,5-Trimethylbenzene	ND		0.98	0.20	ug/m3			12/05/17 01:55	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/05/17 01:55	1
1,3-Dichlorobenzene	ND		1.2	0.30	ug/m3			12/05/17 01:55	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/05/17 01:55	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/05/17 01:55	1
2,2,4-Trimethylpentane	ND		0.93	0.20	ug/m3			12/05/17 01:55	1
2-Chlorotoluene	ND		1.0	0.18	ug/m3			12/05/17 01:55	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/05/17 01:55	1
4-Ethyltoluene	ND		0.98	0.20	ug/m3			12/05/17 01:55	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/05/17 01:55	1
Acetone	**6.3**	**J**	12	3.1	ug/m3			12/05/17 01:55	1
Benzene	**0.42**	**J**	0.64	0.089	ug/m3			12/05/17 01:55	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/05/17 01:55	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/05/17 01:55	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/05/17 01:55	1
Bromoform	ND		2.1	0.36	ug/m3			12/05/17 01:55	1
Bromomethane	ND		0.78	0.14	ug/m3			12/05/17 01:55	1
Carbon disulfide	ND		1.6	0.087	ug/m3			12/05/17 01:55	1
Carbon tetrachloride	**0.37**	**J**	1.3	0.069	ug/m3			12/05/17 01:55	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/05/17 01:55	1
Chloroethane	ND		1.3	0.34	ug/m3			12/05/17 01:55	1
Chloroform	ND		0.98	0.12	ug/m3			12/05/17 01:55	1
Chloromethane	**0.99**	**J**	1.0	0.33	ug/m3			12/05/17 01:55	1
cis-1,2-Dichloroethene	ND		0.79	0.11	ug/m3			12/05/17 01:55	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/05/17 01:55	1
Cumene	ND		0.98	0.19	ug/m3			12/05/17 01:55	1
Cyclohexane	ND		0.69	0.15	ug/m3			12/05/17 01:55	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/05/17 01:55	1
Dichlorodifluoromethane	**2.1**	**J**	2.5	0.23	ug/m3			12/05/17 01:55	1
Ethylbenzene	ND		0.87	0.15	ug/m3			12/05/17 01:55	1
Freon 22	**1.5**	**J**	1.8	0.71	ug/m3			12/05/17 01:55	1
Freon TF	**0.48**	**J**	1.5	0.21	ug/m3			12/05/17 01:55	1

Client Sample ID: OA-1 (113017)
Lab Sample ID: 200-41232-7

Date Collected: 11/30/17 12:04
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/05/17 01:55	1
Isopropyl alcohol	**0.63**	**J**	12	0.32	ug/m3			12/05/17 01:55	1
m,p-Xylene	ND		2.2	0.33	ug/m3			12/05/17 01:55	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.35	ug/m3			12/05/17 01:55	1
Methyl Ethyl Ketone	**0.78**	**J**	1.5	0.32	ug/m3			12/05/17 01:55	1
methyl isobutyl ketone	ND		2.0	0.27	ug/m3			12/05/17 01:55	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/05/17 01:55	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/05/17 01:55	1
Methylene Chloride	**2.2**		1.7	0.24	ug/m3			12/05/17 01:55	1
Naphthalene	ND		2.6	0.52	ug/m3			12/05/17 01:55	1
n-Butane	**2.0**		1.2	0.11	ug/m3			12/05/17 01:55	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/05/17 01:55	1
n-Heptane	ND		0.82	0.28	ug/m3			12/05/17 01:55	1
n-Hexane	**0.39**	**J**	0.70	0.16	ug/m3			12/05/17 01:55	1
n-Propylbenzene	ND		0.98	0.20	ug/m3			12/05/17 01:55	1
sec-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 01:55	1
Styrene	ND		0.85	0.15	ug/m3			12/05/17 01:55	1
tert-Butyl alcohol	ND		15	5.2	ug/m3			12/05/17 01:55	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 01:55	1
Tetrachloroethene	ND		1.4	0.066	ug/m3			12/05/17 01:55	1
Tetrahydrofuran	ND		15	3.5	ug/m3			12/05/17 01:55	1
Toluene	**0.67**	**J**	0.75	0.13	ug/m3			12/05/17 01:55	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/05/17 01:55	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/05/17 01:55	1
Trichloroethene	ND		1.1	0.049	ug/m3			12/05/17 01:55	1
Trichlorofluoromethane	**1.1**	**J**	1.1	0.17	ug/m3			12/05/17 01:55	1
Vinyl chloride	ND		0.51	0.046	ug/m3			12/05/17 01:55	1
Xylene (total)	ND		3.0	0.17	ug/m3			12/05/17 01:55	1
Xylene, o-	ND		0.87	0.17	ug/m3			12/05/17 01:55	1

Client Sample ID: SV-5 (113017)
Lab Sample ID: 200-41232-8

Date Collected: 11/30/17 12:11
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.026	ppb v/v			12/05/17 02:45	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/05/17 02:45	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 02:45	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 02:45	1
1,1-Dichloroethene	ND		0.20	0.035	ppb v/v			12/05/17 02:45	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/05/17 02:45	1
1,2,4-Trimethylbenzene	ND		0.20	0.057	ppb v/v			12/05/17 02:45	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/05/17 02:45	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/05/17 02:45	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/05/17 02:45	1
1,2-Dichloroethene, Total	ND		0.40	0.029	ppb v/v			12/05/17 02:45	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/05/17 02:45	1

Client Sample ID: SV-5 (113017)
Lab Sample ID: 200-41232-8

Date Collected: 11/30/17 12:11
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/05/17 02:45	1
1,3,5-Trimethylbenzene	ND		0.20	0.040	ppb v/v			12/05/17 02:45	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/05/17 02:45	1
1,3-Dichlorobenzene	ND		0.20	0.050	ppb v/v			12/05/17 02:45	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/05/17 02:45	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/05/17 02:45	1
2,2,4-Trimethylpentane	ND		0.20	0.043	ppb v/v			12/05/17 02:45	1
2-Chlorotoluene	ND		0.20	0.035	ppb v/v			12/05/17 02:45	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/05/17 02:45	1
4-Ethyltoluene	ND		0.20	0.040	ppb v/v			12/05/17 02:45	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/05/17 02:45	1
Acetone	**8.8**		5.0	1.3	ppb v/v			12/05/17 02:45	1
Benzene	**0.088**	**J**	0.20	0.028	ppb v/v			12/05/17 02:45	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/05/17 02:45	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/05/17 02:45	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/05/17 02:45	1
Bromoform	ND		0.20	0.035	ppb v/v			12/05/17 02:45	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/05/17 02:45	1
Carbon disulfide	ND		0.50	0.028	ppb v/v			12/05/17 02:45	1
Carbon tetrachloride	ND		0.20	0.011	ppb v/v			12/05/17 02:45	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/05/17 02:45	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/05/17 02:45	1
Chloroform	**0.080**	**J**	0.20	0.025	ppb v/v			12/05/17 02:45	1
Chloromethane	ND		0.50	0.16	ppb v/v			12/05/17 02:45	1
cis-1,2-Dichloroethene	ND		0.20	0.029	ppb v/v			12/05/17 02:45	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/05/17 02:45	1
Cumene	ND		0.20	0.039	ppb v/v			12/05/17 02:45	1
Cyclohexane	ND		0.20	0.045	ppb v/v			12/05/17 02:45	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/05/17 02:45	1
Dichlorodifluoromethane	**0.30**	**J**	0.50	0.047	ppb v/v			12/05/17 02:45	1
Ethylbenzene	**0.043**	**J**	0.20	0.034	ppb v/v			12/05/17 02:45	1
Freon 22	ND		0.50	0.20	ppb v/v			12/05/17 02:45	1
Freon TF	**0.047**	**J**	0.20	0.027	ppb v/v			12/05/17 02:45	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/05/17 02:45	1
Isopropyl alcohol	**0.48**	**J**	5.0	0.13	ppb v/v			12/05/17 02:45	1
m,p-Xylene	**0.14**	**J**	0.50	0.077	ppb v/v			12/05/17 02:45	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.086	ppb v/v			12/05/17 02:45	1
Methyl Ethyl Ketone	**0.74**		0.50	0.11	ppb v/v			12/05/17 02:45	1
methyl isobutyl ketone	ND		0.50	0.065	ppb v/v			12/05/17 02:45	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/05/17 02:45	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/05/17 02:45	1
Methylene Chloride	**0.078**	**J**	0.50	0.068	ppb v/v			12/05/17 02:45	1
Naphthalene	ND		0.50	0.10	ppb v/v			12/05/17 02:45	1
n-Butane	**0.26**	**J**	0.50	0.046	ppb v/v			12/05/17 02:45	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/05/17 02:45	1
n-Heptane	ND		0.20	0.068	ppb v/v			12/05/17 02:45	1
n-Hexane	**0.062**	**J**	0.20	0.046	ppb v/v			12/05/17 02:45	1
n-Propylbenzene	ND		0.20	0.040	ppb v/v			12/05/17 02:45	1

Client Sample ID: SV-5 (113017)
Lab Sample ID: 200-41232-8

Date Collected: 11/30/17 12:11
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 02:45	1
Styrene	ND		0.20	0.035	ppb v/v			12/05/17 02:45	1
tert-Butyl alcohol	ND		5.0	1.7	ppb v/v			12/05/17 02:45	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 02:45	1
Tetrachloroethene	**0.43**		0.20	0.0098	ppb v/v			12/05/17 02:45	1
Tetrahydrofuran	ND		5.0	1.2	ppb v/v			12/05/17 02:45	1
Toluene	**0.16**	**J**	0.20	0.035	ppb v/v			12/05/17 02:45	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/05/17 02:45	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/05/17 02:45	1
Trichloroethene	ND		0.20	0.0091	ppb v/v			12/05/17 02:45	1
Trichlorofluoromethane	**0.14**	**J**	0.20	0.031	ppb v/v			12/05/17 02:45	1
Vinyl chloride	ND		0.20	0.018	ppb v/v			12/05/17 02:45	1
Xylene (total)	**0.19**	**J**	0.70	0.040	ppb v/v			12/05/17 02:45	1
Xylene, o-	**0.053**	**J**	0.20	0.040	ppb v/v			12/05/17 02:45	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.14	ug/m3			12/05/17 02:45	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/05/17 02:45	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/05/17 02:45	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/05/17 02:45	1
1,1-Dichloroethene	ND		0.79	0.14	ug/m3			12/05/17 02:45	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/05/17 02:45	1
1,2,4-Trimethylbenzene	ND		0.98	0.28	ug/m3			12/05/17 02:45	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/05/17 02:45	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/05/17 02:45	1
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/05/17 02:45	1
1,2-Dichloroethene, Total	ND		1.6	0.11	ug/m3			12/05/17 02:45	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/05/17 02:45	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/05/17 02:45	1
1,3,5-Trimethylbenzene	ND		0.98	0.20	ug/m3			12/05/17 02:45	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/05/17 02:45	1
1,3-Dichlorobenzene	ND		1.2	0.30	ug/m3			12/05/17 02:45	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/05/17 02:45	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/05/17 02:45	1
2,2,4-Trimethylpentane	ND		0.93	0.20	ug/m3			12/05/17 02:45	1
2-Chlorotoluene	ND		1.0	0.18	ug/m3			12/05/17 02:45	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/05/17 02:45	1
4-Ethyltoluene	ND		0.98	0.20	ug/m3			12/05/17 02:45	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/05/17 02:45	1
Acetone	**21**		12	3.1	ug/m3			12/05/17 02:45	1
Benzene	**0.28**	**J**	0.64	0.089	ug/m3			12/05/17 02:45	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/05/17 02:45	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/05/17 02:45	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/05/17 02:45	1
Bromoform	ND		2.1	0.36	ug/m3			12/05/17 02:45	1
Bromomethane	ND		0.78	0.14	ug/m3			12/05/17 02:45	1
Carbon disulfide	ND		1.6	0.087	ug/m3			12/05/17 02:45	1
Carbon tetrachloride	ND		1.3	0.069	ug/m3			12/05/17 02:45	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/05/17 02:45	1

Client Sample ID: SV-5 (113017)
Lab Sample ID: 200-41232-8

Date Collected: 11/30/17 12:11
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.3	0.34	ug/m3			12/05/17 02:45	1
Chloroform	**0.39**	**J**	0.98	0.12	ug/m3			12/05/17 02:45	1
Chloromethane	ND		1.0	0.33	ug/m3			12/05/17 02:45	1
cis-1,2-Dichloroethene	ND		0.79	0.11	ug/m3			12/05/17 02:45	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/05/17 02:45	1
Cumene	ND		0.98	0.19	ug/m3			12/05/17 02:45	1
Cyclohexane	ND		0.69	0.15	ug/m3			12/05/17 02:45	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/05/17 02:45	1
Dichlorodifluoromethane	**1.5**	**J**	2.5	0.23	ug/m3			12/05/17 02:45	1
Ethylbenzene	**0.18**	**J**	0.87	0.15	ug/m3			12/05/17 02:45	1
Freon 22	ND		1.8	0.71	ug/m3			12/05/17 02:45	1
Freon TF	**0.36**	**J**	1.5	0.21	ug/m3			12/05/17 02:45	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/05/17 02:45	1
Isopropyl alcohol	**1.2**	**J**	12	0.32	ug/m3			12/05/17 02:45	1
m,p-Xylene	**0.62**	**J**	2.2	0.33	ug/m3			12/05/17 02:45	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.35	ug/m3			12/05/17 02:45	1
Methyl Ethyl Ketone	**2.2**		1.5	0.32	ug/m3			12/05/17 02:45	1
methyl isobutyl ketone	ND		2.0	0.27	ug/m3			12/05/17 02:45	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/05/17 02:45	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/05/17 02:45	1
Methylene Chloride	**0.27**	**J**	1.7	0.24	ug/m3			12/05/17 02:45	1
Naphthalene	ND		2.6	0.52	ug/m3			12/05/17 02:45	1
n-Butane	**0.63**	**J**	1.2	0.11	ug/m3			12/05/17 02:45	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/05/17 02:45	1
n-Heptane	ND		0.82	0.28	ug/m3			12/05/17 02:45	1
n-Hexane	**0.22**	**J**	0.70	0.16	ug/m3			12/05/17 02:45	1
n-Propylbenzene	ND		0.98	0.20	ug/m3			12/05/17 02:45	1
sec-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 02:45	1
Styrene	ND		0.85	0.15	ug/m3			12/05/17 02:45	1
tert-Butyl alcohol	ND		15	5.2	ug/m3			12/05/17 02:45	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 02:45	1
Tetrachloroethene	**2.9**		1.4	0.066	ug/m3			12/05/17 02:45	1
Tetrahydrofuran	ND		15	3.5	ug/m3			12/05/17 02:45	1
Toluene	**0.61**	**J**	0.75	0.13	ug/m3			12/05/17 02:45	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/05/17 02:45	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/05/17 02:45	1
Trichloroethene	ND		1.1	0.049	ug/m3			12/05/17 02:45	1
Trichlorofluoromethane	**0.80**	**J**	1.1	0.17	ug/m3			12/05/17 02:45	1
Vinyl chloride	ND		0.51	0.046	ug/m3			12/05/17 02:45	1
Xylene (total)	**0.84**	**J**	3.0	0.17	ug/m3			12/05/17 02:45	1
Xylene, o-	**0.23**	**J**	0.87	0.17	ug/m3			12/05/17 02:45	1

Client Sample ID: SV-10 (113017)
Lab Sample ID: 200-41232-9

Date Collected: 11/30/17 12:05
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.026	ppb v/v			12/05/17 03:35	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/05/17 03:35	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 03:35	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 03:35	1
1,1-Dichloroethene	ND		0.20	0.035	ppb v/v			12/05/17 03:35	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/05/17 03:35	1
1,2,4-Trimethylbenzene	**1.9**		0.20	0.057	ppb v/v			12/05/17 03:35	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/05/17 03:35	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/05/17 03:35	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/05/17 03:35	1
1,2-Dichloroethene, Total	ND		0.40	0.029	ppb v/v			12/05/17 03:35	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/05/17 03:35	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/05/17 03:35	1
1,3,5-Trimethylbenzene	**0.59**		0.20	0.040	ppb v/v			12/05/17 03:35	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/05/17 03:35	1
1,3-Dichlorobenzene	ND		0.20	0.050	ppb v/v			12/05/17 03:35	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/05/17 03:35	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/05/17 03:35	1
2,2,4-Trimethylpentane	**0.12**	**J**	0.20	0.043	ppb v/v			12/05/17 03:35	1
2-Chlorotoluene	**0.083**	**J**	0.20	0.035	ppb v/v			12/05/17 03:35	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/05/17 03:35	1
4-Ethyltoluene	**0.59**		0.20	0.040	ppb v/v			12/05/17 03:35	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/05/17 03:35	1
Acetone	**7.8**		5.0	1.3	ppb v/v			12/05/17 03:35	1
Benzene	**0.16**	**J**	0.20	0.028	ppb v/v			12/05/17 03:35	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/05/17 03:35	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/05/17 03:35	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/05/17 03:35	1
Bromoform	ND		0.20	0.035	ppb v/v			12/05/17 03:35	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/05/17 03:35	1
Carbon disulfide	**0.32**	**J**	0.50	0.028	ppb v/v			12/05/17 03:35	1
Carbon tetrachloride	**0.21**		0.20	0.011	ppb v/v			12/05/17 03:35	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/05/17 03:35	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/05/17 03:35	1
Chloroform	**0.54**		0.20	0.025	ppb v/v			12/05/17 03:35	1
Chloromethane	ND		0.50	0.16	ppb v/v			12/05/17 03:35	1
cis-1,2-Dichloroethene	ND		0.20	0.029	ppb v/v			12/05/17 03:35	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/05/17 03:35	1
Cumene	**0.10**	**J**	0.20	0.039	ppb v/v			12/05/17 03:35	1
Cyclohexane	**0.16**	**J**	0.20	0.045	ppb v/v			12/05/17 03:35	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/05/17 03:35	1
Dichlorodifluoromethane	**0.24**	**J**	0.50	0.047	ppb v/v			12/05/17 03:35	1
Ethylbenzene	**1.2**		0.20	0.034	ppb v/v			12/05/17 03:35	1
Freon 22	ND		0.50	0.20	ppb v/v			12/05/17 03:35	1
Freon TF	**0.035**	**J**	0.20	0.027	ppb v/v			12/05/17 03:35	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/05/17 03:35	1
Isopropyl alcohol	**0.36**	**J**	5.0	0.13	ppb v/v			12/05/17 03:35	1
m,p-Xylene	**4.3**		0.50	0.077	ppb v/v			12/05/17 03:35	1

Client Sample ID: SV-10 (113017)
Lab Sample ID: 200-41232-9

Date Collected: 11/30/17 12:05
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	**0.11**	**J**	0.50	0.086	ppb v/v			12/05/17 03:35	1
Methyl Ethyl Ketone	**0.64**		0.50	0.11	ppb v/v			12/05/17 03:35	1
methyl isobutyl ketone	ND		0.50	0.065	ppb v/v			12/05/17 03:35	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/05/17 03:35	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/05/17 03:35	1
Methylene Chloride	**0.071**	**J**	0.50	0.068	ppb v/v			12/05/17 03:35	1
Naphthalene	ND		0.50	0.10	ppb v/v			12/05/17 03:35	1
n-Butane	**0.11**	**J**	0.50	0.046	ppb v/v			12/05/17 03:35	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/05/17 03:35	1
n-Heptane	**0.38**		0.20	0.068	ppb v/v			12/05/17 03:35	1
n-Hexane	**0.37**		0.20	0.046	ppb v/v			12/05/17 03:35	1
n-Propylbenzene	**0.41**		0.20	0.040	ppb v/v			12/05/17 03:35	1
sec-Butylbenzene	**0.037**	**J**	0.20	0.037	ppb v/v			12/05/17 03:35	1
Styrene	ND		0.20	0.035	ppb v/v			12/05/17 03:35	1
tert-Butyl alcohol	ND		5.0	1.7	ppb v/v			12/05/17 03:35	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 03:35	1
Tetrachloroethene	**0.20**		0.20	0.0098	ppb v/v			12/05/17 03:35	1
Tetrahydrofuran	ND		5.0	1.2	ppb v/v			12/05/17 03:35	1
Toluene	**2.7**		0.20	0.035	ppb v/v			12/05/17 03:35	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/05/17 03:35	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/05/17 03:35	1
Trichloroethene	**0.021**	**J**	0.20	0.0091	ppb v/v			12/05/17 03:35	1
Trichlorofluoromethane	**0.089**	**J**	0.20	0.031	ppb v/v			12/05/17 03:35	1
Vinyl chloride	ND		0.20	0.018	ppb v/v			12/05/17 03:35	1
Xylene (total)	**6.0**		0.70	0.040	ppb v/v			12/05/17 03:35	1
Xylene, o-	**1.7**		0.20	0.040	ppb v/v			12/05/17 03:35	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.14	ug/m3			12/05/17 03:35	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/05/17 03:35	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/05/17 03:35	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/05/17 03:35	1
1,1-Dichloroethene	ND		0.79	0.14	ug/m3			12/05/17 03:35	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/05/17 03:35	1
1,2,4-Trimethylbenzene	**9.4**		0.98	0.28	ug/m3			12/05/17 03:35	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/05/17 03:35	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/05/17 03:35	1
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/05/17 03:35	1
1,2-Dichloroethene, Total	ND		1.6	0.11	ug/m3			12/05/17 03:35	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/05/17 03:35	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/05/17 03:35	1
1,3,5-Trimethylbenzene	**2.9**		0.98	0.20	ug/m3			12/05/17 03:35	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/05/17 03:35	1
1,3-Dichlorobenzene	ND		1.2	0.30	ug/m3			12/05/17 03:35	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/05/17 03:35	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/05/17 03:35	1
2,2,4-Trimethylpentane	**0.56**	**J**	0.93	0.20	ug/m3			12/05/17 03:35	1
2-Chlorotoluene	**0.43**	**J**	1.0	0.18	ug/m3			12/05/17 03:35	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/05/17 03:35	1

Client Sample ID: SV-10 (113017)
Lab Sample ID: 200-41232-9

Date Collected: 11/30/17 12:05
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	**2.9**		0.98	0.20	ug/m3			12/05/17 03:35	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/05/17 03:35	1
Acetone	**18**		12	3.1	ug/m3			12/05/17 03:35	1
Benzene	**0.51**	**J**	0.64	0.089	ug/m3			12/05/17 03:35	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/05/17 03:35	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/05/17 03:35	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/05/17 03:35	1
Bromoform	ND		2.1	0.36	ug/m3			12/05/17 03:35	1
Bromomethane	ND		0.78	0.14	ug/m3			12/05/17 03:35	1
Carbon disulfide	**0.99**	**J**	1.6	0.087	ug/m3			12/05/17 03:35	1
Carbon tetrachloride	**1.3**		1.3	0.069	ug/m3			12/05/17 03:35	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/05/17 03:35	1
Chloroethane	ND		1.3	0.34	ug/m3			12/05/17 03:35	1
Chloroform	**2.6**		0.98	0.12	ug/m3			12/05/17 03:35	1
Chloromethane	ND		1.0	0.33	ug/m3			12/05/17 03:35	1
cis-1,2-Dichloroethene	ND		0.79	0.11	ug/m3			12/05/17 03:35	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/05/17 03:35	1
Cumene	**0.49**	**J**	0.98	0.19	ug/m3			12/05/17 03:35	1
Cyclohexane	**0.56**	**J**	0.69	0.15	ug/m3			12/05/17 03:35	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/05/17 03:35	1
Dichlorodifluoromethane	**1.2**	**J**	2.5	0.23	ug/m3			12/05/17 03:35	1
Ethylbenzene	**5.2**		0.87	0.15	ug/m3			12/05/17 03:35	1
Freon 22	ND		1.8	0.71	ug/m3			12/05/17 03:35	1
Freon TF	**0.27**	**J**	1.5	0.21	ug/m3			12/05/17 03:35	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/05/17 03:35	1
Isopropyl alcohol	**0.89**	**J**	12	0.32	ug/m3			12/05/17 03:35	1
m,p-Xylene	**19**		2.2	0.33	ug/m3			12/05/17 03:35	1
Methyl Butyl Ketone (2-Hexanone)	**0.45**	**J**	2.0	0.35	ug/m3			12/05/17 03:35	1
Methyl Ethyl Ketone	**1.9**		1.5	0.32	ug/m3			12/05/17 03:35	1
methyl isobutyl ketone	ND		2.0	0.27	ug/m3			12/05/17 03:35	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/05/17 03:35	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/05/17 03:35	1
Methylene Chloride	**0.25**	**J**	1.7	0.24	ug/m3			12/05/17 03:35	1
Naphthalene	ND		2.6	0.52	ug/m3			12/05/17 03:35	1
n-Butane	**0.27**	**J**	1.2	0.11	ug/m3			12/05/17 03:35	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/05/17 03:35	1
n-Heptane	**1.5**		0.82	0.28	ug/m3			12/05/17 03:35	1
n-Hexane	**1.3**		0.70	0.16	ug/m3			12/05/17 03:35	1
n-Propylbenzene	**2.0**		0.98	0.20	ug/m3			12/05/17 03:35	1
sec-Butylbenzene	**0.20**	**J**	1.1	0.20	ug/m3			12/05/17 03:35	1
Styrene	ND		0.85	0.15	ug/m3			12/05/17 03:35	1
tert-Butyl alcohol	ND		15	5.2	ug/m3			12/05/17 03:35	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 03:35	1
Tetrachloroethene	**1.4**		1.4	0.066	ug/m3			12/05/17 03:35	1
Tetrahydrofuran	ND		15	3.5	ug/m3			12/05/17 03:35	1
Toluene	**10**		0.75	0.13	ug/m3			12/05/17 03:35	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/05/17 03:35	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/05/17 03:35	1

Client Sample ID: SV-10 (113017)
Lab Sample ID: 200-41232-9

Date Collected: 11/30/17 12:05
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**0.11**	**J**	1.1	0.049	ug/m3			12/05/17 03:35	1
Trichlorofluoromethane	**0.50**	**J**	1.1	0.17	ug/m3			12/05/17 03:35	1
Vinyl chloride	ND		0.51	0.046	ug/m3			12/05/17 03:35	1
Xylene (total)	**26**		3.0	0.17	ug/m3			12/05/17 03:35	1
Xylene, o-	**7.3**		0.87	0.17	ug/m3			12/05/17 03:35	1

Client Sample ID: SV-11 (113017)
Lab Sample ID: 200-41232-10

Date Collected: 11/30/17 12:36
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.13**	**J**	0.20	0.026	ppb v/v			12/05/17 09:41	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/05/17 09:41	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 09:41	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 09:41	1
1,1-Dichloroethene	ND		0.20	0.035	ppb v/v			12/05/17 09:41	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/05/17 09:41	1
1,2,4-Trimethylbenzene	**0.79**		0.20	0.057	ppb v/v			12/05/17 09:41	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/05/17 09:41	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/05/17 09:41	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/05/17 09:41	1
1,2-Dichloroethene, Total	ND		0.40	0.029	ppb v/v			12/05/17 09:41	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/05/17 09:41	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/05/17 09:41	1
1,3,5-Trimethylbenzene	**0.23**		0.20	0.040	ppb v/v			12/05/17 09:41	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/05/17 09:41	1
1,3-Dichlorobenzene	**0.069**	**J**	0.20	0.050	ppb v/v			12/05/17 09:41	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/05/17 09:41	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/05/17 09:41	1
2,2,4-Trimethylpentane	**0.24**		0.20	0.043	ppb v/v			12/05/17 09:41	1
2-Chlorotoluene	ND		0.20	0.035	ppb v/v			12/05/17 09:41	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/05/17 09:41	1
4-Ethyltoluene	**0.21**		0.20	0.040	ppb v/v			12/05/17 09:41	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/05/17 09:41	1
Acetone	**14**		5.0	1.3	ppb v/v			12/05/17 09:41	1
Benzene	**0.16**	**J**	0.20	0.028	ppb v/v			12/05/17 09:41	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/05/17 09:41	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/05/17 09:41	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/05/17 09:41	1
Bromoform	ND		0.20	0.035	ppb v/v			12/05/17 09:41	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/05/17 09:41	1
Carbon disulfide	**0.24**	**J**	0.50	0.028	ppb v/v			12/05/17 09:41	1
Carbon tetrachloride	ND		0.20	0.011	ppb v/v			12/05/17 09:41	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/05/17 09:41	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/05/17 09:41	1
Chloroform	**2.1**		0.20	0.025	ppb v/v			12/05/17 09:41	1
Chloromethane	ND		0.50	0.16	ppb v/v			12/05/17 09:41	1

Client Sample ID: SV-11 (113017)
Lab Sample ID: 200-41232-10

Date Collected: 11/30/17 12:36
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.20	0.029	ppb v/v			12/05/17 09:41	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/05/17 09:41	1
Cumene	**0.065**	**J**	0.20	0.039	ppb v/v			12/05/17 09:41	1
Cyclohexane	**0.14**	**J**	0.20	0.045	ppb v/v			12/05/17 09:41	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/05/17 09:41	1
Dichlorodifluoromethane	**0.28**	**J**	0.50	0.047	ppb v/v			12/05/17 09:41	1
Ethylbenzene	**0.83**		0.20	0.034	ppb v/v			12/05/17 09:41	1
Freon 22	ND		0.50	0.20	ppb v/v			12/05/17 09:41	1
Freon TF	**0.043**	**J**	0.20	0.027	ppb v/v			12/05/17 09:41	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/05/17 09:41	1
Isopropyl alcohol	**0.48**	**J**	5.0	0.13	ppb v/v			12/05/17 09:41	1
m,p-Xylene	**3.1**		0.50	0.077	ppb v/v			12/05/17 09:41	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.086	ppb v/v			12/05/17 09:41	1
Methyl Ethyl Ketone	**5.3**		0.50	0.11	ppb v/v			12/05/17 09:41	1
methyl isobutyl ketone	**0.15**	**J**	0.50	0.065	ppb v/v			12/05/17 09:41	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/05/17 09:41	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/05/17 09:41	1
Methylene Chloride	**0.073**	**J**	0.50	0.068	ppb v/v			12/05/17 09:41	1
Naphthalene	ND		0.50	0.10	ppb v/v			12/05/17 09:41	1
n-Butane	**0.76**		0.50	0.046	ppb v/v			12/05/17 09:41	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/05/17 09:41	1
n-Heptane	**0.25**		0.20	0.068	ppb v/v			12/05/17 09:41	1
n-Hexane	**0.20**		0.20	0.046	ppb v/v			12/05/17 09:41	1
n-Propylbenzene	**0.16**	**J**	0.20	0.040	ppb v/v			12/05/17 09:41	1
sec-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 09:41	1
Styrene	ND		0.20	0.035	ppb v/v			12/05/17 09:41	1
tert-Butyl alcohol	ND		5.0	1.7	ppb v/v			12/05/17 09:41	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 09:41	1
Tetrachloroethene	**0.53**		0.20	0.0098	ppb v/v			12/05/17 09:41	1
Tetrahydrofuran	**27**		5.0	1.2	ppb v/v			12/05/17 09:41	1
Toluene	**1.8**		0.20	0.035	ppb v/v			12/05/17 09:41	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/05/17 09:41	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/05/17 09:41	1
Trichloroethene	ND		0.20	0.0091	ppb v/v			12/05/17 09:41	1
Trichlorofluoromethane	**0.20**		0.20	0.031	ppb v/v			12/05/17 09:41	1
Vinyl chloride	ND		0.20	0.018	ppb v/v			12/05/17 09:41	1
Xylene (total)	**4.2**		0.70	0.040	ppb v/v			12/05/17 09:41	1
Xylene, o-	**1.1**		0.20	0.040	ppb v/v			12/05/17 09:41	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.73**	**J**	1.1	0.14	ug/m3			12/05/17 09:41	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/05/17 09:41	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/05/17 09:41	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/05/17 09:41	1
1,1-Dichloroethene	ND		0.79	0.14	ug/m3			12/05/17 09:41	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/05/17 09:41	1
1,2,4-Trimethylbenzene	**3.9**		0.98	0.28	ug/m3			12/05/17 09:41	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/05/17 09:41	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/05/17 09:41	1

Client Sample ID: SV-11 (113017)
Lab Sample ID: 200-41232-10

Date Collected: 11/30/17 12:36
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/05/17 09:41	1
1,2-Dichloroethene, Total	ND		1.6	0.11	ug/m3			12/05/17 09:41	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/05/17 09:41	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/05/17 09:41	1
1,3,5-Trimethylbenzene	**1.2**		0.98	0.20	ug/m3			12/05/17 09:41	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/05/17 09:41	1
1,3-Dichlorobenzene	**0.42**	**J**	1.2	0.30	ug/m3			12/05/17 09:41	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/05/17 09:41	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/05/17 09:41	1
2,2,4-Trimethylpentane	**1.1**		0.93	0.20	ug/m3			12/05/17 09:41	1
2-Chlorotoluene	ND		1.0	0.18	ug/m3			12/05/17 09:41	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/05/17 09:41	1
4-Ethyltoluene	**1.1**		0.98	0.20	ug/m3			12/05/17 09:41	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/05/17 09:41	1
Acetone	**32**		12	3.1	ug/m3			12/05/17 09:41	1
Benzene	**0.50**	**J**	0.64	0.089	ug/m3			12/05/17 09:41	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/05/17 09:41	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/05/17 09:41	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/05/17 09:41	1
Bromoform	ND		2.1	0.36	ug/m3			12/05/17 09:41	1
Bromomethane	ND		0.78	0.14	ug/m3			12/05/17 09:41	1
Carbon disulfide	**0.75**	**J**	1.6	0.087	ug/m3			12/05/17 09:41	1
Carbon tetrachloride	ND		1.3	0.069	ug/m3			12/05/17 09:41	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/05/17 09:41	1
Chloroethane	ND		1.3	0.34	ug/m3			12/05/17 09:41	1
Chloroform	**10**		0.98	0.12	ug/m3			12/05/17 09:41	1
Chloromethane	ND		1.0	0.33	ug/m3			12/05/17 09:41	1
cis-1,2-Dichloroethene	ND		0.79	0.11	ug/m3			12/05/17 09:41	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/05/17 09:41	1
Cumene	**0.32**	**J**	0.98	0.19	ug/m3			12/05/17 09:41	1
Cyclohexane	**0.48**	**J**	0.69	0.15	ug/m3			12/05/17 09:41	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/05/17 09:41	1
Dichlorodifluoromethane	**1.4**	**J**	2.5	0.23	ug/m3			12/05/17 09:41	1
Ethylbenzene	**3.6**		0.87	0.15	ug/m3			12/05/17 09:41	1
Freon 22	ND		1.8	0.71	ug/m3			12/05/17 09:41	1
Freon TF	**0.33**	**J**	1.5	0.21	ug/m3			12/05/17 09:41	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/05/17 09:41	1
Isopropyl alcohol	**1.2**	**J**	12	0.32	ug/m3			12/05/17 09:41	1
m,p-Xylene	**13**		2.2	0.33	ug/m3			12/05/17 09:41	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.35	ug/m3			12/05/17 09:41	1
Methyl Ethyl Ketone	**16**		1.5	0.32	ug/m3			12/05/17 09:41	1
methyl isobutyl ketone	**0.61**	**J**	2.0	0.27	ug/m3			12/05/17 09:41	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/05/17 09:41	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/05/17 09:41	1
Methylene Chloride	**0.25**	**J**	1.7	0.24	ug/m3			12/05/17 09:41	1
Naphthalene	ND		2.6	0.52	ug/m3			12/05/17 09:41	1
n-Butane	**1.8**		1.2	0.11	ug/m3			12/05/17 09:41	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/05/17 09:41	1

Client Sample ID: SV-11 (113017)
Lab Sample ID: 200-41232-10

Date Collected: 11/30/17 12:36
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Heptane	**1.0**		0.82	0.28	ug/m3			12/05/17 09:41	1
n-Hexane	**0.70**		0.70	0.16	ug/m3			12/05/17 09:41	1
n-Propylbenzene	**0.78**	**J**	0.98	0.20	ug/m3			12/05/17 09:41	1
sec-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 09:41	1
Styrene	ND		0.85	0.15	ug/m3			12/05/17 09:41	1
tert-Butyl alcohol	ND		15	5.2	ug/m3			12/05/17 09:41	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 09:41	1
Tetrachloroethene	**3.6**		1.4	0.066	ug/m3			12/05/17 09:41	1
Tetrahydrofuran	**80**		15	3.5	ug/m3			12/05/17 09:41	1
Toluene	**6.6**		0.75	0.13	ug/m3			12/05/17 09:41	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/05/17 09:41	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/05/17 09:41	1
Trichloroethene	ND		1.1	0.049	ug/m3			12/05/17 09:41	1
Trichlorofluoromethane	**1.1**		1.1	0.17	ug/m3			12/05/17 09:41	1
Vinyl chloride	ND		0.51	0.046	ug/m3			12/05/17 09:41	1
Xylene (total)	**18**		3.0	0.17	ug/m3			12/05/17 09:41	1
Xylene, o-	**4.7**		0.87	0.17	ug/m3			12/05/17 09:41	1

Client Sample ID: SV-T (113017)
Lab Sample ID: 200-41232-11

Date Collected: 11/30/17 12:15
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.80	0.10	ppb v/v			12/05/17 05:15	4
1,1,2,2-Tetrachloroethane	ND		0.80	0.10	ppb v/v			12/05/17 05:15	4
1,1,2-Trichloroethane	ND		0.80	0.068	ppb v/v			12/05/17 05:15	4
1,1-Dichloroethane	ND		0.80	0.068	ppb v/v			12/05/17 05:15	4
1,1-Dichloroethene	ND		0.80	0.14	ppb v/v			12/05/17 05:15	4
1,2,4-Trichlorobenzene	ND		2.0	0.76	ppb v/v			12/05/17 05:15	4
1,2,4-Trimethylbenzene	**1.5**		0.80	0.23	ppb v/v			12/05/17 05:15	4
1,2-Dibromoethane	ND		0.80	0.092	ppb v/v			12/05/17 05:15	4
1,2-Dichlorobenzene	ND		0.80	0.18	ppb v/v			12/05/17 05:15	4
1,2-Dichloroethane	ND		0.80	0.14	ppb v/v			12/05/17 05:15	4
1,2-Dichloroethene, Total	ND		1.6	0.12	ppb v/v			12/05/17 05:15	4
1,2-Dichloropropane	ND		0.80	0.14	ppb v/v			12/05/17 05:15	4
1,2-Dichlorotetrafluoroethane	ND		0.80	0.16	ppb v/v			12/05/17 05:15	4
1,3,5-Trimethylbenzene	**0.73**	**J**	0.80	0.16	ppb v/v			12/05/17 05:15	4
1,3-Butadiene	ND		0.80	0.15	ppb v/v			12/05/17 05:15	4
1,3-Dichlorobenzene	ND		0.80	0.20	ppb v/v			12/05/17 05:15	4
1,4-Dichlorobenzene	ND		0.80	0.25	ppb v/v			12/05/17 05:15	4
1,4-Dioxane	ND		20	3.0	ppb v/v			12/05/17 05:15	4
2,2,4-Trimethylpentane	**0.48**	**J**	0.80	0.17	ppb v/v			12/05/17 05:15	4
2-Chlorotoluene	ND		0.80	0.14	ppb v/v			12/05/17 05:15	4
3-Chloropropene	ND		2.0	0.25	ppb v/v			12/05/17 05:15	4
4-Ethyltoluene	**0.60**	**J**	0.80	0.16	ppb v/v			12/05/17 05:15	4
4-Isopropyltoluene	ND		0.80	0.21	ppb v/v			12/05/17 05:15	4
Acetone	**73**		20	5.2	ppb v/v			12/05/17 05:15	4

Client Sample ID: SV-T (113017)
Lab Sample ID: 200-41232-11

Date Collected: 11/30/17 12:15
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.46**	**J**	0.80	0.11	ppb v/v			12/05/17 05:15	4
Benzyl chloride	ND		0.80	0.27	ppb v/v			12/05/17 05:15	4
Bromodichloromethane	ND		0.80	0.24	ppb v/v			12/05/17 05:15	4
Bromoethene(Vinyl Bromide)	ND		0.80	0.088	ppb v/v			12/05/17 05:15	4
Bromoform	ND		0.80	0.14	ppb v/v			12/05/17 05:15	4
Bromomethane	ND		0.80	0.14	ppb v/v			12/05/17 05:15	4
Carbon disulfide	**0.53**	**J**	2.0	0.11	ppb v/v			12/05/17 05:15	4
Carbon tetrachloride	ND		0.80	0.044	ppb v/v			12/05/17 05:15	4
Chlorobenzene	ND		0.80	0.10	ppb v/v			12/05/17 05:15	4
Chloroethane	ND		2.0	0.52	ppb v/v			12/05/17 05:15	4
Chloroform	**0.60**	**J**	0.80	0.10	ppb v/v			12/05/17 05:15	4
Chloromethane	ND		2.0	0.64	ppb v/v			12/05/17 05:15	4
cis-1,2-Dichloroethene	ND		0.80	0.12	ppb v/v			12/05/17 05:15	4
cis-1,3-Dichloropropene	ND		0.80	0.14	ppb v/v			12/05/17 05:15	4
Cumene	**0.33**	**J**	0.80	0.16	ppb v/v			12/05/17 05:15	4
Cyclohexane	**0.34**	**J**	0.80	0.18	ppb v/v			12/05/17 05:15	4
Dibromochloromethane	ND		0.80	0.068	ppb v/v			12/05/17 05:15	4
Dichlorodifluoromethane	**0.40**	**J**	2.0	0.19	ppb v/v			12/05/17 05:15	4
Ethylbenzene	**1.1**		0.80	0.14	ppb v/v			12/05/17 05:15	4
Freon 22	ND		2.0	0.80	ppb v/v			12/05/17 05:15	4
Freon TF	ND		0.80	0.11	ppb v/v			12/05/17 05:15	4
Hexachlorobutadiene	ND		0.80	0.26	ppb v/v			12/05/17 05:15	4
Isopropyl alcohol	**27**		20	0.52	ppb v/v			12/05/17 05:15	4
m,p-Xylene	**4.5**		2.0	0.31	ppb v/v			12/05/17 05:15	4
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.34	ppb v/v			12/05/17 05:15	4
Methyl Ethyl Ketone	**30**		2.0	0.44	ppb v/v			12/05/17 05:15	4
methyl isobutyl ketone	**1.3**	**J**	2.0	0.26	ppb v/v			12/05/17 05:15	4
Methyl methacrylate	ND		2.0	0.44	ppb v/v			12/05/17 05:15	4
Methyl tert-butyl ether	**0.17**	**J**	0.80	0.16	ppb v/v			12/05/17 05:15	4
Methylene Chloride	ND		2.0	0.27	ppb v/v			12/05/17 05:15	4
Naphthalene	ND		2.0	0.40	ppb v/v			12/05/17 05:15	4
n-Butane	**3.4**		2.0	0.18	ppb v/v			12/05/17 05:15	4
n-Butylbenzene	ND		0.80	0.27	ppb v/v			12/05/17 05:15	4
n-Heptane	**0.55**	**J**	0.80	0.27	ppb v/v			12/05/17 05:15	4
n-Hexane	**0.65**	**J**	0.80	0.18	ppb v/v			12/05/17 05:15	4
n-Propylbenzene	**0.52**	**J**	0.80	0.16	ppb v/v			12/05/17 05:15	4
sec-Butylbenzene	ND		0.80	0.15	ppb v/v			12/05/17 05:15	4
Styrene	ND		0.80	0.14	ppb v/v			12/05/17 05:15	4
tert-Butyl alcohol	ND		20	6.8	ppb v/v			12/05/17 05:15	4
tert-Butylbenzene	ND		0.80	0.15	ppb v/v			12/05/17 05:15	4
Tetrachloroethene	**0.20**	**J**	0.80	0.039	ppb v/v			12/05/17 05:15	4
Tetrahydrofuran	**19**	**J**	20	4.8	ppb v/v			12/05/17 05:15	4
Toluene	**3.0**		0.80	0.14	ppb v/v			12/05/17 05:15	4
trans-1,2-Dichloroethene	ND		0.80	0.20	ppb v/v			12/05/17 05:15	4
trans-1,3-Dichloropropene	ND		0.80	0.15	ppb v/v			12/05/17 05:15	4
Trichloroethene	ND		0.80	0.036	ppb v/v			12/05/17 05:15	4
Trichlorofluoromethane	**0.12**	**J**	0.80	0.12	ppb v/v			12/05/17 05:15	4
Vinyl chloride	ND		0.80	0.072	ppb v/v			12/05/17 05:15	4

Client Sample ID: SV-T (113017)
Lab Sample ID: 200-41232-11

Date Collected: 11/30/17 12:15
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylene (total)	**6.1**		2.8	0.16	ppb v/v			12/05/17 05:15	4
Xylene, o-	**1.6**		0.80	0.16	ppb v/v			12/05/17 05:15	4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.4	0.57	ug/m3			12/05/17 05:15	4
1,1,2,2-Tetrachloroethane	ND		5.5	0.71	ug/m3			12/05/17 05:15	4
1,1,2-Trichloroethane	ND		4.4	0.37	ug/m3			12/05/17 05:15	4
1,1-Dichloroethane	ND		3.2	0.28	ug/m3			12/05/17 05:15	4
1,1-Dichloroethene	ND		3.2	0.56	ug/m3			12/05/17 05:15	4
1,2,4-Trichlorobenzene	ND		15	5.6	ug/m3			12/05/17 05:15	4
1,2,4-Trimethylbenzene	**7.5**		3.9	1.1	ug/m3			12/05/17 05:15	4
1,2-Dibromoethane	ND		6.1	0.71	ug/m3			12/05/17 05:15	4
1,2-Dichlorobenzene	ND		4.8	1.1	ug/m3			12/05/17 05:15	4
1,2-Dichloroethane	ND		3.2	0.55	ug/m3			12/05/17 05:15	4
1,2-Dichloroethene, Total	ND		6.3	0.46	ug/m3			12/05/17 05:15	4
1,2-Dichloropropane	ND		3.7	0.65	ug/m3			12/05/17 05:15	4
1,2-Dichlorotetrafluoroethane	ND		5.6	1.1	ug/m3			12/05/17 05:15	4
1,3,5-Trimethylbenzene	**3.6**	**J**	3.9	0.79	ug/m3			12/05/17 05:15	4
1,3-Butadiene	ND		1.8	0.33	ug/m3			12/05/17 05:15	4
1,3-Dichlorobenzene	ND		4.8	1.2	ug/m3			12/05/17 05:15	4
1,4-Dichlorobenzene	ND		4.8	1.5	ug/m3			12/05/17 05:15	4
1,4-Dioxane	ND		72	11	ug/m3			12/05/17 05:15	4
2,2,4-Trimethylpentane	**2.2**	**J**	3.7	0.80	ug/m3			12/05/17 05:15	4
2-Chlorotoluene	ND		4.1	0.72	ug/m3			12/05/17 05:15	4
3-Chloropropene	ND		6.3	0.79	ug/m3			12/05/17 05:15	4
4-Ethyltoluene	**2.9**	**J**	3.9	0.79	ug/m3			12/05/17 05:15	4
4-Isopropyltoluene	ND		4.4	1.1	ug/m3			12/05/17 05:15	4
Acetone	**170**		48	12	ug/m3			12/05/17 05:15	4
Benzene	**1.5**	**J**	2.6	0.36	ug/m3			12/05/17 05:15	4
Benzyl chloride	ND		4.1	1.4	ug/m3			12/05/17 05:15	4
Bromodichloromethane	ND		5.4	1.6	ug/m3			12/05/17 05:15	4
Bromoethene(Vinyl Bromide)	ND		3.5	0.38	ug/m3			12/05/17 05:15	4
Bromoform	ND		8.3	1.4	ug/m3			12/05/17 05:15	4
Bromomethane	ND		3.1	0.56	ug/m3			12/05/17 05:15	4
Carbon disulfide	**1.7**	**J**	6.2	0.35	ug/m3			12/05/17 05:15	4
Carbon tetrachloride	ND		5.0	0.28	ug/m3			12/05/17 05:15	4
Chlorobenzene	ND		3.7	0.46	ug/m3			12/05/17 05:15	4
Chloroethane	ND		5.3	1.4	ug/m3			12/05/17 05:15	4
Chloroform	**2.9**	**J**	3.9	0.49	ug/m3			12/05/17 05:15	4
Chloromethane	ND		4.1	1.3	ug/m3			12/05/17 05:15	4
cis-1,2-Dichloroethene	ND		3.2	0.46	ug/m3			12/05/17 05:15	4
cis-1,3-Dichloropropene	ND		3.6	0.65	ug/m3			12/05/17 05:15	4
Cumene	**1.6**	**J**	3.9	0.77	ug/m3			12/05/17 05:15	4
Cyclohexane	**1.2**	**J**	2.8	0.62	ug/m3			12/05/17 05:15	4
Dibromochloromethane	ND		6.8	0.58	ug/m3			12/05/17 05:15	4
Dichlorodifluoromethane	**2.0**	**J**	9.9	0.93	ug/m3			12/05/17 05:15	4
Ethylbenzene	**4.9**		3.5	0.59	ug/m3			12/05/17 05:15	4
Freon 22	ND		7.1	2.8	ug/m3			12/05/17 05:15	4
Freon TF	ND		6.1	0.83	ug/m3			12/05/17 05:15	4

Client Sample ID: SV-T (113017)
Lab Sample ID: 200-41232-11

Date Collected: 11/30/17 12:15
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		8.5	2.7	ug/m3			12/05/17 05:15	4
Isopropyl alcohol	**67**		49	1.3	ug/m3			12/05/17 05:15	4
m,p-Xylene	**19**		8.7	1.3	ug/m3			12/05/17 05:15	4
Methyl Butyl Ketone (2-Hexanone)	ND		8.2	1.4	ug/m3			12/05/17 05:15	4
Methyl Ethyl Ketone	**87**		5.9	1.3	ug/m3			12/05/17 05:15	4
methyl isobutyl ketone	**5.4**	**J**	8.2	1.1	ug/m3			12/05/17 05:15	4
Methyl methacrylate	ND		8.2	1.8	ug/m3			12/05/17 05:15	4
Methyl tert-butyl ether	**0.63**	**J**	2.9	0.59	ug/m3			12/05/17 05:15	4
Methylene Chloride	ND		6.9	0.94	ug/m3			12/05/17 05:15	4
Naphthalene	ND		10	2.1	ug/m3			12/05/17 05:15	4
n-Butane	**8.1**		4.8	0.44	ug/m3			12/05/17 05:15	4
n-Butylbenzene	ND		4.4	1.5	ug/m3			12/05/17 05:15	4
n-Heptane	**2.3**	**J**	3.3	1.1	ug/m3			12/05/17 05:15	4
n-Hexane	**2.3**	**J**	2.8	0.65	ug/m3			12/05/17 05:15	4
n-Propylbenzene	**2.5**	**J**	3.9	0.79	ug/m3			12/05/17 05:15	4
sec-Butylbenzene	ND		4.4	0.81	ug/m3			12/05/17 05:15	4
Styrene	ND		3.4	0.60	ug/m3			12/05/17 05:15	4
tert-Butyl alcohol	ND		61	21	ug/m3			12/05/17 05:15	4
tert-Butylbenzene	ND		4.4	0.81	ug/m3			12/05/17 05:15	4
Tetrachloroethene	**1.3**	**J**	5.4	0.27	ug/m3			12/05/17 05:15	4
Tetrahydrofuran	**55**	**J**	59	14	ug/m3			12/05/17 05:15	4
Toluene	**11**		3.0	0.53	ug/m3			12/05/17 05:15	4
trans-1,2-Dichloroethene	ND		3.2	0.79	ug/m3			12/05/17 05:15	4
trans-1,3-Dichloropropene	ND		3.6	0.69	ug/m3			12/05/17 05:15	4
Trichloroethene	ND		4.3	0.20	ug/m3			12/05/17 05:15	4
Trichlorofluoromethane	**0.69**	**J**	4.5	0.70	ug/m3			12/05/17 05:15	4
Vinyl chloride	ND		2.0	0.18	ug/m3			12/05/17 05:15	4
Xylene (total)	**26**		12	0.69	ug/m3			12/05/17 05:15	4
Xylene, o-	**7.0**		3.5	0.69	ug/m3			12/05/17 05:15	4

Client Sample ID: SVDUP-1 (113017)
Lab Sample ID: 200-41232-12

Date Collected: 11/30/17 00:00
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.13**	**J**	0.20	0.026	ppb v/v			12/05/17 08:52	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/05/17 08:52	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 08:52	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 08:52	1
1,1-Dichloroethene	ND		0.20	0.035	ppb v/v			12/05/17 08:52	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/05/17 08:52	1
1,2,4-Trimethylbenzene	**0.81**		0.20	0.057	ppb v/v			12/05/17 08:52	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/05/17 08:52	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/05/17 08:52	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/05/17 08:52	1
1,2-Dichloroethene, Total	ND		0.40	0.029	ppb v/v			12/05/17 08:52	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/05/17 08:52	1

Client Sample ID: SVDUP-1 (113017)
Lab Sample ID: 200-41232-12

Date Collected: 11/30/17 00:00
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/05/17 08:52	1
1,3,5-Trimethylbenzene	**0.24**		0.20	0.040	ppb v/v			12/05/17 08:52	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/05/17 08:52	1
1,3-Dichlorobenzene	**0.069**	**J**	0.20	0.050	ppb v/v			12/05/17 08:52	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/05/17 08:52	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/05/17 08:52	1
2,2,4-Trimethylpentane	**0.24**		0.20	0.043	ppb v/v			12/05/17 08:52	1
2-Chlorotoluene	**0.037**	**J**	0.20	0.035	ppb v/v			12/05/17 08:52	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/05/17 08:52	1
4-Ethyltoluene	**0.22**		0.20	0.040	ppb v/v			12/05/17 08:52	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/05/17 08:52	1
Acetone	**13**		5.0	1.3	ppb v/v			12/05/17 08:52	1
Benzene	**0.16**	**J**	0.20	0.028	ppb v/v			12/05/17 08:52	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/05/17 08:52	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/05/17 08:52	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/05/17 08:52	1
Bromoform	ND		0.20	0.035	ppb v/v			12/05/17 08:52	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/05/17 08:52	1
Carbon disulfide	**0.22**	**J**	0.50	0.028	ppb v/v			12/05/17 08:52	1
Carbon tetrachloride	**0.011**	**J**	0.20	0.011	ppb v/v			12/05/17 08:52	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/05/17 08:52	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/05/17 08:52	1
Chloroform	**2.1**		0.20	0.025	ppb v/v			12/05/17 08:52	1
Chloromethane	**0.17**	**J**	0.50	0.16	ppb v/v			12/05/17 08:52	1
cis-1,2-Dichloroethene	ND		0.20	0.029	ppb v/v			12/05/17 08:52	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/05/17 08:52	1
Cumene	**0.068**	**J**	0.20	0.039	ppb v/v			12/05/17 08:52	1
Cyclohexane	**0.15**	**J**	0.20	0.045	ppb v/v			12/05/17 08:52	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/05/17 08:52	1
Dichlorodifluoromethane	**0.27**	**J**	0.50	0.047	ppb v/v			12/05/17 08:52	1
Ethylbenzene	**0.83**		0.20	0.034	ppb v/v			12/05/17 08:52	1
Freon 22	ND		0.50	0.20	ppb v/v			12/05/17 08:52	1
Freon TF	**0.049**	**J**	0.20	0.027	ppb v/v			12/05/17 08:52	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/05/17 08:52	1
Isopropyl alcohol	**0.46**	**J**	5.0	0.13	ppb v/v			12/05/17 08:52	1
m,p-Xylene	**3.2**		0.50	0.077	ppb v/v			12/05/17 08:52	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.086	ppb v/v			12/05/17 08:52	1
Methyl Ethyl Ketone	**5.3**		0.50	0.11	ppb v/v			12/05/17 08:52	1
methyl isobutyl ketone	**0.15**	**J**	0.50	0.065	ppb v/v			12/05/17 08:52	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/05/17 08:52	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/05/17 08:52	1
Methylene Chloride	**0.075**	**J**	0.50	0.068	ppb v/v			12/05/17 08:52	1
Naphthalene	ND		0.50	0.10	ppb v/v			12/05/17 08:52	1
n-Butane	**0.81**		0.50	0.046	ppb v/v			12/05/17 08:52	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/05/17 08:52	1
n-Heptane	**0.24**		0.20	0.068	ppb v/v			12/05/17 08:52	1
n-Hexane	**0.22**		0.20	0.046	ppb v/v			12/05/17 08:52	1
n-Propylbenzene	**0.16**	**J**	0.20	0.040	ppb v/v			12/05/17 08:52	1

Client Sample ID: SVDUP-1 (113017)
Lab Sample ID: 200-41232-12

Date Collected: 11/30/17 00:00
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 08:52	1
Styrene	ND		0.20	0.035	ppb v/v			12/05/17 08:52	1
tert-Butyl alcohol	ND		5.0	1.7	ppb v/v			12/05/17 08:52	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 08:52	1
Tetrachloroethene	**0.53**		0.20	0.0098	ppb v/v			12/05/17 08:52	1
Tetrahydrofuran	**28**		5.0	1.2	ppb v/v			12/05/17 08:52	1
Toluene	**1.8**		0.20	0.035	ppb v/v			12/05/17 08:52	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/05/17 08:52	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/05/17 08:52	1
Trichloroethene	ND		0.20	0.0091	ppb v/v			12/05/17 08:52	1
Trichlorofluoromethane	**0.20**		0.20	0.031	ppb v/v			12/05/17 08:52	1
Vinyl chloride	ND		0.20	0.018	ppb v/v			12/05/17 08:52	1
Xylene (total)	**4.3**		0.70	0.040	ppb v/v			12/05/17 08:52	1
Xylene, o-	**1.1**		0.20	0.040	ppb v/v			12/05/17 08:52	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.72**	**J**	1.1	0.14	ug/m3			12/05/17 08:52	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/05/17 08:52	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/05/17 08:52	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/05/17 08:52	1
1,1-Dichloroethene	ND		0.79	0.14	ug/m3			12/05/17 08:52	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/05/17 08:52	1
1,2,4-Trimethylbenzene	**4.0**		0.98	0.28	ug/m3			12/05/17 08:52	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/05/17 08:52	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/05/17 08:52	1
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/05/17 08:52	1
1,2-Dichloroethene, Total	ND		1.6	0.11	ug/m3			12/05/17 08:52	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/05/17 08:52	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/05/17 08:52	1
1,3,5-Trimethylbenzene	**1.2**		0.98	0.20	ug/m3			12/05/17 08:52	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/05/17 08:52	1
1,3-Dichlorobenzene	**0.41**	**J**	1.2	0.30	ug/m3			12/05/17 08:52	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/05/17 08:52	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/05/17 08:52	1
2,2,4-Trimethylpentane	**1.1**		0.93	0.20	ug/m3			12/05/17 08:52	1
2-Chlorotoluene	**0.19**	**J**	1.0	0.18	ug/m3			12/05/17 08:52	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/05/17 08:52	1
4-Ethyltoluene	**1.1**		0.98	0.20	ug/m3			12/05/17 08:52	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/05/17 08:52	1
Acetone	**31**		12	3.1	ug/m3			12/05/17 08:52	1
Benzene	**0.52**	**J**	0.64	0.089	ug/m3			12/05/17 08:52	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/05/17 08:52	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/05/17 08:52	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/05/17 08:52	1
Bromoform	ND		2.1	0.36	ug/m3			12/05/17 08:52	1
Bromomethane	ND		0.78	0.14	ug/m3			12/05/17 08:52	1
Carbon disulfide	**0.67**	**J**	1.6	0.087	ug/m3			12/05/17 08:52	1
Carbon tetrachloride	**0.067**	**J**	1.3	0.069	ug/m3			12/05/17 08:52	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/05/17 08:52	1

Client Sample ID: SVDUP-1 (113017)
Lab Sample ID: 200-41232-12

Date Collected: 11/30/17 00:00
Matrix: Air
Date Received: 12/01/17 10:30
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.3	0.34	ug/m3			12/05/17 08:52	1
Chloroform	**10**		0.98	0.12	ug/m3			12/05/17 08:52	1
Chloromethane	**0.36**	**J**	1.0	0.33	ug/m3			12/05/17 08:52	1
cis-1,2-Dichloroethene	ND		0.79	0.11	ug/m3			12/05/17 08:52	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/05/17 08:52	1
Cumene	**0.33**	**J**	0.98	0.19	ug/m3			12/05/17 08:52	1
Cyclohexane	**0.50**	**J**	0.69	0.15	ug/m3			12/05/17 08:52	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/05/17 08:52	1
Dichlorodifluoromethane	**1.4**	**J**	2.5	0.23	ug/m3			12/05/17 08:52	1
Ethylbenzene	**3.6**		0.87	0.15	ug/m3			12/05/17 08:52	1
Freon 22	ND		1.8	0.71	ug/m3			12/05/17 08:52	1
Freon TF	**0.37**	**J**	1.5	0.21	ug/m3			12/05/17 08:52	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/05/17 08:52	1
Isopropyl alcohol	**1.1**	**J**	12	0.32	ug/m3			12/05/17 08:52	1
m,p-Xylene	**14**		2.2	0.33	ug/m3			12/05/17 08:52	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.35	ug/m3			12/05/17 08:52	1
Methyl Ethyl Ketone	**16**		1.5	0.32	ug/m3			12/05/17 08:52	1
methyl isobutyl ketone	**0.61**	**J**	2.0	0.27	ug/m3			12/05/17 08:52	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/05/17 08:52	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/05/17 08:52	1
Methylene Chloride	**0.26**	**J**	1.7	0.24	ug/m3			12/05/17 08:52	1
Naphthalene	ND		2.6	0.52	ug/m3			12/05/17 08:52	1
n-Butane	**1.9**		1.2	0.11	ug/m3			12/05/17 08:52	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/05/17 08:52	1
n-Heptane	**1.0**		0.82	0.28	ug/m3			12/05/17 08:52	1
n-Hexane	**0.78**		0.70	0.16	ug/m3			12/05/17 08:52	1
n-Propylbenzene	**0.78**	**J**	0.98	0.20	ug/m3			12/05/17 08:52	1
sec-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 08:52	1
Styrene	ND		0.85	0.15	ug/m3			12/05/17 08:52	1
tert-Butyl alcohol	ND		15	5.2	ug/m3			12/05/17 08:52	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 08:52	1
Tetrachloroethene	**3.6**		1.4	0.066	ug/m3			12/05/17 08:52	1
Tetrahydrofuran	**81**		15	3.5	ug/m3			12/05/17 08:52	1
Toluene	**6.7**		0.75	0.13	ug/m3			12/05/17 08:52	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/05/17 08:52	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/05/17 08:52	1
Trichloroethene	ND		1.1	0.049	ug/m3			12/05/17 08:52	1
Trichlorofluoromethane	**1.1**		1.1	0.17	ug/m3			12/05/17 08:52	1
Vinyl chloride	ND		0.51	0.046	ug/m3			12/05/17 08:52	1
Xylene (total)	**19**		3.0	0.17	ug/m3			12/05/17 08:52	1
Xylene, o-	**4.7**		0.87	0.17	ug/m3			12/05/17 08:52	1

Appendix B
Laboratory Case Narrative

Job Narrative
200-41232-1

Receipt
The samples were received on 12/1/2017 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

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

489501-Albany

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403-6809
phone 802.660.1990 fax 802.660.1919

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	Client Project Manager: Stefan Bagnato	Samples Collected By: A.Thomas + ESousa	COC No: 1 of 2 COCs
Company Name: Arcadis U.S. Inc	Phone: (518) 250-7300		
Address: 855 Route 146 Suite 210	Email: Stefan.bagnato@arcadis.com		For Lab Use Only:
City/State/Zip: Clifton Park, NY, 12065			Walk-in Client:
Phone: (518) 250-7300	Site Contact:		Lab Sampling:
FAX:	Tel/Fax		Job / SDG No.:
Project Name: NYSDEC-222 South Ferry St.	Anaylsis Turnaround Time		(See below for Add'l Items)
Site/Location: 222 South Ferry St. - Schenectady	Standard (Specific):		
PO# 0021016444.0000	Rush (Specifiy):		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-14A (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes sectio	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-8 (113017)	11-30-17	0955	1209	-30	-6.5	3683	5412	X											X			
SV-12 (113017)	11-30-17	0956	1156	-30	-6.5	3717	5427	X											X			
SV-1 (113017)	11-30-17	0959	1210	-30	-6	3133	2876	X											X			
SV-2 (113017)	11-30-17	1002	1229	-30	-6	5182	4118	X											X			
SV-4 (113017)	11-30-17	1005	1159	-30	-6.5	5212	5696	X											X			
SV-7 (113017)	11-30-17	1008	1202	-29	-6.5	4187	3540	X											X			
OA-1 (113017)	11-30-17	1011	1204	-27	-3.5	2528	5116	X											X			
SV-5 (113017)	11-30-17	1014	1211	-30	-6	2667	4791	X											X			
SV-10 (113017)	11-30-17	1017	1205	-27	-1.5	3746	5690	X											X			
SV-11 (113017)	11-30-17	1028	1236	-30	-6.5	5179	3281	X											X			

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

200-41232 COC

Special Instructions/QC Requirements & Comments: ASP Category B Deliverables

Samples Shipped by:	Date / Time:	Samples Received by: VSH TAGUK 12/1/17 1030
Samples Relinquished by: Anthony Thomas	Date / Time: 11-30-17 1255	Received by: Karl Zadn 11-30-17 1350
Relinquished by: Emmanuel Sousa	Date / Time: 11/30/17 1350	Received by: Relinquished by Karl Zadn 11-30-17 1800

Lab Use Only: Shipper Name: TR Opened by: VSH Condition: Intact

Form No. CA-C-WI-003, Rev. 2.5, dated 9/22/2017

12/14/2017

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403-6809
phone 802.660.1990 fax 802.660.1919

480501-Albany

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	Client Project Manager: Stefan Bagnato	Samples Collected By: A.Thomas + E.Sousa	COC No:
Company Name: Arcadis U.S. Inc	Phone: (518) 250-7300		2 of 2 COCs
Address: 855 Route 146 Suite 210	Email: stefan.bagnato@arcadis.com		
City/State/Zip Clifton Park, NY, 12065			For Lab Use Only:
Phone: (518) 250-7300	Site Contact:		Walk-in Client:
FAX:	Tel/Fax		Lab Sampling:
Project Name: NYSDEC-222 South Ferry St.	Anaylsis Turnaround Time		Job / SDG No.:
Site/Location: 222 South Ferry St-Screnchtady	Standard (Specific):		(See below for Add'l Items)
P O # 0026016444.0000	Rush (Specifiy):		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-14/15 Standard / Low Level	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes sectio	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
SV-T (113017)	11-30-17	1020	1215	-30	-6.5	3125	5726	X											X			
SVDUP-1 (113017)	11-30-17	—	—	-30	-6.5	5193	2693	X											X			

11-30-17

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments: ASP Category B Deliverables

Samples Shipped by:	Date / Time:	Samples Received by:
Samples Relinquished by: A.Thomas	Date / Time: 11-30-17 1355	Received by: Rat Yoder 11-30-17 1350
Relinquished by: Emmanuel Sousa	Date / Time: 11/30/17 1350	Received by: Relinquished by Rat Yoder 11-30-17 1800

Lab Use Only: Shipper Name: TA Opened by: Condition:

Form No. CA-C-WI-003, Rev. 2.5, dated 9/22/2017

12/14/2017

ORIGIN ID:SCHA (518) 438-8140
TIM KNOLLMEYER
TESTAMERICA LAB INC
25 KRAFT AVE

ALBANY, NY 12205
UNITED STATES US

SHIP DATE: 30NOV17
ACTWGT: 34.80 LB
CAD: 0439821/CAFE3108
DIMS: 21x21x17 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING/ CALLAHAN
TESTAMERICA–BURLINGTON
30 COMMUNITY DRIVE, SUITE 11

BURLINGTON VT 05403
(802) 660–1990
REF: SUMAS

FedEx Express

1 of 3

TRK# 0201 7417 3416 4310

FRI – 01 DEC 3:00P
STANDARD OVERNIGHT

MASTER

XH BTVA

05403
VT–US BTV

ORIGIN ID:SCHA (518) 438-8140
TIM KNOLLMEYER
TESTAMERICA LAB INC
25 KRAFT AVE

ALBANY, NY 12205
UNITED STATES US

SHIP DATE: 30NOV17
ACTWGT: 34.80 LB
CAD: 0439821/CAFE3108
DIMS: 21x21x17 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING/ CALLAHAN
TESTAMERICA–BURLINGTON
30 COMMUNITY DRIVE, SUITE 11

BURLINGTON VT 05403
(802) 660–1990
REF: SUMAS

2 of 3

MPS# 0263 7417 3416 4320

FRI – 01 DEC 3:0
STANDARD OVERNIG

Mstr# 7417 3416 4310 0201

XH BTVA

VT–US

ORIGIN ID:SCHA (518) 438-8140
TIM KNOLLMEYER
TESTAMERICA LAB INC
25 KRAFT AVE

ALBANY, NY 12205
UNITED STATES US

SHIP DATE: 30NOV17
ACTWGT: 34.80 LB
CAD: 0439821/CAFE3108
DIMS: 21x21x17 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING/ CALLAHAN
TESTAMERICA–BURLINGTON
30 COMMUNITY DRIVE, SUITE 11

BURLINGTON VT 05403
(802) 660–1990
REF: SUMAS

FedEx Express

FRI – 01 DEC 3:00P
STANDARD OVERNIGHT

05403
VT–US BTV

3 of 3

MPS# 0263 7417 3416 4331

Mstr# 7417 3416 4310 0201

XH BTVA

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 200-41232-1

Login Number: 41232
List Number: 1
Creator: Hahl, Victoria L

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Seal present with no number.
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.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	Thermal preservation not required.
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY:	ARCADIS U.S., Inc.
SITE NAME:	222 South Ferry Street
CONTRACTED LAB:	TestAmerica-Buffalo
QA/QC LEVEL:	DUSR
EPA SOW/METHODS:	SW-846
VALIDATION GUIDELINES:	USEPA Region II data validation SOPs
SAMPLE MATRIX:	Soil
TYPES OF ANALYSES:	Volatile Organics (VOA), Semivolatile Organics (SVOA), Pesticides (Pest), Polychlorinated Biphenyls (PCB), Total Metals
SDG NUMBER:	480-127631-1

SAMPLES:

Client Sample #	Lab Sample #	Matrix	VOA	SVOA
SS-01 (0-2”)	480-127631-1	Soil	X	X
SS-01 (2-12”)	480-127631-2	Soil	X	X
SS-02 (0-2”)	480-127631-3	Soil	X	X
SS-02 (2-12”)	480-127631-4	Soil	X	X
SS-03 (0-2”)	480-127631-5	Soil	X	X
SS-03 (2-12”)	480-127631-6	Soil	X	X
DUP-01	480-127631-7	Soil	X	X
DRUM-C	480-127631-8	Soil	X	
SS-01 (2-12”)MS	480-127631-2MS	Soil	X	X
SS-01 (2-12”)MSD	480-127631-2MSD	Soil	X	X
DRUM-CMS	480-127631-8MS	Soil	X	
DRUM-CMSD	480-127631-8MSD	Soil	X	

Client Sample #	Lab Sample #	Matrix	PEST	PCB
SS-01 (0-2”)	480-127631-1	Soil	X	X
SS-01 (2-12”)	480-127631-2	Soil	X	X
SS-02 (0-2”)	480-127631-3	Soil	X	X
SS-02 (2-12”)	480-127631-4	Soil	X	X
SS-03 (0-2”)	480-127631-5	Soil	X	X
SS-03 (2-12”)	480-127631-6	Soil	X	X
DUP-01	480-127631-7	Soil	X	X
SS-01 (2-12”)MS	480-127631-2MS	Soil	X	X
SS-01 (2-12”)MSD	480-127631-2MSD	Soil	X	X

Client Sample #	Lab Sample #	Matrix	METALS
SS-01 (0-2”)	480-127631-1	Soil	X
SS-01 (0-2”)RE	180-127631-1RE	Soil	X
SS-01 (2-12”)	480-127631-2	Soil	X
SS-01 (2-12”)RE	480-127631-2RE	Soil	X
SS-02 (0-2”)	480-127631-3	Soil	X
SS-02 (0-2”)RE	480-127631-3RE	Soil	X
SS-02 (2-12”)	480-127631-4	Soil	X
SS-02 (2-12”)RE	480-127631-4RE	Soil	X
SS-03 (0-2”)	480-127631-5	Soil	X
SS-03 (0-2”)RE	480-127631-5RE	Soil	X
SS-03 (2-12”)	480-127631-6	Soil	X
SS-03 (2-12”)RE	480-127631-6RE	Soil	X
DUP-01	480-127631-7	Soil	X
DUP-01RE	480-127631-7RE	Soil	X
DRUM-C	480-127631-8	Soil	X
DRUM-CRE	480-127631-8RE	Soil	X
SS-01 (2-12”)MS	480-127631-2MS	Soil	X
SS-01 (2-12”)MSD	480-127631-2MSD	Soil	X

SUFFIX CODES: MD = MATRIX DUPLICATE, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE

DATA REVIEWER(S): Amy L. Hogan, Theresa Tipe

SECONDARY REVIEWER(S): Kevin C. Harmon, Ann Poon

Data Qualifier Definitions

J	-	The associated numerical value is an estimated quantity.
JN	-	The compound/analyte was tentatively identified with estimated concentration.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA USABILITY SUMMARY

TestAmerica-Buffalo – 480-12763-1 – Organics and Inorganics

VOLATILE ORGANICS

SUMMARY

I.) General:

The analyses for Volatile Organics were performed by GC / MS according to SW-846 Method 8260C.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualification.

III.) Holding Times:

All Holding Time criteria were met. No data qualification was required.

IV.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Continuing Calibration:

The Percent Differences (%Ds) for the standard run on 11/17/17 at 09:31 on instrument HP5973 exceeded the 20% QC limit for the following compounds:

chloromethane	20.2%
bromomethane	25.4%
2-butanone	22.0%
carbon tetrachloride	26.2%
2-hexanone	20.5%

bromoform	24.3%

The results for these compounds in the associated SDG samples, which consisted entirely of non-detects, were qualified as estimated (UJ). The associated SDG samples were: SS-01 (0-2"), SS-01 (2-12"), SS-02 (0-2"), SS-02 (2-12"), SS-03 (0-2") and SS-03 (2-12")

The Percent Differences (%Ds) for the standards run on 11/20/17 at 11:13 on instrument HP5973 exceeded the 20% QC limit for the following compounds:

dichlorodifluoromethane	55.2%
chloromethane	31.9%
vinyl chloride	28.9%
bromomethane	38.3%
chloroethane	24.1%
carbon tetrachloride	25.8%
bromoform	23.4%

The results for these compounds in associated SDG samples DUP-01 and DRUM-C, which consisted entirely of non-detects, were qualified as estimated (UJ).

VI.) Blanks:

Method Blanks:

There were no detections in the method blank associated with this SDG. No data qualification was necessary.

Tentatively Identified Compounds (TIC):

There were no TIC detections reported in the blanks associated with this SDG. No data qualification was required.

VII.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No data qualification was required.

VIII.) Laboratory Control Samples (LCS):

Three LCS were analyzed for this fraction of the SDG. The Percent Recoveries (%Rs) for LCS 480-367965 exceeded their QC limits for the following compounds:

Compound	LCS, %R	QC Limits
chloromethane	137%	63-127%

dichlorodifluoromethane	151%	57-142%
vinyl chloride	134%	61-133%

Since there were no positive results for these compounds in the associated SDG samples, no data qualification was necessary.

The Percent Recovery (%R) for dichlorodifluoromethane was 150% for LCS 480-388298, which exceeded the 57-142% QC limits. Since the results for this compound in the associated SDG samples, no data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed on SDG samples SS-01 (2-12") and DRUM-C. The Percent Recoveries (%Rs) were outside their QC limits in samples SS-01 (2-12") MS / MSD for the following compounds:

Compound	MS, %R	MSD, %R	QC Limits
1,2,4-trichlorobenzene	42%	43%	64-120%
2-butanone	69%		70-134%
bromoform	67%	67%	68-126%

Data qualification based on MS / MSD criteria was not required, so no data qualification was necessary.

A total of thirty-three Percent Recoveries (%Rs) and thirty-one Relative Percent Differences (RPDs) were outside their QC limits for samples DRUM-C MS/MSD. Data qualification based on MS /MSD criteria was not required, so no data qualification was necessary.

X.) Field Duplicates:

One set of field duplicates (SS-02(2-12") / DUP-01) was identified in this SDG. There were no calculable Relative Percent Differences (RPDs), so no action was required.

XI.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No data qualification was necessary.

XII.) TCL Compound Identification:

All sample data were reported in accordance with the cited method.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No data qualification was necessary.

SEMIVOLATILE ORGANICS

SUMMARY

I.) General:

The analyses for Semivolatile Organics were performed by GC / MS according to SW-846 Method 8270D.

II.) Overall Assessment of Data:

All laboratory data were acceptable without qualification.

III.) Holding Times:

All Holding Time criteria were met. No data qualification was necessary.

IV.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Continuing Calibration:

All Continuing Calibration criteria were met. No data qualification was necessary.

VI.) Blanks:

Method Blanks:

There were no detections in the method blank associated with this SDG. No data qualification was necessary.

Tentatively Identified Compounds (TIC):

There were no TIC detections reported in the blanks associated with this SDG. No data qualification was required.

VII.) Surrogate Recoveries:

The Percent Recoveries (%R's) were below their respective QC limits for the following samples:

Sample	Surrogate	%R	QC Limits
SS-02 (2-12")	2,4,6-tribromophenol	123%	54-120%
SS-03 (0-2")	2-fluorobiphenyl	53%	60-120%
	2,4,6-tribromophenol	143%	54-120%
SS-03 (2-12")	2-fluorobiphenyl	49%	60-120%
	2,4,6-tribromophenol	135%	54-120%
DUP-01	2-fluorobiphenyl	54%	54-120%

Since only one %R for each fraction was outside the QC limits, no data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this fraction of the SDG. All criteria were met. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed on SDG sample SS-01 (2-12"). A total of eighteen Percent Recoveries (%R's) were outside the QC limits. Data qualification based on MS / MSD criteria was not required. No data qualification was necessary.

X.) Field Duplicates:

One set of field duplicates (SS-02(2-12") / DUP-01) was identified in this SDG. The only calculable Relative Percent Difference (RPD) was 68.5% for fluoranthene, which exceeded the advisory 60% QC limit for solid samples. Data qualification based on field duplicate criteria was not required, so no action was taken.

XI.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No data qualification was necessary.

XII.) TCL Compound Identification:

All sample data were reported in accordance with the cited method.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

Due to the color and viscous nature of the matrix, all SDG samples were analyzed at a dilution. All CRQL criteria were met. No data qualification was necessary.

PESTICIDES

SUMMARY

I.) General:

The analyses for Pesticides were performed by GC / MS according to SW-846 Method 8081.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualification.

III.) Holding Times:

All Holding Time criteria were met. No data qualification was necessary.

IV.) Instrument Performance:

All Instrument Performance criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Continuing Calibration:

All Continuing Calibration criteria were met. No data qualification was necessary.

VI.) Blanks:

Method Blanks:

There were no detections in the method blank associated with this SDG. No action was necessary.

VII.) Surrogate Recoveries:

All Surrogates were diluted out of the samples. No data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this fraction of the SDG. All criteria were met. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed on SDG sample SS-01 (2-12"). All MS / MSD criteria were met. No data qualification was necessary.

X.) Field Duplicates:

One set of field duplicates (SS-02(2-12") / DUP-01) was identified in this SDG. There were no calculable Relative Percent Differences (RPDs), so no data qualification was necessary.

XI.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No data qualification was necessary.

XII.) TCL Compound Identification:

The Column Relative Percent Differences (RPDs) for the following samples exceeded the 25% QC limit:

Sample	Compound	RPD
SS-01 (0-2")	4,4-DDT	45.1%
SS-01 (2-12")	4,4-DDT	48.6%
SS-02 (0-2")	4,4-DDT	47.5%
SS-02 (2-12")	4,4-DDT	43.3%
SS-03 (0-2")	4,4-DDT	44.2%
SS-03 (2-12")	4,4-DDT	39.6%
DUP-01	4,4-DDT	46.7%

The positive results for 4,4-DDT in the listed samples were qualified as estimated (J).

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All samples were diluted due to the color and nature of the matrix. All CRQL criteria were met. No action was required.

POLYCHLORINATED BIPHENYLS

SUMMARY

I.) General:

The analyses for Polychlorinated Biphenyls were performed by GC / MS according to SW-846 Method 8082.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualification.

III.) Holding Times:

All Holding Time criteria were met. No data qualification was necessary.

IV.) Instrument Performance:

All Instrument Performance criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Continuing Calibration:

The percent Differences (%Ds) for the standards analyzed on 11/20/17 on instrument HP6890-7 exceeded the 15% QC limit for the following compounds:

Compound	Col.1, %R	Col.2, %R
Aroclor 1016 (1)	18.8%	25.7%
Aroclor 1016 (2)	16.8%	

Aroclor 1016 (3)		18.5%
Aroclor 1260 (3)	16.6%	
Aroclor 1264 (4)	19.2%	
Aroclor 1260(5)	21.3%	
Aroclor 1221 (1)	15.6%	32.1%
Aroclor 1221 (3)		15.9%
Aroclor 1254 (2)		31.4%
Aroclor 1254 (5)		19.6%
Aroclor 1262 (1)	16.9%	15.7%
Aroclor 1262 (2)		15.6%
Aroclor 1262 (3)		17.8%
Aroclor 1262 (4)		20.7%
Aroclor 1242 (3)	37.5%	
Aroclor 1242 (4)		27.2%
Aroclor 1248 (4)		30.9%
DCB	21.9%	23.8%

All results for these Aroclors in the SDG samples, which consisted entirely of non-detects, were qualified as estimated (UJ).

VI.) Blanks:

Method Blanks:

There were no detections in the method blank associated with this SDG. No action was necessary.

VII.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this fraction of the SDG. All criteria were met. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed on SDG sample SS-01 (2-12”). All MS / MSD criteria were met. No data qualification was necessary.

X.) Field Duplicates:

One set of field duplicates (SS-02(2-12") / DUP-01) was identified in this SDG. There were no calculable Relative Percent Differences (RPDs), so no data qualification was necessary.

XI.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No data qualification was necessary.

XII.) TCL Compound Identification:

All sample data were reported in accordance with the cited method.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No action was required.

TOTAL METALS

SUMMARY

I,) General:

The analyses for Total Metals were performed using SW-846 Methods 6010C and 7470A.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualification.

III.) Holding Times:

All Holding Time criteria were met. No data qualification was necessary.

IV.) Calibration:

All Initial and Continuing Calibration criteria were met. No data qualification was necessary.

V.) ICP CRDL Standard:

All ICP CRDL standards associated with the analytical sequence met QC criteria. No data qualification was necessary.

VI.) Blanks:

Preparation Blanks:

The following compounds were detected in the preparation blank associated with this fraction of the SDG:

aluminum	7.48 mg/kg
calcium	9.52 mg/kg
iron	6.81 mg/kg
manganese	0.114 mg/kg
sodium	21.28 mg/kg

All positive results for these analytes in the SDG samples less than the CRQL were qualified as undetected (U) with the result being raised to the CRQL.

Calibration Blanks:

There were no detections reported in the calibration blanks. No data qualification was necessary.

VII.) Interference Check Standards:

All ICSA and ICSAB recoveries associated with these analyses met QC criteria. No data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

All LCS Recovery criteria were met. No data qualification was necessary.

IX.) Duplicate Sample Analysis:

MS / MSD analyses were performed on SDG sample SS-01 (2-12”). All duplicate sample criteria were met. No data qualification was necessary.

X.) Matrix Spike (MS):

MS / MSD analyses were performed on SDG sample SS-01 (2-12”). The Percent Recoveries (%R’s) were outside the 75-120% for metals by 6010 and 80-120% QC limits for mercury by 7470A for the following analytes:

Analyte	MS, %R	MSD %R
aluminum	480%	416%
antimony	66%	67%

barium	176%	161%
lead	192%	154%
mercury	72%	64%
potassium	242%	221%
zinc		158%

All positive and non-detect results for antimony and mercury and all positive results for aluminum, barium, lead, potassium and zinc were qualified as estimated (J) and (UJ).

XI.) Serial Dilution:

Serial Dilution analysis was performed on SDG sample SS-01 (2-12”). The Percent Differences (%Ds) for chromium (11%), iron (12%) and zinc (13%) exceeded the 10% QC limit. All positive results for these analytes in the SDG samples were qualified as estimated (J).

XII.) Field Duplicates:

One field duplicate set (SS-02(2-12”) / DUP-01) was identified for this fraction of the SDG. The calculable Relative Percent Differences (RPDs) were:

aluminum	1.9%
arsenic	1.7%
barium	5.8%
beryllium	2.1%
cadmium	1.8%
calcium	19%
chromium	11%
cobalt	0%
copper	12%
iron	1.9%
lead	5.1%
magnesium	9.0%
manganese	11%
nickel	0.7%
potassium	2.2%
vanadium	25%
zinc	4.8%

All RPDs were within the advisory 30 % QC limit. No data qualification was necessary.

XIII.) Instrument QC data:

All Instrument verification tests were performed within the required timeframe. No data

qualification was necessary.

XIV.) Compound Identification:

All sample data were reported in accordance with the cited method.

Appendix A
Qualified Form Is

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: NYSDEC - 222 South Ferry St Site - Schen

TestAmerica Job ID: 480-127631-1

Client Sample ID: SS-01 (0-2")
Date Collected: 11/15/17 12:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-1
Matrix: Solid
Percent Solids: 84.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.9	0.43	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,1,2,2-Tetrachloroethane	ND	vs	5.9	0.96	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.9	1.4	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,1,2-Trichloroethane	ND	vs	5.9	0.77	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,1-Dichloroethane	ND	vs	5.9	0.72	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,1-Dichloroethene	ND	vs	5.9	0.73	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,2,4-Trichlorobenzene	ND	vs	5.9	0.36	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.9	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,2-Dibromoethane	ND	vs	5.9	0.76	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,2-Dichlorobenzene	ND	vs	5.9	0.46	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,2-Dichloroethane	ND	vs	5.9	0.30	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,2-Dichloropropane	ND	vs	5.9	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,3-Dichlorobenzene	ND	vs	5.9	0.30	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
1,4-Dichlorobenzene	ND	vs	5.9	0.83	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
2-Butanone (MEK)	ND	vs UJ	30	2.2	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
2-Hexanone	ND	vs UJ	30	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
4-Methyl-2-pentanone (MIBK)	ND	vs	30	1.9	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Acetone	ND	vs	30	5.0	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Benzene	ND	vs	5.9	0.29	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Bromodichloromethane	ND	vs	5.9	0.79	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Bromoform	ND	vs UJ	5.9	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Bromomethane	ND	vs UJ	5.9	0.53	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Carbon disulfide	ND	vs	5.9	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Carbon tetrachloride	ND	vs UJ	5.9	0.57	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Chlorobenzene	ND	vs	5.9	0.78	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Chloroethane	ND	vs	5.9	1.3	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Chloroform	ND	vs	5.9	0.37	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Chloromethane	ND	vs * UJ	5.9	0.36	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
cis-1,2-Dichloroethene	ND	vs	5.9	0.76	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
cis-1,3-Dichloropropene	ND	vs	5.9	0.85	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Cyclohexane	ND	vs	5.9	0.83	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Dibromochloromethane	ND	vs	5.9	0.76	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Dichlorodifluoromethane	ND	vs *	5.9	0.49	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Ethylbenzene	ND	vs	5.9	0.41	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Isopropylbenzene	ND	vs	5.9	0.89	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Methyl acetate	ND	vs	30	3.6	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Methyl tert-butyl ether	ND	vs	5.9	0.58	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Methylcyclohexane	ND	vs	5.9	0.90	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Methylene Chloride	ND	vs	5.9	2.7	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Styrene	ND	vs	5.9	0.30	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Tetrachloroethene	ND	vs	5.9	0.80	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Toluene	ND	vs	5.9	0.45	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
trans-1,2-Dichloroethene	ND	vs	5.9	0.61	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
trans-1,3-Dichloropropene	ND	vs	5.9	2.6	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Trichloroethene	ND	vs	5.9	1.3	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Trichlorofluoromethane	ND	vs	5.9	0.56	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Vinyl chloride	ND	vs *	5.9	0.72	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1
Xylenes, Total	ND	vs	12	1.0	ug/Kg	☼	11/17/17 09:55	11/17/17 17:21	1

Client Sample ID: SS-01 (0-2")
Date Collected: 11/15/17 12:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-1
Matrix: Solid
Percent Solids: 84.3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*11/17/17 09:55*	*11/17/17 17:21*	*1*
4-Bromofluorobenzene (Surr)	*81*		*72 - 126*	*11/17/17 09:55*	*11/17/17 17:21*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*11/17/17 09:55*	*11/17/17 17:21*	*1*
Toluene-d8 (Surr)	*106*		*71 - 125*	*11/17/17 09:55*	*11/17/17 17:21*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		2000	540	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2,4,6-Trichlorophenol	ND		2000	400	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2,4-Dichlorophenol	ND		2000	210	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2,4-Dimethylphenol	ND		2000	480	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2,4-Dinitrophenol	ND		19000	9200	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2,4-Dinitrotoluene	ND		2000	410	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2,6-Dinitrotoluene	ND		2000	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2-Chloronaphthalene	ND		2000	330	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2-Chlorophenol	ND		2000	360	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2-Methylnaphthalene	ND		2000	400	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2-Methylphenol	ND		2000	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2-Nitroaniline	ND		3900	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
2-Nitrophenol	ND		2000	560	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
3,3'-Dichlorobenzidine	ND		3900	2300	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
3-Nitroaniline	ND		3900	550	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
4,6-Dinitro-2-methylphenol	ND		3900	2000	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
4-Bromophenyl phenyl ether	ND		2000	280	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
4-Chloro-3-methylphenol	ND		2000	490	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
4-Chloroaniline	ND		2000	490	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
4-Chlorophenyl phenyl ether	ND		2000	250	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
4-Methylphenol	ND		3900	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
4-Nitroaniline	ND		3900	1000	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
4-Nitrophenol	ND		3900	1400	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Acenaphthene	ND		2000	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Acenaphthylene	ND		2000	260	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Acetophenone	ND		2000	270	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Anthracene	ND		2000	490	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Atrazine	ND		2000	690	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Benzaldehyde	ND		2000	1600	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Benzo[a]anthracene	**1200**	**J**	2000	200	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Benzo[a]pyrene	**1300**	**J**	2000	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Benzo[b]fluoranthene	**1700**	**J**	2000	320	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Benzo[g,h,i]perylene	**820**	**J**	2000	210	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Benzo[k]fluoranthene	**720**	**J**	2000	260	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Biphenyl	ND		2000	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
bis (2-chloroisopropyl) ether	ND		2000	400	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Bis(2-chloroethoxy)methane	ND		2000	420	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Bis(2-chloroethyl)ether	ND		2000	260	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Bis(2-ethylhexyl) phthalate	ND		2000	680	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Butyl benzyl phthalate	ND		2000	330	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Caprolactam	ND		2000	600	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Carbazole	ND		2000	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Chrysene	**1200**	**J**	2000	450	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10

Client Sample ID: SS-01 (0-2")
Date Collected: 11/15/17 12:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-1
Matrix: Solid
Percent Solids: 84.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		2000	350	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Dibenzofuran	ND		2000	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Diethyl phthalate	ND		2000	260	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Dimethyl phthalate	ND		2000	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Di-n-butyl phthalate	ND		2000	340	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Di-n-octyl phthalate	ND		2000	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Fluoranthene	**2400**		2000	210	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Fluorene	ND		2000	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Hexachlorobenzene	ND		2000	270	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Hexachlorobutadiene	ND		2000	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Hexachlorocyclopentadiene	ND		2000	270	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Hexachloroethane	ND		2000	260	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Indeno[1,2,3-cd]pyrene	**880**	J	2000	250	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Isophorone	ND		2000	420	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Naphthalene	ND		2000	260	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Nitrobenzene	ND		2000	220	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
N-Nitrosodi-n-propylamine	ND		2000	340	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
N-Nitrosodiphenylamine	ND		2000	1600	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Pentachlorophenol	ND		3900	2000	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Phenanthrene	**1200**	J	2000	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Phenol	ND		2000	300	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10
Pyrene	**1900**	J	2000	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*104*		*54 - 120*	*11/20/17 14:14*	*11/29/17 15:47*	*10*
2-Fluorobiphenyl	*70*		*60 - 120*	*11/20/17 14:14*	*11/29/17 15:47*	*10*
2-Fluorophenol (Surr)	*86*		*52 - 120*	*11/20/17 14:14*	*11/29/17 15:47*	*10*
Nitrobenzene-d5 (Surr)	*85*		*53 - 120*	*11/20/17 14:14*	*11/29/17 15:47*	*10*
Phenol-d5 (Surr)	*85*		*54 - 120*	*11/20/17 14:14*	*11/29/17 15:47*	*10*
p-Terphenyl-d14 (Surr)	*92*		*65 - 121*	*11/20/17 14:14*	*11/29/17 15:47*	*10*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		98	19	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
4,4'-DDE	ND		98	21	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
4,4'-DDT	**39**	J	98	23	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Aldrin	ND		98	24	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
alpha-BHC	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
alpha-Chlordane	ND		98	49	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
beta-BHC	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
delta-BHC	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Dieldrin	ND		98	23	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Endosulfan I	ND		98	19	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Endosulfan II	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Endosulfan sulfate	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Endrin	ND		98	19	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Endrin aldehyde	ND		98	25	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Endrin ketone	ND		98	24	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
gamma-BHC (Lindane)	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
gamma-Chlordane	ND		98	31	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50

Client Sample ID: SS-01 (0-2")

Date Collected: 11/15/17 12:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-1

Matrix: Solid
Percent Solids: 84.3

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		98	21	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Heptachlor epoxide	ND		98	25	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Methoxychlor	ND		98	20	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50
Toxaphene	ND		980	570	ug/Kg	☼	11/18/17 07:04	11/27/17 13:36	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 13:36*	*50*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 13:36*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 13:36*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 13:36*	*50*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	UJ	0.22	0.044	mg/Kg	☼	11/17/17 07:50	11/20/17 16:00	1
PCB-1221	ND	UJ	0.22	0.044	mg/Kg	☼	11/17/17 07:50	11/20/17 16:00	1
PCB-1232	ND		0.22	0.044	mg/Kg	☼	11/17/17 07:50	11/20/17 16:00	1
PCB-1242	ND	UJ	0.22	0.044	mg/Kg	☼	11/17/17 07:50	11/20/17 16:00	1
PCB-1248	ND	UJ	0.22	0.044	mg/Kg	☼	11/17/17 07:50	11/20/17 16:00	1
PCB-1254	ND	UJ	0.22	0.10	mg/Kg	☼	11/17/17 07:50	11/20/17 16:00	1
PCB-1260	ND	UJ	0.22	0.10	mg/Kg	☼	11/17/17 07:50	11/20/17 16:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*104*		*60 - 154*	*11/17/17 07:50*	*11/20/17 16:00*	*1*
Tetrachloro-m-xylene	*78*		*60 - 154*	*11/17/17 07:50*	*11/20/17 16:00*	*1*
DCB Decachlorobiphenyl	*92*		*65 - 174*	*11/17/17 07:50*	*11/20/17 16:00*	*1*
DCB Decachlorobiphenyl	*86*		*65 - 174*	*11/17/17 07:50*	*11/20/17 16:00*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7150**	~~B~~ J	11.7	5.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Antimony	ND	UJ	17.5	0.47	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Arsenic	**4.4**		2.3	0.47	mg/Kg	☼	11/17/17 15:45	11/28/17 01:14	1
Barium	**68.2**	J	0.58	0.13	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Beryllium	**0.40**		0.23	0.033	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Cadmium	**0.37**		0.23	0.035	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Calcium	**16900**	~~B~~	58.4	3.9	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Chromium	**13.1**	J	0.58	0.23	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Cobalt	**4.9**		0.58	0.058	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Copper	**32.5**		1.2	0.25	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Iron	**13000**	~~B~~ J	11.7	4.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Lead	**160**	J	1.2	0.28	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Magnesium	**5230**		23.4	1.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Manganese	**292**	~~B~~	0.23	0.037	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Nickel	**12.7**		5.8	0.27	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Potassium	**1610**	J	35.1	23.4	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Selenium	ND		4.7	0.47	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Silver	ND		0.70	0.23	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Sodium	164 **90.8** ~~J B~~ U		164	15.2	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Thallium	ND		7.0	0.35	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1
Vanadium	**18.9**		0.58	0.13	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1

Client Sample ID: SS-01 (0-2")

Lab Sample ID: 480-127631-1
Date Collected: 11/15/17 12:00
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 84.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	162	J	2.3	0.75	mg/Kg	☼	11/17/17 15:45	11/28/17 14:01	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.38	J	0.024	0.0098	mg/Kg	☼	11/22/17 11:30	11/22/17 14:49	1

Client Sample ID: SS-01 (2-12")

Lab Sample ID: 480-127631-2
Date Collected: 11/15/17 12:10
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.6	0.41	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,1,2,2-Tetrachloroethane	ND	vs	5.6	0.92	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.6	1.3	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,1,2-Trichloroethane	ND	vs	5.6	0.73	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,1-Dichloroethane	ND	vs	5.6	0.69	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,1-Dichloroethene	ND	vs	5.6	0.69	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,2,4-Trichlorobenzene	ND	vs F1	5.6	0.34	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.6	2.8	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,2-Dibromoethane	ND	vs	5.6	0.73	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,2-Dichlorobenzene	ND	vs	5.6	0.44	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,2-Dichloroethane	ND	vs	5.6	0.28	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,2-Dichloropropane	ND	vs	5.6	2.8	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,3-Dichlorobenzene	ND	vs	5.6	0.29	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
1,4-Dichlorobenzene	ND	vs	5.6	0.79	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
2-Butanone (MEK)	ND	vs ~~F1~~ UJ	28	2.1	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
2-Hexanone	ND	vs UJ	28	2.8	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
4-Methyl-2-pentanone (MIBK)	ND	vs	28	1.9	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Acetone	ND	vs	28	4.8	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Benzene	ND	vs	5.6	0.28	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Bromodichloromethane	ND	vs	5.6	0.76	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Bromoform	ND	vs ~~F1~~ UJ	5.6	2.8	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Bromomethane	ND	vs UJ	5.6	0.51	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Carbon disulfide	ND	vs	5.6	2.8	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Carbon tetrachloride	ND	vs UJ	5.6	0.55	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Chlorobenzene	ND	vs	5.6	0.75	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Chloroethane	ND	vs	5.6	1.3	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Chloroform	ND	vs	5.6	0.35	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Chloromethane	ND	vs * UJ	5.6	0.34	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
cis-1,2-Dichloroethene	ND	vs	5.6	0.72	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
cis-1,3-Dichloropropene	ND	vs	5.6	0.81	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Cyclohexane	ND	vs	5.6	0.79	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Dibromochloromethane	ND	vs	5.6	0.72	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Dichlorodifluoromethane	ND	vs *	5.6	0.47	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Ethylbenzene	ND	vs	5.6	0.39	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Isopropylbenzene	ND	vs	5.6	0.85	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Methyl acetate	ND	vs	28	3.4	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Methyl tert-butyl ether	ND	vs	5.6	0.55	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Methylcyclohexane	ND	vs	5.6	0.86	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1

Client Sample ID: SS-01 (2-12")
Date Collected: 11/15/17 12:10
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-2
Matrix: Solid
Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND	vs	5.6	2.6	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Styrene	ND	vs	5.6	0.28	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Tetrachloroethene	ND	vs	5.6	0.76	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Toluene	ND	vs	5.6	0.43	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
trans-1,2-Dichloroethene	ND	vs	5.6	0.58	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
trans-1,3-Dichloropropene	ND	vs	5.6	2.5	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Trichloroethene	**1.7**	**J vs**	5.6	1.2	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Trichlorofluoromethane	ND	vs	5.6	0.53	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Vinyl chloride	ND	vs *	5.6	0.69	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1
Xylenes, Total	ND	vs	11	0.95	ug/Kg	☼	11/17/17 09:55	11/17/17 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*11/17/17 09:55*	*11/17/17 17:46*	*1*
4-Bromofluorobenzene (Surr)	*90*		*72 - 126*	*11/17/17 09:55*	*11/17/17 17:46*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*11/17/17 09:55*	*11/17/17 17:46*	*1*
Toluene-d8 (Surr)	*104*		*71 - 125*	*11/17/17 09:55*	*11/17/17 17:46*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1900	520	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2,4,6-Trichlorophenol	ND		1900	390	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2,4-Dichlorophenol	ND	F2	1900	210	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2,4-Dimethylphenol	ND		1900	470	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2,4-Dinitrophenol	ND		19000	8900	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2,4-Dinitrotoluene	ND		1900	400	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2,6-Dinitrotoluene	ND		1900	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2-Chloronaphthalene	ND		1900	320	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2-Chlorophenol	ND		1900	350	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2-Methylnaphthalene	ND		1900	390	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2-Methylphenol	ND		1900	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2-Nitroaniline	ND		3800	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
2-Nitrophenol	ND		1900	550	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
3,3'-Dichlorobenzidine	ND		3800	2300	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
3-Nitroaniline	ND		3800	540	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
4,6-Dinitro-2-methylphenol	ND		3800	1900	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
4-Bromophenyl phenyl ether	ND	F2	1900	270	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
4-Chloro-3-methylphenol	ND		1900	480	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
4-Chloroaniline	ND		1900	480	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
4-Chlorophenyl phenyl ether	ND		1900	240	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
4-Methylphenol	ND		3800	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
4-Nitroaniline	ND		3800	1000	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
4-Nitrophenol	ND		3800	1400	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Acenaphthene	ND		1900	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Acenaphthylene	ND		1900	250	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Acetophenone	ND		1900	260	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Anthracene	ND	F1	1900	480	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Atrazine	ND		1900	670	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Benzaldehyde	ND		1900	1500	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Benzo[a]anthracene	**1400**	**J F1**	1900	190	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Benzo[a]pyrene	**1300**	**J F1**	1900	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10

Client Sample ID: SS-01 (2-12")
Date Collected: 11/15/17 12:10
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-2
Matrix: Solid
Percent Solids: 87.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**1900**	**F1**	1900	310	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Benzo[g,h,i]perylene	**890**	**J**	1900	210	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Benzo[k]fluoranthene	**550**	**J F1**	1900	250	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Biphenyl	ND		1900	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
bis (2-chloroisopropyl) ether	ND	F2	1900	390	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Bis(2-chloroethoxy)methane	ND		1900	410	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Bis(2-chloroethyl)ether	ND		1900	250	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Bis(2-ethylhexyl) phthalate	ND		1900	660	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Butyl benzyl phthalate	ND	F1	1900	320	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Caprolactam	ND		1900	580	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Carbazole	ND		1900	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Chrysene	**1300**	**J F1**	1900	430	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Dibenz(a,h)anthracene	ND		1900	340	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Dibenzofuran	ND		1900	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Diethyl phthalate	ND	F2	1900	250	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Dimethyl phthalate	ND	F2	1900	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Di-n-butyl phthalate	ND		1900	330	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Di-n-octyl phthalate	ND		1900	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Fluoranthene	**2600**	**F1**	1900	210	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Fluorene	ND		1900	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Hexachlorobenzene	ND		1900	260	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Hexachlorobutadiene	ND		1900	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Hexachlorocyclopentadiene	ND		1900	260	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Hexachloroethane	ND		1900	250	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Indeno[1,2,3-cd]pyrene	**930**	**J**	1900	240	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Isophorone	ND		1900	410	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Naphthalene	ND		1900	250	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Nitrobenzene	ND		1900	220	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
N-Nitrosodi-n-propylamine	ND		1900	330	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
N-Nitrosodiphenylamine	ND	F1	1900	1600	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Pentachlorophenol	ND		3800	1900	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Phenanthrene	**1500**	**J F1**	1900	290	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Phenol	ND		1900	300	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10
Pyrene	**2000**	**F1**	1900	230	ug/Kg	☼	11/20/17 14:14	11/29/17 15:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*54 - 120*	*11/20/17 14:14*	*11/29/17 15:21*	*10*
2-Fluorobiphenyl	*73*		*60 - 120*	*11/20/17 14:14*	*11/29/17 15:21*	*10*
2-Fluorophenol (Surr)	*82*		*52 - 120*	*11/20/17 14:14*	*11/29/17 15:21*	*10*
Nitrobenzene-d5 (Surr)	*92*		*53 - 120*	*11/20/17 14:14*	*11/29/17 15:21*	*10*
Phenol-d5 (Surr)	*96*		*54 - 120*	*11/20/17 14:14*	*11/29/17 15:21*	*10*
p-Terphenyl-d14 (Surr)	*91*		*65 - 121*	*11/20/17 14:14*	*11/29/17 15:21*	*10*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND	F1	95	18	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
4,4'-DDE	ND		95	20	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
4,4'-DDT	**37**	~~J~~ J	95	22	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Aldrin	ND		95	23	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
alpha-BHC	ND	F1	95	17	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50

12/01/2017
1/15/18

Client Sample ID: SS-01 (2-12")
Date Collected: 11/15/17 12:10
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-2
Matrix: Solid
Percent Solids: 87.0

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-Chlordane	ND		95	47	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
beta-BHC	ND	F1	95	17	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
delta-BHC	ND	F1	95	18	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Dieldrin	ND		95	23	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Endosulfan I	ND	F1	95	18	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Endosulfan II	ND	F1	95	17	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Endosulfan sulfate	ND		95	18	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Endrin	ND	F1	95	19	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Endrin aldehyde	ND		95	24	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Endrin ketone	ND		95	23	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
gamma-BHC (Lindane)	ND	F1	95	17	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
gamma-Chlordane	ND		95	30	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Heptachlor	ND		95	20	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Heptachlor epoxide	ND		95	24	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Methoxychlor	ND	F1	95	19	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50
Toxaphene	ND		950	550	ug/Kg	☼	11/18/17 07:04	11/27/17 12:57	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 12:57*	*50*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 12:57*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 12:57*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 12:57*	*50*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	UJ	0.22	0.044	mg/Kg	☼	11/17/17 07:50	11/20/17 15:45	1
PCB-1221	ND	UJ	0.22	0.044	mg/Kg	☼	11/17/17 07:50	11/20/17 15:45	1
PCB-1232	ND		0.22	0.044	mg/Kg	☼	11/17/17 07:50	11/20/17 15:45	1
PCB-1242	ND	UJ	0.22	0.044	mg/Kg	☼	11/17/17 07:50	11/20/17 15:45	1
PCB-1248	ND	UJ	0.22	0.044	mg/Kg	☼	11/17/17 07:50	11/20/17 15:45	1
PCB-1254	ND	UJ	0.22	0.11	mg/Kg	☼	11/17/17 07:50	11/20/17 15:45	1
PCB-1260	ND	UJ	0.22	0.11	mg/Kg	☼	11/17/17 07:50	11/20/17 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*60 - 154*	*11/17/17 07:50*	*11/20/17 15:45*	*1*
Tetrachloro-m-xylene	*65*		*60 - 154*	*11/17/17 07:50*	*11/20/17 15:45*	*1*
DCB Decachlorobiphenyl	*73*		*65 - 174*	*11/17/17 07:50*	*11/20/17 15:45*	*1*
DCB Decachlorobiphenyl	*69*		*65 - 174*	*11/17/17 07:50*	*11/20/17 15:45*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7880**	~~B F1~~ J	11.2	4.9	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Antimony	ND	F1 UJ	16.8	0.45	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Arsenic	**5.5**		2.2	0.45	mg/Kg	☼	11/17/17 15:45	11/28/17 01:17	1
Barium	**78.9**	F1 J	0.56	0.12	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Beryllium	**0.45**		0.22	0.031	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Cadmium	**0.39**		0.22	0.034	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Calcium	**35800**	~~B F2~~	56.0	3.7	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Chromium	**13.2**	J	0.56	0.22	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Cobalt	**5.7**		0.56	0.056	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1

11/15/18

Client Sample ID: SS-01 (2-12")

Lab Sample ID: 480-127631-2
Date Collected: 11/15/17 12:10
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 87.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	29.7		1.1	0.24	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Iron	13300	~~B~~ J	11.2	3.9	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Lead	167	~~F1~~ J	1.1	0.27	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Magnesium	15900		22.4	1.0	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Manganese	297	~~B~~	0.22	0.036	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Nickel	16.0		5.6	0.26	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Potassium	1950	~~F1~~ J	33.6	22.4	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Selenium	ND		4.5	0.45	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Silver	ND		0.67	0.22	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Sodium	157	~~119 J B~~ U	157	14.6	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Thallium	ND		6.7	0.34	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Vanadium	27.8		0.56	0.12	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1
Zinc	129	~~F1~~ J	2.2	0.72	mg/Kg	☼	11/17/17 15:45	11/28/17 14:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.49	J	0.024	0.0095	mg/Kg	☼	11/22/17 11:30	11/22/17 14:51	1

Client Sample ID: SS-02 (0-2")

Lab Sample ID: 480-127631-3
Date Collected: 11/15/17 12:30
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 75.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	6.6	0.48	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,1,2,2-Tetrachloroethane	ND	vs	6.6	1.1	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.6	1.5	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,1,2-Trichloroethane	ND	vs	6.6	0.86	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,1-Dichloroethane	ND	vs	6.6	0.80	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,1-Dichloroethene	ND	vs	6.6	0.81	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,2,4-Trichlorobenzene	ND	vs	6.6	0.40	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,2-Dibromo-3-Chloropropane	ND	vs	6.6	3.3	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,2-Dibromoethane	ND	vs	6.6	0.85	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,2-Dichlorobenzene	ND	vs	6.6	0.52	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,2-Dichloroethane	ND	vs	6.6	0.33	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,2-Dichloropropane	ND	vs	6.6	3.3	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,3-Dichlorobenzene	ND	vs	6.6	0.34	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
1,4-Dichlorobenzene	ND	vs	6.6	0.92	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
2-Butanone (MEK)	ND	vs UJ	33	2.4	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
2-Hexanone	ND	vs UJ	33	3.3	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
4-Methyl-2-pentanone (MIBK)	ND	vs	33	2.2	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Acetone	ND	vs	33	5.6	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Benzene	ND	vs	6.6	0.32	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Bromodichloromethane	ND	vs	6.6	0.88	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Bromoform	ND	vs UJ	6.6	3.3	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Bromomethane	ND	vs UJ	6.6	0.59	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Carbon disulfide	ND	vs	6.6	3.3	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Carbon tetrachloride	ND	vs UJ	6.6	0.64	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Chlorobenzene	ND	vs	6.6	0.87	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Chloroethane	ND	vs	6.6	1.5	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1

Revised 1/15/18

Client Sample ID: SS-02 (0-2")
Date Collected: 11/15/17 12:30
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-3
Matrix: Solid
Percent Solids: 75.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	**0.41**	**J vs**	6.6	0.41	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Chloromethane	ND	vs * UJ	6.6	0.40	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
cis-1,2-Dichloroethene	ND	vs	6.6	0.84	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
cis-1,3-Dichloropropene	ND	vs	6.6	0.95	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Cyclohexane	ND	vs	6.6	0.92	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Dibromochloromethane	ND	vs	6.6	0.84	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Dichlorodifluoromethane	ND	vs *	6.6	0.54	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Ethylbenzene	ND	vs	6.6	0.45	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Isopropylbenzene	ND	vs	6.6	0.99	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Methyl acetate	ND	vs	33	4.0	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Methyl tert-butyl ether	ND	vs	6.6	0.65	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Methylcyclohexane	ND	vs	6.6	1.0	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Methylene Chloride	ND	vs	6.6	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Styrene	ND	vs	6.6	0.33	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Tetrachloroethene	ND	vs	6.6	0.88	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Toluene	ND	vs	6.6	0.50	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
trans-1,2-Dichloroethene	ND	vs	6.6	0.68	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
trans-1,3-Dichloropropene	ND	vs	6.6	2.9	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Trichloroethene	ND	vs	6.6	1.5	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Trichlorofluoromethane	ND	vs	6.6	0.62	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Vinyl chloride	ND	vs *	6.6	0.80	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1
Xylenes, Total	ND	vs	13	1.1	ug/Kg	☼	11/17/17 09:55	11/17/17 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 126*	*11/17/17 09:55*	*11/17/17 18:12*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 126*	*11/17/17 09:55*	*11/17/17 18:12*	*1*
Dibromofluoromethane (Surr)	*113*		*60 - 140*	*11/17/17 09:55*	*11/17/17 18:12*	*1*
Toluene-d8 (Surr)	*117*		*71 - 125*	*11/17/17 09:55*	*11/17/17 18:12*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		2200	610	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2,4,6-Trichlorophenol	ND		2200	450	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2,4-Dichlorophenol	ND		2200	240	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2,4-Dimethylphenol	ND		2200	540	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2,4-Dinitrophenol	ND		22000	10000	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2,4-Dinitrotoluene	ND		2200	460	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2,6-Dinitrotoluene	ND		2200	260	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2-Chloronaphthalene	ND		2200	370	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2-Chlorophenol	ND		2200	410	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2-Methylnaphthalene	ND		2200	450	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2-Methylphenol	ND		2200	260	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2-Nitroaniline	ND		4400	330	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
2-Nitrophenol	ND		2200	630	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
3,3'-Dichlorobenzidine	ND		4400	2600	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
3-Nitroaniline	ND		4400	620	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
4,6-Dinitro-2-methylphenol	ND		4400	2200	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
4-Bromophenyl phenyl ether	ND		2200	320	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
4-Chloro-3-methylphenol	ND		2200	550	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
4-Chloroaniline	ND		2200	550	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10

12/01/2017

Client Sample ID: SS-02 (0-2")
Date Collected: 11/15/17 12:30
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-3
Matrix: Solid
Percent Solids: 75.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		2200	280	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
4-Methylphenol	ND		4400	260	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
4-Nitroaniline	ND		4400	1200	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
4-Nitrophenol	ND		4400	1600	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Acenaphthene	ND		2200	330	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Acenaphthylene	ND		2200	290	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Acetophenone	ND		2200	300	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Anthracene	**610**	**J**	2200	550	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Atrazine	ND		2200	780	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Benzaldehyde	ND		2200	1800	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Benzo[a]anthracene	**2200**		2200	220	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Benzo[a]pyrene	**2300**		2200	330	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Benzo[b]fluoranthene	**2900**		2200	360	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Benzo[g,h,i]perylene	**1500**	**J**	2200	240	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Benzo[k]fluoranthene	**1300**	**J**	2200	290	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Biphenyl	ND		2200	330	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
bis (2-chloroisopropyl) ether	ND		2200	450	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Bis(2-chloroethoxy)methane	ND		2200	470	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Bis(2-chloroethyl)ether	ND		2200	290	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Bis(2-ethylhexyl) phthalate	ND		2200	760	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Butyl benzyl phthalate	ND		2200	370	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Caprolactam	ND		2200	670	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Carbazole	**340**	**J**	2200	260	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Chrysene	**2300**		2200	500	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Dibenz(a,h)anthracene	ND		2200	400	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Dibenzofuran	ND		2200	260	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Diethyl phthalate	ND		2200	290	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Dimethyl phthalate	ND		2200	260	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Di-n-butyl phthalate	ND		2200	380	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Di-n-octyl phthalate	ND		2200	260	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Fluoranthene	**4700**		2200	240	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Fluorene	ND		2200	260	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Hexachlorobenzene	ND		2200	300	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Hexachlorobutadiene	ND		2200	330	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Hexachlorocyclopentadiene	ND		2200	300	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Hexachloroethane	ND		2200	290	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Indeno[1,2,3-cd]pyrene	**1600**	**J**	2200	280	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Isophorone	ND		2200	470	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Naphthalene	ND		2200	290	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Nitrobenzene	ND		2200	250	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
N-Nitrosodi-n-propylamine	ND		2200	380	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
N-Nitrosodiphenylamine	ND		2200	1800	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Pentachlorophenol	ND		4400	2200	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Phenanthrene	**3300**		2200	330	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Phenol	ND		2200	340	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10
Pyrene	**4100**		2200	260	ug/Kg	☼	11/20/17 14:14	11/29/17 16:13	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*54 - 120*	*11/20/17 14:14*	*11/29/17 16:13*	*10*
2-Fluorobiphenyl	*86*		*60 - 120*	*11/20/17 14:14*	*11/29/17 16:13*	*10*

Client Sample ID: SS-02 (0-2")
Date Collected: 11/15/17 12:30
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-3
Matrix: Solid
Percent Solids: 75.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	100		52 - 120	11/20/17 14:14	11/29/17 16:13	10
Nitrobenzene-d5 (Surr)	94		53 - 120	11/20/17 14:14	11/29/17 16:13	10
Phenol-d5 (Surr)	97		54 - 120	11/20/17 14:14	11/29/17 16:13	10
p-Terphenyl-d14 (Surr)	103		65 - 121	11/20/17 14:14	11/29/17 16:13	10

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		110	21	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
4,4'-DDE	ND		110	23	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
4,4'-DDT	**45**	J	110	25	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Aldrin	ND		110	27	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
alpha-BHC	ND		110	20	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
alpha-Chlordane	ND		110	54	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
beta-BHC	ND		110	20	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
delta-BHC	ND		110	20	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Dieldrin	ND		110	26	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Endosulfan I	ND		110	21	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Endosulfan II	ND		110	20	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Endosulfan sulfate	ND		110	20	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Endrin	ND		110	22	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Endrin aldehyde	ND		110	28	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Endrin ketone	ND		110	27	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
gamma-BHC (Lindane)	ND		110	20	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
gamma-Chlordane	ND		110	35	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Heptachlor	ND		110	24	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Heptachlor epoxide	ND		110	28	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Methoxychlor	ND		110	22	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50
Toxaphene	ND		1100	630	ug/Kg	☼	11/18/17 07:04	11/27/17 13:56	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	0	X	45 - 120	11/18/17 07:04	11/27/17 13:56	50
DCB Decachlorobiphenyl	0	X	45 - 120	11/18/17 07:04	11/27/17 13:56	50
Tetrachloro-m-xylene	0	X	30 - 124	11/18/17 07:04	11/27/17 13:56	50
Tetrachloro-m-xylene	0	X	30 - 124	11/18/17 07:04	11/27/17 13:56	50

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	UJ	0.32	0.063	mg/Kg	☼	11/17/17 07:50	11/20/17 16:16	1
PCB-1221	ND	UJ	0.32	0.063	mg/Kg	☼	11/17/17 07:50	11/20/17 16:16	1
PCB-1232	ND		0.32	0.063	mg/Kg	☼	11/17/17 07:50	11/20/17 16:16	1
PCB-1242	ND	UJ	0.32	0.063	mg/Kg	☼	11/17/17 07:50	11/20/17 16:16	1
PCB-1248	ND		0.32	0.063	mg/Kg	☼	11/17/17 07:50	11/20/17 16:16	1
PCB-1254	ND		0.32	0.15	mg/Kg	☼	11/17/17 07:50	11/20/17 16:16	1
PCB-1260	ND		0.32	0.15	mg/Kg	☼	11/17/17 07:50	11/20/17 16:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		60 - 154	11/17/17 07:50	11/20/17 16:16	1
Tetrachloro-m-xylene	64		60 - 154	11/17/17 07:50	11/20/17 16:16	1
DCB Decachlorobiphenyl	83		65 - 174	11/17/17 07:50	11/20/17 16:16	1
DCB Decachlorobiphenyl	80		65 - 174	11/17/17 07:50	11/20/17 16:16	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9150	~~B~~ J	13.2	5.8	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Antimony	ND	UJ	19.9	0.53	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Arsenic	5.0		2.6	0.53	mg/Kg	☼	11/17/17 15:45	11/28/17 01:46	1
Barium	125	J	0.66	0.15	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Beryllium	0.52		0.26	0.037	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Cadmium	0.73		0.26	0.040	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Calcium	30200	~~B~~	66.2	4.4	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Chromium	16.1	J	0.66	0.26	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Cobalt	6.3		0.66	0.066	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Copper	36.0		1.3	0.28	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Iron	15000	~~B~~ J	13.2	4.6	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Lead	230	J	1.3	0.32	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Magnesium	10800		26.5	1.2	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Manganese	403	~~B~~	0.26	0.042	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Nickel	16.4		6.6	0.30	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Potassium	2140	J	39.7	26.5	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Selenium	ND		5.3	0.53	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Silver	ND		0.79	0.26	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Sodium	185	~~117 JB~~ U	185	17.2	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Thallium	ND		7.9	0.40	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Vanadium	23.7		0.66	0.15	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1
Zinc	242	J	2.6	0.85	mg/Kg	☼	11/17/17 15:45	11/28/17 14:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.52	J	0.026	0.010	mg/Kg	☼	11/22/17 11:30	11/22/17 15:01	1

Client Sample ID: SS-02 (2-12")

Date Collected: 11/15/17 12:40
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-4

Matrix: Solid
Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.8	0.42	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,1,2,2-Tetrachloroethane	ND	vs	5.8	0.95	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.8	1.3	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,1,2-Trichloroethane	ND	vs	5.8	0.76	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,1-Dichloroethane	ND	vs	5.8	0.71	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,1-Dichloroethene	ND	vs	5.8	0.72	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,2,4-Trichlorobenzene	ND	vs	5.8	0.36	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.8	2.9	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,2-Dibromoethane	ND	vs	5.8	0.75	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,2-Dichlorobenzene	ND	vs	5.8	0.46	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,2-Dichloroethane	ND	vs	5.8	0.29	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,2-Dichloropropane	ND	vs	5.8	2.9	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,3-Dichlorobenzene	ND	vs	5.8	0.30	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
1,4-Dichlorobenzene	ND	vs	5.8	0.82	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
2-Butanone (MEK)	ND	vs UJ	29	2.1	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
2-Hexanone	ND	vs UJ	29	2.9	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
4-Methyl-2-pentanone (MIBK)	ND	vs	29	1.9	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Acetone	ND	vs	29	4.9	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Benzene	ND	vs	5.8	0.29	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Bromodichloromethane	ND	vs	5.8	0.78	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Bromoform	ND	vs UJ	5.8	2.9	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1

Client Sample ID: SS-02 (2-12")
Date Collected: 11/15/17 12:40
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-4
Matrix: Solid
Percent Solids: 84.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND	vs UJ	5.8	0.53	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Carbon disulfide	ND	vs	5.8	2.9	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Carbon tetrachloride	ND	vs UJ	5.8	0.57	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Chlorobenzene	ND	vs	5.8	0.77	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Chloroethane	ND	vs	5.8	1.3	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Chloroform	ND	vs	5.8	0.36	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Chloromethane	ND	vs * UJ	5.8	0.35	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
cis-1,2-Dichloroethene	ND	vs	5.8	0.75	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
cis-1,3-Dichloropropene	ND	vs	5.8	0.84	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Cyclohexane	ND	vs	5.8	0.82	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Dibromochloromethane	ND	vs	5.8	0.75	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Dichlorodifluoromethane	ND	vs *	5.8	0.48	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Ethylbenzene	ND	vs	5.8	0.40	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Isopropylbenzene	ND	vs	5.8	0.88	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Methyl acetate	ND	vs	29	3.5	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Methyl tert-butyl ether	ND	vs	5.8	0.57	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Methylcyclohexane	ND	vs	5.8	0.89	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Methylene Chloride	ND	vs	5.8	2.7	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Styrene	ND	vs	5.8	0.29	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Tetrachloroethene	ND	vs	5.8	0.78	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Toluene	ND	vs	5.8	0.44	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
trans-1,2-Dichloroethene	ND	vs	5.8	0.60	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
trans-1,3-Dichloropropene	ND	vs	5.8	2.6	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Trichloroethene	ND	vs	5.8	1.3	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Trichlorofluoromethane	ND	vs	5.8	0.55	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Vinyl chloride	ND	vs *	5.8	0.71	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1
Xylenes, Total	ND	vs	12	0.98	ug/Kg	☼	11/17/17 09:55	11/17/17 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*11/17/17 09:55*	*11/17/17 18:37*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*11/17/17 09:55*	*11/17/17 18:37*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*	*11/17/17 09:55*	*11/17/17 18:37*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*	*11/17/17 09:55*	*11/17/17 18:37*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		3900	1100	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2,4,6-Trichlorophenol	ND		3900	790	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2,4-Dichlorophenol	ND		3900	420	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2,4-Dimethylphenol	ND		3900	950	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2,4-Dinitrophenol	ND		38000	18000	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2,4-Dinitrotoluene	ND		3900	810	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2,6-Dinitrotoluene	ND		3900	460	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2-Chloronaphthalene	ND		3900	650	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2-Chlorophenol	ND		3900	720	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2-Methylnaphthalene	ND		3900	790	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2-Methylphenol	ND		3900	460	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2-Nitroaniline	ND		7700	580	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
2-Nitrophenol	ND		3900	1100	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
3,3'-Dichlorobenzidine	ND		7700	4600	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20

Client Sample ID: SS-02 (2-12")
Date Collected: 11/15/17 12:40
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-4
Matrix: Solid
Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		7700	1100	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
4,6-Dinitro-2-methylphenol	ND		7700	3900	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
4-Bromophenyl phenyl ether	ND		3900	560	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
4-Chloro-3-methylphenol	ND		3900	970	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
4-Chloroaniline	ND		3900	970	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
4-Chlorophenyl phenyl ether	ND		3900	490	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
4-Methylphenol	ND		7700	460	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
4-Nitroaniline	ND		7700	2100	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
4-Nitrophenol	ND		7700	2800	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Acenaphthene	ND		3900	580	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Acenaphthylene	ND		3900	510	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Acetophenone	ND		3900	530	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Anthracene	ND		3900	970	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Atrazine	ND		3900	1400	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Benzaldehyde	ND		3900	3100	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Benzo[a]anthracene	**2200**	**J**	3900	390	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Benzo[a]pyrene	**2400**	**J**	3900	580	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Benzo[b]fluoranthene	**2700**	**J**	3900	630	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Benzo[g,h,i]perylene	**1500**	**J**	3900	420	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Benzo[k]fluoranthene	**1600**	**J**	3900	510	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Biphenyl	ND		3900	580	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
bis (2-chloroisopropyl) ether	ND		3900	790	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Bis(2-chloroethoxy)methane	ND		3900	830	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Bis(2-chloroethyl)ether	ND		3900	510	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Bis(2-ethylhexyl) phthalate	ND		3900	1300	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Butyl benzyl phthalate	ND		3900	650	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Caprolactam	ND		3900	1200	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Carbazole	ND		3900	460	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Chrysene	**2300**	**J**	3900	880	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Dibenz(a,h)anthracene	ND		3900	700	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Dibenzofuran	ND		3900	460	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Diethyl phthalate	ND		3900	510	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Dimethyl phthalate	ND		3900	460	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Di-n-butyl phthalate	ND		3900	670	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Di-n-octyl phthalate	ND		3900	460	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Fluoranthene	**4800**		3900	420	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Fluorene	ND		3900	460	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Hexachlorobenzene	ND		3900	530	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Hexachlorobutadiene	ND		3900	580	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Hexachlorocyclopentadiene	ND		3900	530	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Hexachloroethane	ND		3900	510	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Indeno[1,2,3-cd]pyrene	**1700**	**J**	3900	490	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Isophorone	ND		3900	830	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Naphthalene	ND		3900	510	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Nitrobenzene	ND		3900	440	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
N-Nitrosodi-n-propylamine	ND		3900	670	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
N-Nitrosodiphenylamine	ND		3900	3200	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Pentachlorophenol	ND		7700	3900	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Phenanthrene	**3100**	**J**	3900	580	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20

Client Sample ID: SS-02 (2-12")
Date Collected: 11/15/17 12:40
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-4
Matrix: Solid
Percent Solids: 84.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		3900	600	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20
Pyrene	**3800**	**J**	3900	460	ug/Kg	☼	11/20/17 14:14	11/29/17 16:40	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*123*	*X*	*54 - 120*	*11/20/17 14:14*	*11/29/17 16:40*	*20*
2-Fluorobiphenyl	*70*		*60 - 120*	*11/20/17 14:14*	*11/29/17 16:40*	*20*
2-Fluorophenol (Surr)	*98*		*52 - 120*	*11/20/17 14:14*	*11/29/17 16:40*	*20*
Nitrobenzene-d5 (Surr)	*103*		*53 - 120*	*11/20/17 14:14*	*11/29/17 16:40*	*20*
Phenol-d5 (Surr)	*92*		*54 - 120*	*11/20/17 14:14*	*11/29/17 16:40*	*20*
p-Terphenyl-d14 (Surr)	*100*		*65 - 121*	*11/20/17 14:14*	*11/29/17 16:40*	*20*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		98	19	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
4,4'-DDE	ND		98	21	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
4,4'-DDT	**41**	**+J**	98	23	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Aldrin	ND		98	24	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
alpha-BHC	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
alpha-Chlordane	ND		98	49	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
beta-BHC	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
delta-BHC	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Dieldrin	ND		98	24	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Endosulfan I	ND		98	19	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Endosulfan II	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Endosulfan sulfate	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Endrin	ND		98	19	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Endrin aldehyde	ND		98	25	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Endrin ketone	ND		98	24	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
gamma-BHC (Lindane)	ND		98	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
gamma-Chlordane	ND		98	31	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Heptachlor	ND		98	21	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Heptachlor epoxide	ND		98	25	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Methoxychlor	ND		98	20	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50
Toxaphene	ND		980	570	ug/Kg	☼	11/18/17 07:04	11/27/17 14:16	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 14:16*	*50*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 14:16*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 14:16*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 14:16*	*50*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	UJ	0.26	0.051	mg/Kg	☼	11/17/17 07:50	11/20/17 16:32	1
PCB-1221	ND	UJ	0.26	0.051	mg/Kg	☼	11/17/17 07:50	11/20/17 16:32	1
PCB-1232	ND		0.26	0.051	mg/Kg	☼	11/17/17 07:50	11/20/17 16:32	1
PCB-1242	ND	UJ	0.26	0.051	mg/Kg	☼	11/17/17 07:50	11/20/17 16:32	1
PCB-1248	ND	↓	0.26	0.051	mg/Kg	☼	11/17/17 07:50	11/20/17 16:32	1
PCB-1254	ND		0.26	0.12	mg/Kg	☼	11/17/17 07:50	11/20/17 16:32	1
PCB-1260	ND		0.26	0.12	mg/Kg	☼	11/17/17 07:50	11/20/17 16:32	1

Client Sample ID: SS-02 (2-12")

Lab Sample ID: 480-127631-4
Date Collected: 11/15/17 12:40
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 84.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		60 - 154	11/17/17 07:50	11/20/17 16:32	1
Tetrachloro-m-xylene	77		60 - 154	11/17/17 07:50	11/20/17 16:32	1
DCB Decachlorobiphenyl	106		65 - 174	11/17/17 07:50	11/20/17 16:32	1
DCB Decachlorobiphenyl	104		65 - 174	11/17/17 07:50	11/20/17 16:32	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8500	~~B~~ J	11.6	5.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Antimony	ND	UJ	17.4	0.46	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Arsenic	6.0		2.3	0.46	mg/Kg	☼	11/17/17 15:45	11/28/17 01:50	1
Barium	104	J	0.58	0.13	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Beryllium	0.48		0.23	0.032	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Cadmium	0.55		0.23	0.035	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Calcium	19500	~~B~~	57.9	3.8	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Chromium	15.0	J	0.58	0.23	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Cobalt	5.9		0.58	0.058	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Copper	35.5		1.2	0.24	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Iron	15200	~~B~~ J	11.6	4.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Lead	223	J	1.2	0.28	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Magnesium	5280		23.1	1.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Manganese	325	~~B~~	0.23	0.037	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Nickel	15.3		5.8	0.27	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Potassium	1810	J	34.7	23.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Selenium	ND		4.6	0.46	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Silver	0.26	J	0.69	0.23	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Sodium	162 118	~~J B~~ UJ	162	15.0	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Thallium	ND		6.9	0.35	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Vanadium	23.3		0.58	0.13	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1
Zinc	232	J	2.3	0.74	mg/Kg	☼	11/17/17 15:45	11/28/17 14:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.52	J	0.024	0.0098	mg/Kg	☼	11/22/17 11:30	11/22/17 15:03	1

Client Sample ID: SS-03 (0-2")

Lab Sample ID: 480-127631-5
Date Collected: 11/15/17 12:50
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	6.0	0.43	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,1,2,2-Tetrachloroethane	ND	vs	6.0	0.97	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.0	1.4	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,1,2-Trichloroethane	ND	vs	6.0	0.78	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,1-Dichloroethane	ND	vs	6.0	0.73	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,1-Dichloroethene	ND	vs	6.0	0.73	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,2,4-Trichlorobenzene	ND	vs	6.0	0.36	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,2-Dibromo-3-Chloropropane	ND	vs	6.0	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,2-Dibromoethane	ND	vs	6.0	0.77	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,2-Dichlorobenzene	ND	vs	6.0	0.47	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,2-Dichloroethane	ND	vs	6.0	0.30	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1

Client Sample ID: SS-03 (0-2")
Date Collected: 11/15/17 12:50
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-5
Matrix: Solid
Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND	vs	6.0	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,3-Dichlorobenzene	ND	vs	6.0	0.31	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
1,4-Dichlorobenzene	ND	vs	6.0	0.84	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
2-Butanone (MEK)	ND	vs UJ	30	2.2	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
2-Hexanone	ND	vs UJ	30	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
4-Methyl-2-pentanone (MIBK)	ND	vs	30	2.0	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Acetone	ND	vs	30	5.0	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Benzene	ND	vs	6.0	0.29	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Bromodichloromethane	ND	vs	6.0	0.80	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Bromoform	ND	vs UJ	6.0	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Bromomethane	ND	vs UJ	6.0	0.54	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Carbon disulfide	ND	vs	6.0	3.0	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Carbon tetrachloride	ND	vs UJ	6.0	0.58	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Chlorobenzene	ND	vs	6.0	0.79	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Chloroethane	ND	vs	6.0	1.4	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Chloroform	ND	vs	6.0	0.37	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Chloromethane	ND	vs * UJ	6.0	0.36	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
cis-1,2-Dichloroethene	ND	vs	6.0	0.76	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
cis-1,3-Dichloropropene	ND	vs	6.0	0.86	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Cyclohexane	ND	vs	6.0	0.84	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Dibromochloromethane	ND	vs	6.0	0.76	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Dichlorodifluoromethane	ND	vs *	6.0	0.49	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Ethylbenzene	ND	vs	6.0	0.41	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Isopropylbenzene	ND	vs	6.0	0.90	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Methyl acetate	ND	vs	30	3.6	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Methyl tert-butyl ether	ND	vs	6.0	0.59	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Methylcyclohexane	ND	vs	6.0	0.91	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Methylene Chloride	ND	vs	6.0	2.7	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Styrene	ND	vs	6.0	0.30	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Tetrachloroethene	ND	vs	6.0	0.80	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Toluene	ND	vs	6.0	0.45	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
trans-1,2-Dichloroethene	ND	vs	6.0	0.62	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
trans-1,3-Dichloropropene	ND	vs	6.0	2.6	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Trichloroethene	ND	vs	6.0	1.3	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Trichlorofluoromethane	ND	vs	6.0	0.57	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Vinyl chloride	ND	vs *	6.0	0.73	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1
Xylenes, Total	ND	vs	12	1.0	ug/Kg	☼	11/17/17 09:55	11/17/17 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*11/17/17 09:55*	*11/17/17 19:02*	*1*
4-Bromofluorobenzene (Surr)	*89*		*72 - 126*	*11/17/17 09:55*	*11/17/17 19:02*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*11/17/17 09:55*	*11/17/17 19:02*	*1*
Toluene-d8 (Surr)	*95*		*71 - 125*	*11/17/17 09:55*	*11/17/17 19:02*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		4100	1100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2,4,6-Trichlorophenol	ND		4100	820	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2,4-Dichlorophenol	ND		4100	430	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2,4-Dimethylphenol	ND		4100	990	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20

Client Sample ID: SS-03 (0-2")
Date Collected: 11/15/17 12:50
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-5
Matrix: Solid
Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		40000	19000	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2,4-Dinitrotoluene	ND		4100	850	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2,6-Dinitrotoluene	ND		4100	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2-Chloronaphthalene	ND		4100	680	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2-Chlorophenol	ND		4100	750	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2-Methylnaphthalene	ND		4100	820	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2-Methylphenol	ND		4100	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2-Nitroaniline	ND		8000	600	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
2-Nitrophenol	ND		4100	1200	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
3,3'-Dichlorobenzidine	ND		8000	4800	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
3-Nitroaniline	ND		8000	1100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
4,6-Dinitro-2-methylphenol	ND		8000	4100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
4-Bromophenyl phenyl ether	ND		4100	580	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
4-Chloro-3-methylphenol	ND		4100	1000	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
4-Chloroaniline	ND		4100	1000	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
4-Chlorophenyl phenyl ether	ND		4100	510	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
4-Methylphenol	ND		8000	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
4-Nitroaniline	ND		8000	2200	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
4-Nitrophenol	ND		8000	2900	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Acenaphthene	ND		4100	600	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Acenaphthylene	ND		4100	530	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Acetophenone	ND		4100	560	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Anthracene	ND		4100	1000	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Atrazine	ND		4100	1400	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Benzaldehyde	ND		4100	3300	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Benzo[a]anthracene	**1700**	**J**	4100	410	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Benzo[a]pyrene	**2100**	**J**	4100	600	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Benzo[b]fluoranthene	**2900**	**J**	4100	650	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Benzo[g,h,i]perylene	**1300**	**J**	4100	430	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Benzo[k]fluoranthene	**910**	**J**	4100	530	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Biphenyl	ND		4100	600	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
bis (2-chloroisopropyl) ether	ND		4100	820	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Bis(2-chloroethoxy)methane	ND		4100	870	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Bis(2-chloroethyl)ether	ND		4100	530	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Bis(2-ethylhexyl) phthalate	ND		4100	1400	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Butyl benzyl phthalate	ND		4100	680	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Caprolactam	ND		4100	1200	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Carbazole	ND		4100	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Chrysene	**2000**	**J**	4100	920	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Dibenz(a,h)anthracene	ND		4100	720	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Dibenzofuran	ND		4100	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Diethyl phthalate	ND		4100	530	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Dimethyl phthalate	ND		4100	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Di-n-butyl phthalate	ND		4100	700	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Di-n-octyl phthalate	ND		4100	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Fluoranthene	**3900**	**J**	4100	430	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Fluorene	ND		4100	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Hexachlorobenzene	ND		4100	560	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Hexachlorobutadiene	ND		4100	600	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20

Client Sample ID: SS-03 (0-2")
Date Collected: 11/15/17 12:50
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-5
Matrix: Solid
Percent Solids: 82.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		4100	560	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Hexachloroethane	ND		4100	530	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Indeno[1,2,3-cd]pyrene	**1600**	**J**	4100	510	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Isophorone	ND		4100	870	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Naphthalene	ND		4100	530	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Nitrobenzene	ND		4100	460	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
N-Nitrosodi-n-propylamine	ND		4100	700	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
N-Nitrosodiphenylamine	ND		4100	3300	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Pentachlorophenol	ND		8000	4100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Phenanthrene	**1900**	**J**	4100	600	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Phenol	ND		4100	630	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20
Pyrene	**3000**	**J**	4100	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:06	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*143*	*X*	*54 - 120*	*11/20/17 14:14*	*11/29/17 17:06*	*20*
2-Fluorobiphenyl	*53*	*X*	*60 - 120*	*11/20/17 14:14*	*11/29/17 17:06*	*20*
2-Fluorophenol (Surr)	*82*		*52 - 120*	*11/20/17 14:14*	*11/29/17 17:06*	*20*
Nitrobenzene-d5 (Surr)	*86*		*53 - 120*	*11/20/17 14:14*	*11/29/17 17:06*	*20*
Phenol-d5 (Surr)	*84*		*54 - 120*	*11/20/17 14:14*	*11/29/17 17:06*	*20*
p-Terphenyl-d14 (Surr)	*90*		*65 - 121*	*11/20/17 14:14*	*11/29/17 17:06*	*20*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		100	20	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
4,4'-DDE	ND		100	21	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
4,4'-DDT	**49**	~~J~~ J	100	24	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Aldrin	ND		100	25	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
alpha-BHC	ND		100	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
alpha-Chlordane	ND		100	50	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
beta-BHC	ND		100	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
delta-BHC	ND		100	19	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Dieldrin	ND		100	24	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Endosulfan I	ND		100	19	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Endosulfan II	ND		100	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Endosulfan sulfate	ND		100	19	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Endrin	ND		100	20	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Endrin aldehyde	ND		100	26	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Endrin ketone	ND		100	25	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
gamma-BHC (Lindane)	ND		100	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
gamma-Chlordane	ND		100	32	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Heptachlor	ND		100	22	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Heptachlor epoxide	ND		100	26	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Methoxychlor	ND		100	21	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50
Toxaphene	ND		1000	590	ug/Kg	☼	11/18/17 07:04	11/27/17 14:35	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 14:35*	*50*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 14:35*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 14:35*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 14:35*	*50*

Client Sample ID: SS-03 (0-2")

Lab Sample ID: 480-127631-5
Date Collected: 11/15/17 12:50
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 82.5

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	UJ	0.27	0.053	mg/Kg	☼	11/17/17 07:50	11/20/17 16:48	1
PCB-1221	ND	UJ	0.27	0.053	mg/Kg	☼	11/17/17 07:50	11/20/17 16:48	1
PCB-1232	ND		0.27	0.053	mg/Kg	☼	11/17/17 07:50	11/20/17 16:48	1
PCB-1242	ND	UJ	0.27	0.053	mg/Kg	☼	11/17/17 07:50	11/20/17 16:48	1
PCB-1248	ND		0.27	0.053	mg/Kg	☼	11/17/17 07:50	11/20/17 16:48	1
PCB-1254	ND		0.27	0.13	mg/Kg	☼	11/17/17 07:50	11/20/17 16:48	1
PCB-1260	ND		0.27	0.13	mg/Kg	☼	11/17/17 07:50	11/20/17 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*91*		*60 - 154*	*11/17/17 07:50*	*11/20/17 16:48*	*1*
Tetrachloro-m-xylene	*68*		*60 - 154*	*11/17/17 07:50*	*11/20/17 16:48*	*1*
DCB Decachlorobiphenyl	*91*		*65 - 174*	*11/17/17 07:50*	*11/20/17 16:48*	*1*
DCB Decachlorobiphenyl	*86*		*65 - 174*	*11/17/17 07:50*	*11/20/17 16:48*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7930**	~~B~~ J	11.6	5.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Antimony	ND	UJ	17.4	0.46	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Arsenic	**5.8**		2.3	0.46	mg/Kg	☼	11/17/17 15:45	11/28/17 01:53	1
Barium	**98.4**	J	0.58	0.13	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Beryllium	**0.44**		0.23	0.032	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Cadmium	**0.58**		0.23	0.035	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Calcium	**28300**	~~B~~	58.0	3.8	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Chromium	**13.9**	J	0.58	0.23	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Cobalt	**5.8**		0.58	0.058	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Copper	**34.7**		1.2	0.24	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Iron	**16000**	~~B~~ J	11.6	4.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Lead	**221**	J	1.2	0.28	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Magnesium	**5420**		23.2	1.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Manganese	**336**	~~B~~	0.23	0.037	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Nickel	**15.6**		5.8	0.27	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Potassium	**1750**	J	34.8	23.2	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Selenium	ND		4.6	0.46	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Silver	**0.27**	J	0.70	0.23	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Sodium	**93.4**	~~J B~~ U	162	15.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Thallium	ND		7.0	0.35	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Vanadium	**21.0**		0.58	0.13	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1
Zinc	**213**	J	2.3	0.74	mg/Kg	☼	11/17/17 15:45	11/28/17 14:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.68**	J	0.024	0.0097	mg/Kg	☼	11/22/17 11:30	11/22/17 15:04	1

Client Sample ID: SS-03 (2-12")

Lab Sample ID: 480-127631-6
Date Collected: 11/15/17 13:00
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.7	0.41	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1

Client Sample ID: SS-03 (2-12")
Date Collected: 11/15/17 13:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-6
Matrix: Solid
Percent Solids: 84.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	vs	5.7	0.92	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.7	1.3	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,1,2-Trichloroethane	ND	vs	5.7	0.74	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,1-Dichloroethane	ND	vs	5.7	0.69	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,1-Dichloroethene	ND	vs	5.7	0.69	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,2,4-Trichlorobenzene	ND	vs	5.7	0.35	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.7	2.8	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,2-Dibromoethane	ND	vs	5.7	0.73	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,2-Dichlorobenzene	ND	vs	5.7	0.44	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,2-Dichloroethane	ND	vs	5.7	0.28	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,2-Dichloropropane	ND	vs	5.7	2.8	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,3-Dichlorobenzene	ND	vs	5.7	0.29	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
1,4-Dichlorobenzene	ND	vs	5.7	0.79	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
2-Butanone (MEK)	ND	vs UJ	28	2.1	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
2-Hexanone	ND	vs UJ	28	2.8	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
4-Methyl-2-pentanone (MIBK)	ND	vs	28	1.9	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Acetone	ND	vs	28	4.8	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Benzene	ND	vs	5.7	0.28	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Bromodichloromethane	ND	vs	5.7	0.76	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Bromoform	ND	vs UJ	5.7	2.8	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Bromomethane	ND	vs UJ	5.7	0.51	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Carbon disulfide	ND	vs	5.7	2.8	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Carbon tetrachloride	ND	vs UJ	5.7	0.55	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Chlorobenzene	ND	vs	5.7	0.75	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Chloroethane	ND	vs	5.7	1.3	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Chloroform	ND	vs	5.7	0.35	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Chloromethane	ND	vs UJ	5.7	0.34	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
cis-1,2-Dichloroethene	ND	vs	5.7	0.73	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
cis-1,3-Dichloropropene	ND	vs	5.7	0.82	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Cyclohexane	ND	vs	5.7	0.79	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Dibromochloromethane	ND	vs	5.7	0.73	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Dichlorodifluoromethane	ND	vs *	5.7	0.47	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Ethylbenzene	ND	vs	5.7	0.39	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Isopropylbenzene	ND	vs	5.7	0.86	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Methyl acetate	ND	vs	28	3.4	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Methyl tert-butyl ether	ND	vs	5.7	0.56	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Methylcyclohexane	ND	vs	5.7	0.86	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Methylene Chloride	ND	vs	5.7	2.6	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Styrene	ND	vs	5.7	0.28	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Tetrachloroethene	ND	vs	5.7	0.76	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Toluene	ND	vs	5.7	0.43	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
trans-1,2-Dichloroethene	ND	vs	5.7	0.59	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
trans-1,3-Dichloropropene	ND	vs	5.7	2.5	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Trichloroethene	ND	vs	5.7	1.2	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Trichlorofluoromethane	ND	vs	5.7	0.54	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Vinyl chloride	ND	vs *	5.7	0.69	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1
Xylenes, Total	ND	vs	11	0.95	ug/Kg	☼	11/17/17 09:55	11/17/17 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*11/17/17 09:55*	*11/17/17 19:28*	*1*

Client Sample ID: SS-03 (2-12")
Date Collected: 11/15/17 13:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-6
Matrix: Solid
Percent Solids: 84.9

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*11/17/17 09:55*	*11/17/17 19:28*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*11/17/17 09:55*	*11/17/17 19:28*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*11/17/17 09:55*	*11/17/17 19:28*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		4000	1100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2,4,6-Trichlorophenol	ND		4000	800	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2,4-Dichlorophenol	ND		4000	420	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2,4-Dimethylphenol	ND		4000	960	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2,4-Dinitrophenol	ND		39000	18000	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2,4-Dinitrotoluene	ND		4000	820	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2,6-Dinitrotoluene	ND		4000	470	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2-Chloronaphthalene	ND		4000	660	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2-Chlorophenol	ND		4000	730	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2-Methylnaphthalene	ND		4000	800	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2-Methylphenol	ND		4000	470	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2-Nitroaniline	ND		7800	590	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
2-Nitrophenol	ND		4000	1100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
3,3'-Dichlorobenzidine	ND		7800	4700	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
3-Nitroaniline	ND		7800	1100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
4,6-Dinitro-2-methylphenol	ND		7800	4000	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
4-Bromophenyl phenyl ether	ND		4000	560	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
4-Chloro-3-methylphenol	ND		4000	990	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
4-Chloroaniline	ND		4000	990	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
4-Chlorophenyl phenyl ether	ND		4000	490	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
4-Methylphenol	ND		7800	470	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
4-Nitroaniline	ND		7800	2100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
4-Nitrophenol	ND		7800	2800	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Acenaphthene	**1400**	**J**	4000	590	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Acenaphthylene	ND		4000	520	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Acetophenone	ND		4000	540	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Anthracene	**3400**	**J**	4000	990	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Atrazine	ND		4000	1400	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Benzaldehyde	ND		4000	3200	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Benzo[a]anthracene	**6000**		4000	400	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Benzo[a]pyrene	**5200**		4000	590	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Benzo[b]fluoranthene	**6600**		4000	640	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Benzo[g,h,i]perylene	**3600**	**J**	4000	420	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Benzo[k]fluoranthene	**3800**	**J**	4000	520	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Biphenyl	ND		4000	590	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
bis (2-chloroisopropyl) ether	ND		4000	800	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Bis(2-chloroethoxy)methane	ND		4000	850	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Bis(2-chloroethyl)ether	ND		4000	520	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Bis(2-ethylhexyl) phthalate	ND		4000	1400	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Butyl benzyl phthalate	ND		4000	660	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Caprolactam	ND		4000	1200	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Carbazole	**1300**	**J**	4000	470	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Chrysene	**5800**		4000	890	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20

Client Sample ID: SS-03 (2-12")
Date Collected: 11/15/17 13:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-6
Matrix: Solid
Percent Solids: 84.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		4000	710	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Dibenzofuran	**1200**	**J**	4000	470	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Diethyl phthalate	ND		4000	520	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Dimethyl phthalate	ND		4000	470	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Di-n-butyl phthalate	ND		4000	680	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Di-n-octyl phthalate	ND		4000	470	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Fluoranthene	**14000**		4000	420	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Fluorene	**1600**	**J**	4000	470	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Hexachlorobenzene	ND		4000	540	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Hexachlorobutadiene	ND		4000	590	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Hexachlorocyclopentadiene	ND		4000	540	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Hexachloroethane	ND		4000	520	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Indeno[1,2,3-cd]pyrene	**3300**	**J**	4000	490	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Isophorone	ND		4000	850	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Naphthalene	ND		4000	520	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Nitrobenzene	ND		4000	450	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
N-Nitrosodi-n-propylamine	ND		4000	680	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
N-Nitrosodiphenylamine	ND		4000	3200	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Pentachlorophenol	ND		7800	4000	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Phenanthrene	**14000**		4000	590	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Phenol	ND		4000	610	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20
Pyrene	**10000**		4000	470	ug/Kg	☼	11/20/17 14:14	11/29/17 17:32	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*135*	*X*	*54 - 120*	*11/20/17 14:14*	*11/29/17 17:32*	*20*
2-Fluorobiphenyl	*49*	*X*	*60 - 120*	*11/20/17 14:14*	*11/29/17 17:32*	*20*
2-Fluorophenol (Surr)	*73*		*52 - 120*	*11/20/17 14:14*	*11/29/17 17:32*	*20*
Nitrobenzene-d5 (Surr)	*90*		*53 - 120*	*11/20/17 14:14*	*11/29/17 17:32*	*20*
Phenol-d5 (Surr)	*83*		*54 - 120*	*11/20/17 14:14*	*11/29/17 17:32*	*20*
p-Terphenyl-d14 (Surr)	*86*		*65 - 121*	*11/20/17 14:14*	*11/29/17 17:32*	*20*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		97	19	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
4,4'-DDE	ND		97	20	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
4,4'-DDT	**45**	**J**	97	23	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Aldrin	ND		97	24	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
alpha-BHC	ND		97	17	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
alpha-Chlordane	ND		97	48	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
beta-BHC	ND		97	17	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
delta-BHC	ND		97	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Dieldrin	ND		97	23	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Endosulfan I	ND		97	19	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Endosulfan II	ND		97	17	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Endosulfan sulfate	ND		97	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Endrin	ND		97	19	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Endrin aldehyde	ND		97	25	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Endrin ketone	ND		97	24	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
gamma-BHC (Lindane)	ND		97	18	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
gamma-Chlordane	ND		97	31	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50

Client Sample ID: SS-03 (2-12")
Date Collected: 11/15/17 13:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-6
Matrix: Solid
Percent Solids: 84.9

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptachlor	ND		97	21	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Heptachlor epoxide	ND		97	25	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Methoxychlor	ND		97	20	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50
Toxaphene	ND		970	560	ug/Kg	☼	11/18/17 07:04	11/27/17 14:55	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 14:55*	*50*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 14:55*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 14:55*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 14:55*	*50*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	UJ	0.24	0.048	mg/Kg	☼	11/17/17 07:50	11/20/17 17:04	1
PCB-1221	ND	UJ	0.24	0.048	mg/Kg	☼	11/17/17 07:50	11/20/17 17:04	1
PCB-1232	ND		0.24	0.048	mg/Kg	☼	11/17/17 07:50	11/20/17 17:04	1
PCB-1242	ND	UJ	0.24	0.048	mg/Kg	☼	11/17/17 07:50	11/20/17 17:04	1
PCB-1248	ND	↓	0.24	0.048	mg/Kg	☼	11/17/17 07:50	11/20/17 17:04	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	11/17/17 07:50	11/20/17 17:04	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	11/17/17 07:50	11/20/17 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*106*		*60 - 154*	*11/17/17 07:50*	*11/20/17 17:04*	*1*
Tetrachloro-m-xylene	*80*		*60 - 154*	*11/17/17 07:50*	*11/20/17 17:04*	*1*
DCB Decachlorobiphenyl	*109*		*65 - 174*	*11/17/17 07:50*	*11/20/17 17:04*	*1*
DCB Decachlorobiphenyl	*102*		*65 - 174*	*11/17/17 07:50*	*11/20/17 17:04*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9390**	~~B~~ J	11.8	5.2	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Antimony	ND	UJ	17.8	0.47	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Arsenic	**5.8**		2.4	0.47	mg/Kg	☼	11/17/17 15:45	11/28/17 01:57	1
Barium	**115**	J	0.59	0.13	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Beryllium	**0.56**		0.24	0.033	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Cadmium	**0.60**		0.24	0.036	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Calcium	**21500**	~~B~~	59.2	3.9	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Chromium	**16.5**	J	0.59	0.24	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Cobalt	**6.4**		0.59	0.059	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Copper	**40.3**		1.2	0.25	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Iron	**16400**	~~B~~ J	11.8	4.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Lead	**246**	J	1.2	0.28	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Magnesium	**7690**		23.7	1.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Manganese	**334**	~~B~~	0.24	0.038	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Nickel	**17.0**		5.9	0.27	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Potassium	**2110**	J	35.5	23.7	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Selenium	ND		4.7	0.47	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Silver	**0.29**	J	0.71	0.24	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Sodium	166 ~~138~~	~~J B~~ U	166	15.4	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Thallium	ND		7.1	0.36	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1
Vanadium	**24.1**		0.59	0.13	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1

Received 11/16/17

Client Sample ID: SS-03 (2-12")

Lab Sample ID: 480-127631-6
Date Collected: 11/15/17 13:00
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 84.9

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	242	J	2.4	0.76	mg/Kg	☼	11/17/17 15:45	11/28/17 14:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.86	J	0.024	0.0097	mg/Kg	☼	11/22/17 11:30	11/22/17 15:05	1

Client Sample ID: DUP-01

Lab Sample ID: 480-127631-7
Date Collected: 11/15/17 00:00
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.6	0.40	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,1,2,2-Tetrachloroethane	ND	vs	5.6	0.90	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.6	1.3	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,1,2-Trichloroethane	ND	vs	5.6	0.72	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,1-Dichloroethane	ND	vs	5.6	0.68	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,1-Dichloroethene	ND	vs	5.6	0.68	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,2,4-Trichlorobenzene	ND	vs	5.6	0.34	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.6	2.8	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,2-Dibromoethane	ND	vs	5.6	0.71	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,2-Dichlorobenzene	ND	vs	5.6	0.43	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,2-Dichloroethane	ND	vs	5.6	0.28	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,2-Dichloropropane	ND	vs	5.6	2.8	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,3-Dichlorobenzene	ND	vs	5.6	0.29	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
1,4-Dichlorobenzene	ND	vs	5.6	0.78	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
2-Butanone (MEK)	ND	vs	28	2.0	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
2-Hexanone	ND	vs	28	2.8	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
4-Methyl-2-pentanone (MIBK)	ND	vs	28	1.8	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Acetone	ND	vs	28	4.7	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Benzene	ND	vs	5.6	0.27	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Bromodichloromethane	ND	vs	5.6	0.74	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Bromoform	ND	vs UJ	5.6	2.8	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Bromomethane	ND	vs UJ	5.6	0.50	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Carbon disulfide	ND	vs	5.6	2.8	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Carbon tetrachloride	ND	vs UJ	5.6	0.54	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Chlorobenzene	ND	vs	5.6	0.73	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Chloroethane	ND	vs UJ	5.6	1.3	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Chloroform	ND	vs	5.6	0.34	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Chloromethane	ND	vs UJ	5.6	0.34	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
cis-1,2-Dichloroethene	ND	vs	5.6	0.71	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
cis-1,3-Dichloropropene	ND	vs	5.6	0.80	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Cyclohexane	ND	vs	5.6	0.78	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Dibromochloromethane	ND	vs	5.6	0.71	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Dichlorodifluoromethane	ND	vs * UJ	5.6	0.46	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Ethylbenzene	ND	vs	5.6	0.38	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Isopropylbenzene	ND	vs	5.6	0.84	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Methyl acetate	ND	vs	28	3.4	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Methyl tert-butyl ether	ND	vs	5.6	0.55	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Methylcyclohexane	ND	vs	5.6	0.84	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1

Client Sample ID: DUP-01
Date Collected: 11/15/17 00:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-7
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND	vs	5.6	2.6	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Styrene	ND	vs	5.6	0.28	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Tetrachloroethene	**5.3**	**J vs**	5.6	0.75	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Toluene	ND	vs	5.6	0.42	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
trans-1,2-Dichloroethene	ND	vs	5.6	0.57	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
trans-1,3-Dichloropropene	ND	vs	5.6	2.4	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Trichloroethene	ND	vs	5.6	1.2	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Trichlorofluoromethane	ND	vs	5.6	0.53	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Vinyl chloride	ND	vs UJ	5.6	0.68	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1
Xylenes, Total	ND	vs	11	0.93	ug/Kg	☼	11/20/17 09:24	11/20/17 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*11/20/17 09:24*	*11/20/17 15:24*	*1*
4-Bromofluorobenzene (Surr)	*89*		*72 - 126*	*11/20/17 09:24*	*11/20/17 15:24*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*	*11/20/17 09:24*	*11/20/17 15:24*	*1*
Toluene-d8 (Surr)	*108*		*71 - 125*	*11/20/17 09:24*	*11/20/17 15:24*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		3900	1000	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2,4,6-Trichlorophenol	ND		3900	770	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2,4-Dichlorophenol	ND		3900	410	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2,4-Dimethylphenol	ND		3900	930	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2,4-Dinitrophenol	ND		38000	18000	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2,4-Dinitrotoluene	ND		3900	790	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2,6-Dinitrotoluene	ND		3900	450	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2-Chloronaphthalene	ND		3900	640	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2-Chlorophenol	ND		3900	700	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2-Methylnaphthalene	ND		3900	770	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2-Methylphenol	ND		3900	450	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2-Nitroaniline	ND		7500	570	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
2-Nitrophenol	ND		3900	1100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
3,3'-Dichlorobenzidine	ND		7500	4500	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
3-Nitroaniline	ND		7500	1100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
4,6-Dinitro-2-methylphenol	ND		7500	3900	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
4-Bromophenyl phenyl ether	ND		3900	540	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
4-Chloro-3-methylphenol	ND		3900	950	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
4-Chloroaniline	ND		3900	950	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
4-Chlorophenyl phenyl ether	ND		3900	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
4-Methylphenol	ND		7500	450	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
4-Nitroaniline	ND		7500	2000	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
4-Nitrophenol	ND		7500	2700	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Acenaphthene	**950**	**J**	3900	570	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Acenaphthylene	ND		3900	500	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Acetophenone	ND		3900	520	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Anthracene	**2000**	**J**	3900	950	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Atrazine	ND		3900	1300	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Benzaldehyde	ND		3900	3100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Benzo[a]anthracene	**4100**		3900	390	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Benzo[a]pyrene	**3700**	**J**	3900	570	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20

Client Sample ID: DUP-01
Date Collected: 11/15/17 00:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-7
Matrix: Solid
Percent Solids: 86.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**4300**		3900	610	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Benzo[g,h,i]perylene	**2200**	J	3900	410	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Benzo[k]fluoranthene	**2400**	J	3900	500	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Biphenyl	ND		3900	570	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
bis (2-chloroisopropyl) ether	ND		3900	770	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Bis(2-chloroethoxy)methane	ND		3900	820	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Bis(2-chloroethyl)ether	ND		3900	500	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Bis(2-ethylhexyl) phthalate	ND		3900	1300	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Butyl benzyl phthalate	ND		3900	640	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Caprolactam	ND		3900	1200	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Carbazole	**970**	J	3900	450	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Chrysene	**4000**		3900	860	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Dibenz(a,h)anthracene	ND		3900	680	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Dibenzofuran	**930**	J	3900	450	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Diethyl phthalate	ND		3900	500	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Dimethyl phthalate	ND		3900	450	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Di-n-butyl phthalate	ND		3900	660	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Di-n-octyl phthalate	ND		3900	450	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Fluoranthene	**9800**		3900	410	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Fluorene	**1300**	J	3900	450	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Hexachlorobenzene	ND		3900	520	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Hexachlorobutadiene	ND		3900	570	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Hexachlorocyclopentadiene	ND		3900	520	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Hexachloroethane	ND		3900	500	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Indeno[1,2,3-cd]pyrene	**2400**	J	3900	480	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Isophorone	ND		3900	820	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Naphthalene	ND		3900	500	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Nitrobenzene	ND		3900	430	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
N-Nitrosodi-n-propylamine	ND		3900	660	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
N-Nitrosodiphenylamine	ND		3900	3100	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Pentachlorophenol	ND		7500	3900	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Phenanthrene	**9100**		3900	570	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Phenol	ND		3900	590	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20
Pyrene	**6800**		3900	450	ug/Kg	☼	11/20/17 14:14	11/29/17 17:58	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*103*		*54 - 120*	*11/20/17 14:14*	*11/29/17 17:58*	*20*
2-Fluorobiphenyl	*54*	*X*	*60 - 120*	*11/20/17 14:14*	*11/29/17 17:58*	*20*
2-Fluorophenol (Surr)	*90*		*52 - 120*	*11/20/17 14:14*	*11/29/17 17:58*	*20*
Nitrobenzene-d5 (Surr)	*85*		*53 - 120*	*11/20/17 14:14*	*11/29/17 17:58*	*20*
Phenol-d5 (Surr)	*76*		*54 - 120*	*11/20/17 14:14*	*11/29/17 17:58*	*20*
p-Terphenyl-d14 (Surr)	*82*		*65 - 121*	*11/20/17 14:14*	*11/29/17 17:58*	*20*

Method: 8081B - Organochlorine Pesticides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,4'-DDD	ND		94	18	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
4,4'-DDE	ND		94	20	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
4,4'-DDT	**39**	J	94	22	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Aldrin	ND		94	23	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
alpha-BHC	ND		94	17	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50

Client Sample ID: DUP-01
Date Collected: 11/15/17 00:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-7
Matrix: Solid
Percent Solids: 86.8

Method: 8081B - Organochlorine Pesticides (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
alpha-Chlordane	ND		94	47	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
beta-BHC	ND		94	17	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
delta-BHC	ND		94	18	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Dieldrin	ND		94	23	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Endosulfan I	ND		94	18	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Endosulfan II	ND		94	17	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Endosulfan sulfate	ND		94	18	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Endrin	ND		94	19	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Endrin aldehyde	ND		94	24	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Endrin ketone	ND		94	23	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
gamma-BHC (Lindane)	ND		94	17	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
gamma-Chlordane	ND		94	30	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Heptachlor	ND		94	20	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Heptachlor epoxide	ND		94	24	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Methoxychlor	ND		94	19	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50
Toxaphene	ND		940	550	ug/Kg	☼	11/18/17 07:04	11/27/17 15:14	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 15:14*	*50*
DCB Decachlorobiphenyl	*0*	*X*	*45 - 120*	*11/18/17 07:04*	*11/27/17 15:14*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 15:14*	*50*
Tetrachloro-m-xylene	*0*	*X*	*30 - 124*	*11/18/17 07:04*	*11/27/17 15:14*	*50*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	UJ	0.22	0.042	mg/Kg	☼	11/17/17 07:50	11/20/17 17:20	1
PCB-1221	ND	UJ	0.22	0.042	mg/Kg	☼	11/17/17 07:50	11/20/17 17:20	1
PCB-1232	ND		0.22	0.042	mg/Kg	☼	11/17/17 07:50	11/20/17 17:20	1
PCB-1242	ND	UJ	0.22	0.042	mg/Kg	☼	11/17/17 07:50	11/20/17 17:20	1
PCB-1248	ND		0.22	0.042	mg/Kg	☼	11/17/17 07:50	11/20/17 17:20	1
PCB-1254	ND		0.22	0.10	mg/Kg	☼	11/17/17 07:50	11/20/17 17:20	1
PCB-1260	ND		0.22	0.10	mg/Kg	☼	11/17/17 07:50	11/20/17 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*119*		*60 - 154*	*11/17/17 07:50*	*11/20/17 17:20*	*1*
Tetrachloro-m-xylene	*96*		*60 - 154*	*11/17/17 07:50*	*11/20/17 17:20*	*1*
DCB Decachlorobiphenyl	*121*		*65 - 174*	*11/17/17 07:50*	*11/20/17 17:20*	*1*
DCB Decachlorobiphenyl	*116*		*65 - 174*	*11/17/17 07:50*	*11/20/17 17:20*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8660**	~~B~~ J	11.4	5.0	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Antimony	ND	UJ	17.1	0.46	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Arsenic	**5.9**		2.3	0.46	mg/Kg	☼	11/17/17 15:45	11/28/17 02:00	1
Barium	**98.1**	J	0.57	0.13	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Beryllium	**0.47**		0.23	0.032	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Cadmium	**0.56**		0.23	0.034	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Calcium	**23600**	~~B~~	56.9	3.8	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Chromium	**13.4**	J	0.57	0.23	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Cobalt	**5.9**		0.57	0.057	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1

Client Sample ID: DUP-01

Lab Sample ID: 480-127631-7
Date Collected: 11/15/17 00:00
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 86.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	**39.9**		1.1	0.24	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Iron	**15500**	~~B~~ J	11.4	4.0	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Lead	**237**	J	1.1	0.27	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Magnesium	**5780**		22.8	1.1	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Manganese	**290**	B	0.23	0.036	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Nickel	**15.2**		5.7	0.26	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Potassium	**1770**	J	34.1	22.8	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Selenium	ND		4.6	0.46	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Silver	**0.23**	J	0.68	0.23	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Sodium	159 103 ~~J B~~ U		159	14.8	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Thallium	ND		6.8	0.34	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Vanadium	**29.9**		0.57	0.13	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1
Zinc	**221**	J	2.3	0.73	mg/Kg	☼	11/17/17 15:45	11/28/17 14:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.60**	J	0.022	0.0090	mg/Kg	☼	11/22/17 11:30	11/22/17 15:07	1

Client Sample ID: DRUM-C

Lab Sample ID: 480-127631-8
Date Collected: 11/15/17 14:00
Matrix: Solid
Date Received: 11/16/17 02:00
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs F1 F2	6.1	0.45	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,1,2,2-Tetrachloroethane	ND	vs F1 F2	6.1	1.0	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs F2	6.1	1.4	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,1,2-Trichloroethane	ND	vs F1 F2	6.1	0.80	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,1-Dichloroethane	ND	vs F2	6.1	0.75	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,1-Dichloroethene	ND	vs F2	6.1	0.75	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,2,4-Trichlorobenzene	ND	vs F1 F2	6.1	0.37	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,2-Dibromo-3-Chloropropane	ND	vs F1	6.1	3.1	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,2-Dibromoethane	ND	vs F1	6.1	0.79	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,2-Dichlorobenzene	ND	vs F1 F2	6.1	0.48	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,2-Dichloroethane	ND	vs	6.1	0.31	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,2-Dichloropropane	ND	vs F2	6.1	3.1	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,3-Dichlorobenzene	ND	vs F1 F2	6.1	0.32	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
1,4-Dichlorobenzene	ND	vs F1 F2	6.1	0.86	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
2-Butanone (MEK)	ND	vs F1	31	2.2	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
2-Hexanone	ND	vs	31	3.1	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
4-Methyl-2-pentanone (MIBK)	ND	vs	31	2.0	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Acetone	**22**	J vs F1	31	5.2	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Benzene	ND	vs F2	6.1	0.30	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Bromodichloromethane	ND	vs F1	6.1	0.82	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Bromoform	ND	vs ~~F1~~ UJ	6.1	3.1	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Bromomethane	ND	vs F2	6.1	0.55	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Carbon disulfide	ND	vs F1 F2	6.1	3.1	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Carbon tetrachloride	ND	vs ~~F1~~ UJ	6.1	0.59	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Chlorobenzene	ND	vs F1 F2	6.1	0.81	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Chloroethane	ND	vs ~~F2~~ UJ	6.1	1.4	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1

Client Sample ID: DRUM-C
Date Collected: 11/15/17 14:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-8
Matrix: Solid
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND	vs F2	6.1	0.38	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Chloromethane	ND	vs ~~F2~~ UJ	6.1	0.37	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
cis-1,2-Dichloroethene	**2.7**	**J vs F1**	6.1	0.79	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
cis-1,3-Dichloropropene	ND	vs F1	6.1	0.88	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Cyclohexane	ND	vs F2	6.1	0.86	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Dibromochloromethane	ND	vs F1	6.1	0.79	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Dichlorodifluoromethane	ND	vs ~~F1 F2~~ * UJ	6.1	0.51	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Ethylbenzene	ND	vs F1 F2	6.1	0.42	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Isopropylbenzene	ND	vs F1 F2	6.1	0.93	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Methyl acetate	ND	vs	31	3.7	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Methyl tert-butyl ether	ND	vs	6.1	0.60	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Methylcyclohexane	ND	vs F1 F2	6.1	0.93	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Methylene Chloride	ND	vs F2	6.1	2.8	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Styrene	ND	vs F1 F2	6.1	0.31	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Tetrachloroethene	**2.1**	**J vs F1 F2**	6.1	0.82	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Toluene	**0.50**	**J vs F1 F2**	6.1	0.46	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
trans-1,2-Dichloroethene	ND	vs F1 F2	6.1	0.63	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
trans-1,3-Dichloropropene	ND	vs F1	6.1	2.7	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Trichloroethene	**2.3**	**J vs F1 F2**	6.1	1.4	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Trichlorofluoromethane	ND	vs F2	6.1	0.58	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Vinyl chloride	**1.1**	**J vs F2**	6.1	0.75	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1
Xylenes, Total	ND	vs F1 F2	12	1.0	ug/Kg	☼	11/20/17 09:24	11/20/17 15:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*11/20/17 09:24*	*11/20/17 15:50*	*1*
4-Bromofluorobenzene (Surr)	*88*		*72 - 126*	*11/20/17 09:24*	*11/20/17 15:50*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*11/20/17 09:24*	*11/20/17 15:50*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*11/20/17 09:24*	*11/20/17 15:50*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11000**	~~B~~ J	12.6	5.5	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Antimony	ND	UJ	18.9	0.50	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Arsenic	**5.2**		2.5	0.50	mg/Kg	☼	11/17/17 15:45	11/28/17 02:04	1
Barium	**89.0**	J	0.63	0.14	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Beryllium	**0.56**		0.25	0.035	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Cadmium	**0.30**		0.25	0.038	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Calcium	**11400**	~~B~~	62.9	4.2	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Chromium	**27.7**	J	0.63	0.25	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Cobalt	**7.3**		0.63	0.063	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Copper	**40.2**		1.3	0.26	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Iron	**16400**	~~B~~ J	12.6	4.4	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Lead	**221**	J	1.3	0.30	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Magnesium	**4760**		25.2	1.2	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Manganese	**286**	~~B~~	0.25	0.040	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Nickel	**17.5**		6.3	0.29	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Potassium	**2330**	J	37.7	25.2	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Selenium	ND		5.0	0.50	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Silver	**0.26**	J	0.75	0.25	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Sodium	**251**	~~B~~	176	16.3	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1

Client Sample ID: DRUM-C
Date Collected: 11/15/17 14:00
Date Received: 11/16/17 02:00

Lab Sample ID: 480-127631-8
Matrix: Solid
Percent Solids: 79.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		7.5	0.38	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Vanadium	**26.5**		0.63	0.14	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1
Zinc	**121**	J	2.5	0.80	mg/Kg	☼	11/17/17 15:45	11/28/17 14:52	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.47**	J	0.026	0.010	mg/Kg	☼	11/22/17 11:30	11/22/17 15:09	1

Appendix B
Laboratory Case Narrative

Job Narrative
480-127631-1

Receipt
The samples were received on 11/16/2017 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.7° C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-387909 recovered above the upper control limit for 2-Butanone (MEK), 2-Hexanone and Chloromethane. The samples associated with this CCV had no detections above the reporting limit for the affected analytes; therefore, the data have been reported. The following samples are impacted: SS-01 (0-2") (480-127631-1), SS-01 (2-12") (480-127631-2), SS-02 (0-2") (480-127631-3), SS-02 (2-12") (480-127631-4), SS-03 (0-2") (480-127631-5) and SS-03 (2-12") (480-127631-6).

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 480-387909 was outside the method criteria for the following analyte: Carbon tetrachloride. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated. The following samples are impacted: SS-01 (0-2") (480-127631-1), SS-01 (2-12") (480-127631-2), SS-02 (0-2") (480-127631-3), SS-02 (2-12") (480-127631-4), SS-03 (0-2") (480-127631-5) and SS-03 (2-12") (480-127631-6).

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-387965 recovered outside control limits for the following analytes: Chloromethane, Dichlorodifluoromethane and Vinyl chloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: SS-01 (0-2") (480-127631-1), SS-01 (2-12") (480-127631-2), SS-02 (0-2") (480-127631-3), SS-02 (2-12") (480-127631-4), SS-03 (0-2") (480-127631-5) and SS-03 (2-12") (480-127631-6).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-388293 recovered above the upper control limit for Chloromethane, Dichlorodifluoromethane and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples were impacted: DUP-01 (480-127631-7) and DRUM-C (480-127631-8).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-388293 recovered outside acceptance criteria, low biased, for Carbon tetrachloride. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples were impacted: DUP-01 (480-127631-7) and DRUM-C (480-127631-8).

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-388298 recovered outside control limits for the following analyte: Dichlorodifluoromethane. Dichlorodifluoromethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. The following samples were impacted: DUP-01 (480-127631-7) and DRUM-C (480-127631-8).

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-389594 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The following samples are impacted: SS-01 (2-12") (480-127631-2), SS-01 (2-12") (480-127631-2[MS]) and SS-01 (2-12") (480-127631-2[MSD]).

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-388298 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits: DRUM-C (480-127631-8)[MS} and DRUM-C (480-127631-8)[MSD}.

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

GC/MS Semi VOA
Method(s) 8270D: The following samples was diluted due to color and viscosity: SS-01 (0-2") (480-127631-1), SS-01 (2-12") (480-127631-2), SS-01 (2-12") (480-127631-2[MS]), SS-01 (2-12") (480-127631-2[MSD]), SS-02 (0-2") (480-127631-3), SS-02 (2-12") (480-127631-4), SS-03 (0-2") (480-127631-5), SS-03 (2-12") (480-127631-6) and DUP-01 (480-127631-7). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following samples required a dilution due to the nature of the sample matrix: SS-02 (2-12") (480-127631-4), SS-03 (0-2") (480-127631-5), SS-03 (2-12") (480-127631-6) and DUP-01 (480-127631-7). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-388399were outside control limits. Sample dilution, matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits: SS-01 (2-12") (480-127631-2[MS]) and SS-01 (2-12") (480-127631-2[MSD]).

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-388399 were diluted to a level below the method detection limit for 2,4-Dinitrophenol and N-Nitrosodiphenylamine; therefore, percent recoveries were not reported: SS-01 (2-12") (480-127631-2[MS]) and SS-01 (2-12") (480-127631-2[MSD]).

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

GC Semi VOA
Method(s) 8081B: The following samples were diluted due to the nature of the sample matrix: SS-01 (0-2") (480-127631-1), SS-01 (2-12") (480-127631-2), SS-02 (0-2") (480-127631-3), SS-02 (2-12") (480-127631-4), SS-03 (0-2") (480-127631-5), SS-03 (2-12") (480-127631-6) and DUP-01 (480-127631-7). As such, surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

Method(s) 8081B: The following samples were diluted due to the nature of the sample matrix: SS-01 (2-12") (480-127631-2[MS]) and SS-01 (2-12") (480-127631-2[MSD]). As such, spike and surrogate recoveries are below the calibration range, estimated and not representative. Elevated reporting limits (RLs) are provided.

Method(s) 8081B: All primary data for analytical batch 389150 is reported from the RTX-CLPI column.

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCVIS 480-388374/4) that had recoveries for the surrogate Decachlorobiphenyl that as above acceptance limits: SS-01 (0-2") (480-127631-1), SS-01 (2-12") (480-127631-2), SS-02 (0-2") (480-127631-3), SS-02 (2-12") (480-127631-4), SS-03 (0-2") (480-127631-5), SS-03 (2-12") (480-127631-6) and DUP-01 (480-127631-7). There were no detections for any aroclor associated with this surrogate. Therefore, the data has been reported.

Method(s) 8082A: All primary data for analytical batch 388374 is reported from the ZB-5 column.

Method(s) 8082A: The percent difference in a multi-component continuing calibration verification is assessed on the basis of the total amount, individual peak calculations are only listed for completeness.

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

Metals
Method(s) 6010C: The Serial Dilution and Post Spike (480-127631-B-2-A PDS) and (480-127631-B-2-A SD) exceeded the quality control limits for Total Iron. Sample matrix is suspected, therefore, no corrective action was necessary.

Method(s) 6010C: The Serial Dilution (480-127631-B-2-A SD) in batch 480-388016, exhibited results outside the quality control limits for Total Chromium and Zinc. However, the Post Digestion Spike was compliant so no corrective action was necessary

Method(s) 6010C: The % recovery of Post Spike, (480-127631-B-2-A PDS), in batch 480-388016 exhibited results outside the quality control limits for Total Magnesium and Manganese. However, the Serial Dilution of this sample was compliant. Therefore, no corrective action was necessary

Method(s) 6010C: The % recovery of Post Spike, (480-127631-B-2-A PDS), in batch 480-388016,exhibited a result outside the quality control limits for Total Arsenic. Hover, the serial dilution was compliant. Therefore, no corrective action was necessary.

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

Organic Prep
Method(s) 3550C: The following samples required a Florisil clean-up, via EPA Method 3620C, to reduce matrix interferences: SS-01 (0-2") (480-127631-1), SS-01 (2-12") (480-127631-2), SS-01 (2-12") (480-127631-2[MS]), SS-01 (2-12") (480-127631-2[MSD]), SS-02 (0-2") (480-127631-3), SS-02 (2-12") (480-127631-4), SS-03 (0-2") (480-127631-5), SS-03 (2-12") (480-127631-6) and DUP-01 (480-127631-7).

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

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

450501 Albany

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Avery Thomas	Lab PM: Deyo, Melissa L	Carrier:
Client Contact: Stefan Bagnato	Phone: (518) 346-7396	E-Mail: melissa.deyo@testamericainc.com	COC No: 480-104679-24763.1
Company: ARCADIS U.S. Inc			Page: Page 1 of 1
Address: 855 Route 146 Suite 210	Due Date Requested:	Analysis Requested: 480-127631 COC	Job #:
City: Clifton Park	TAT Requested (days): Standard		Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
State, Zip: NY, 12065	PO #: 00266444.0000		
Phone: (518) 250-7300	WO #:		Other:
Email: Stefan.Bagnato@arcadis.com	Project #: 48017030		
Project Name: NYSDEC - 222 South Ferry St Site - Schen	SSOW#:		
Site: 222 South Ferry st - Schenectady			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	6010C, 7471B	8081B, 8082A, 8270D	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
SS-01 (0-2")	11-15-17	1200	G	Solid	N	N	X	X	X	4	
SS-01 (2-12")	11-15-17	1210	G	Solid	N	Y	X	X	X	4	MS, MSD
SS-02 (0-2")	11-15-17	1230	G	Solid	N	N	X	X	X	4	
SS-02 (2-12")	11-15-17	1240	G	Solid	N	N	X	X	X	4	
SS-03 (0-2")	11-15-17	1250	G	Solid	N	N	X	X	X	4	
SS-03 (2-12")	11-15-17	1300	G	Solid	N	N	X	X	X	4	
DUP-01	11-15-17	-	G	Solid	N	N	X	X	X	4	
DRUM-C	11-15-17	1400	C	Solid	N	N	X	X		2	
				Solid							

11-15-17

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Avery Thomas	11-15-17 1550	Arcadis	Rob Zaehringer	11-15-17 1550	TA
Rob Zaehringer	11-15-17 1800	TA	[illegible]	11-16-17 0200	TA
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

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

Cooler Temperature(s) °C and Other Remarks: 0.7 #1

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-127631-1

Login Number: 127631
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

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

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY:	ARCADIS U.S., Inc.
SITE NAME:	222 South Ferry Street
CONTRACTED LAB:	TestAmerica-Buffalo
QA/QC LEVEL:	DUSR
EPA SOW/METHODS:	SW-846
VALIDATION GUIDELINES:	USEPA Region II data validation SOPs
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	Volatile Organics (VOA)

SDG NUMBER: 480-128035-1

SAMPLES:

Client Sample #	Lab Sample #	Matrix	VOA
MW-12 (112717)	480-128035-1	Water	X
MW-4 (112717)	480-128035-2	Water	X
MW-6R (112717)	480-128035-3	Water	X
MW-2 (112717)	480-128035-4	Water	X
TRIP BLANK	480-128035-5	Water	X
MW-6R (112717)MS	480-128035-3MS	Water	X
MW-6R (112717)MSD	480-128035-3MSD	Water	X

SUFFIX CODES: MD = MATRIX DUPLICATE, MS = MATRIX SPIKE, MSD = MATRIX SPIKE DUPLICATE

DATA REVIEWER(S): Amy L. Hogan, Theresa Tipe

SECONDARY REVIEWER(S): Kevin C. Harmon, Ann Poon

Data Qualifier Definitions

J	-	The associated numerical value is an estimated quantity.
JN	-	The compound/analyte was tentatively identified with estimated concentration.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA USABILITY SUMMARY

TestAmerica-Buffalo – 480-128035-1 – Organics and Inorganics

VOLATILE ORGANICS

SUMMARY

I.) General:

The analyses for Volatile Organics were performed by GC / MS according to SW-846 Method 8260C.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualification.

III.) Holding Times:

All Holding Time criteria were met. No data qualification was required.

IV.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Continuing Calibration:

The Percent Differences (%Ds) for the standard run on 11/28/17 at 21:19 on instrument HP5973 exceeded the 20% QC limit for the following compounds:

dichlorodifluoromethane	23.8%
acetone	40.6%
2-butanone	34.7%
4-methyl-2-pentanone	26.1%
2-hexanone	45.3%

All positive and non-detect results for these compounds in the SDG samples were qualified as estimated (J) and (UJ).

VI.) Blanks:

Method Blanks:

There were no detections in the method blank associated with this SDG. No data qualification was necessary.

Trip Blanks:

There were no detections in the TRIP Blank submitted for this SDG. No data qualification was necessary.

Tentatively Identified Compounds (TIC):

There were no TIC detections reported in the blanks associated with this SDG. No data qualification was required.

VII.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No data qualification was required.

VIII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this fraction of the SDG. The Percent Recoveries (%Rs) for LCS 480-389496 exceeded their QC limits for the following compounds:

Compound	LCS, %R	QC Limits
2-hexanone	148%	65-127%
acetone	145%	56-142%

All positive results for these compounds in the SDG samples were qualified as estimated (J).

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed on SDG sample MW-6R (112717). A total of seven Percent Recoveries (%R's) and two Relative Percent Differences (RPDs) were outside their QC limits. Data qualification based on MS /MSD criteria was not required, so no data qualification was necessary.

X.) Field Duplicates:

There were no field duplicates identified in this SDG. No data qualification was necessary.

XI.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No data qualification was necessary.

XII.) TCL Compound Identification:

All sample data were reported in accordance with the cited method.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

Sample MW-6R (112717) was diluted to bring the target compound results within the linear calibration range. No data qualification was necessary.

All other CRQL criteria were met. No data qualification was necessary.

Appendix A
Qualified Form Is

Client Sample ID: MW-12 (112717)
Date Collected: 11/27/17 13:25
Date Received: 11/28/17 01:00

Lab Sample ID: 480-128035-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/29/17 04:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/29/17 04:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/29/17 04:45	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/29/17 04:45	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/29/17 04:45	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/29/17 04:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/29/17 04:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/29/17 04:45	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/29/17 04:45	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/29/17 04:45	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/29/17 04:45	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/29/17 04:45	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/29/17 04:45	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/29/17 04:45	1
2-Butanone (MEK)	ND	UJ	10	1.3	ug/L			11/29/17 04:45	1
2-Hexanone	ND	*UJ	5.0	1.2	ug/L			11/29/17 04:45	1
4-Methyl-2-pentanone (MIBK)	ND	UJ	5.0	2.1	ug/L			11/29/17 04:45	1
Acetone	ND	*UJ	10	3.0	ug/L			11/29/17 04:45	1
Benzene	ND		1.0	0.41	ug/L			11/29/17 04:45	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/29/17 04:45	1
Bromoform	ND		1.0	0.26	ug/L			11/29/17 04:45	1
Bromomethane	ND		1.0	0.69	ug/L			11/29/17 04:45	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/29/17 04:45	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/29/17 04:45	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/29/17 04:45	1
Chloroethane	ND		1.0	0.32	ug/L			11/29/17 04:45	1
Chloroform	ND		1.0	0.34	ug/L			11/29/17 04:45	1
Chloromethane	ND		1.0	0.35	ug/L			11/29/17 04:45	1
cis-1,2-Dichloroethene	**12**		1.0	0.81	ug/L			11/29/17 04:45	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/29/17 04:45	1
Cyclohexane	ND		1.0	0.18	ug/L			11/29/17 04:45	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/29/17 04:45	1
Dichlorodifluoromethane	ND	UJ	1.0	0.68	ug/L			11/29/17 04:45	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/29/17 04:45	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/29/17 04:45	1
Methyl acetate	ND		2.5	1.3	ug/L			11/29/17 04:45	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/29/17 04:45	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/29/17 04:45	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/29/17 04:45	1
Styrene	ND		1.0	0.73	ug/L			11/29/17 04:45	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/29/17 04:45	1
Toluene	ND		1.0	0.51	ug/L			11/29/17 04:45	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/29/17 04:45	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/29/17 04:45	1
Trichloroethene	ND		1.0	0.46	ug/L			11/29/17 04:45	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/29/17 04:45	1
Vinyl chloride	**24**		1.0	0.90	ug/L			11/29/17 04:45	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/29/17 04:45	1

Received 11/5/18

Client Sample ID: MW-12 (112717)

Lab Sample ID: 480-128035-1

Date Collected: 11/27/17 13:25
Matrix: Water
Date Received: 11/28/17 01:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*77 - 120*		*11/29/17 04:45*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*11/29/17 04:45*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 123*		*11/29/17 04:45*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*11/29/17 04:45*	*1*

Client Sample ID: MW-4 (112717)

Lab Sample ID: 480-128035-2

Date Collected: 11/27/17 13:10
Matrix: Water
Date Received: 11/28/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/29/17 05:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/29/17 05:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/29/17 05:12	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/29/17 05:12	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/29/17 05:12	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/29/17 05:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/29/17 05:12	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/29/17 05:12	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/29/17 05:12	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/29/17 05:12	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/29/17 05:12	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/29/17 05:12	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/29/17 05:12	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/29/17 05:12	1
2-Butanone (MEK)	ND	UJ	10	1.3	ug/L			11/29/17 05:12	1
2-Hexanone	ND	→ UJ	5.0	1.2	ug/L			11/29/17 05:12	1
4-Methyl-2-pentanone (MIBK)	ND	UJ	5.0	2.1	ug/L			11/29/17 05:12	1
Acetone	**3.6**	J → J	10	3.0	ug/L			11/29/17 05:12	1
Benzene	ND		1.0	0.41	ug/L			11/29/17 05:12	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/29/17 05:12	1
Bromoform	ND		1.0	0.26	ug/L			11/29/17 05:12	1
Bromomethane	ND		1.0	0.69	ug/L			11/29/17 05:12	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/29/17 05:12	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/29/17 05:12	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/29/17 05:12	1
Chloroethane	ND		1.0	0.32	ug/L			11/29/17 05:12	1
Chloroform	ND		1.0	0.34	ug/L			11/29/17 05:12	1
Chloromethane	ND		1.0	0.35	ug/L			11/29/17 05:12	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/29/17 05:12	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/29/17 05:12	1
Cyclohexane	ND		1.0	0.18	ug/L			11/29/17 05:12	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/29/17 05:12	1
Dichlorodifluoromethane	ND	UJ	1.0	0.68	ug/L			11/29/17 05:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/29/17 05:12	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/29/17 05:12	1
Methyl acetate	ND		2.5	1.3	ug/L			11/29/17 05:12	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/29/17 05:12	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/29/17 05:12	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/29/17 05:12	1

Client Sample ID: MW-4 (112717)

Lab Sample ID: 480-128035-2

Date Collected: 11/27/17 13:10
Matrix: Water
Date Received: 11/28/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			11/29/17 05:12	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/29/17 05:12	1
Toluene	ND		1.0	0.51	ug/L			11/29/17 05:12	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/29/17 05:12	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/29/17 05:12	1
Trichloroethene	**0.99**	**J**	1.0	0.46	ug/L			11/29/17 05:12	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/29/17 05:12	1
Vinyl chloride	**35**		1.0	0.90	ug/L			11/29/17 05:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/29/17 05:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*		*11/29/17 05:12*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*11/29/17 05:12*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*11/29/17 05:12*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*11/29/17 05:12*	*1*

Client Sample ID: MW-6R (112717)

Lab Sample ID: 480-128035-3

Date Collected: 11/27/17 14:35
Matrix: Water
Date Received: 11/28/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			11/29/17 05:40	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			11/29/17 05:40	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			11/29/17 05:40	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			11/29/17 05:40	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			11/29/17 05:40	4
1,1-Dichloroethene	ND	F2 F1	4.0	1.2	ug/L			11/29/17 05:40	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			11/29/17 05:40	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			11/29/17 05:40	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			11/29/17 05:40	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			11/29/17 05:40	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			11/29/17 05:40	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			11/29/17 05:40	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			11/29/17 05:40	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			11/29/17 05:40	4
2-Butanone (MEK)	ND	UJ	40	5.3	ug/L			11/29/17 05:40	4
2-Hexanone	ND	~~F1~~ UJ	20	5.0	ug/L			11/29/17 05:40	4
4-Methyl-2-pentanone (MIBK)	ND	UJ	20	8.4	ug/L			11/29/17 05:40	4
Acetone	ND	UJ	40	12	ug/L			11/29/17 05:40	4
Benzene	ND		4.0	1.6	ug/L			11/29/17 05:40	4
Bromodichloromethane	ND		4.0	1.6	ug/L			11/29/17 05:40	4
Bromoform	ND	F1	4.0	1.0	ug/L			11/29/17 05:40	4
Bromomethane	ND	F2	4.0	2.8	ug/L			11/29/17 05:40	4
Carbon disulfide	ND		4.0	0.76	ug/L			11/29/17 05:40	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			11/29/17 05:40	4
Chlorobenzene	ND		4.0	3.0	ug/L			11/29/17 05:40	4
Chloroethane	ND		4.0	1.3	ug/L			11/29/17 05:40	4
Chloroform	ND		4.0	1.4	ug/L			11/29/17 05:40	4
Chloromethane	ND		4.0	1.4	ug/L			11/29/17 05:40	4

Received 11/15/18

Client Sample ID: MW-6R (112717)

Lab Sample ID: 480-128035-3

Date Collected: 11/27/17 14:35
Matrix: Water
Date Received: 11/28/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**160**	F1	4.0	3.2	ug/L			11/29/17 05:40	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			11/29/17 05:40	4
Cyclohexane	ND		4.0	0.72	ug/L			11/29/17 05:40	4
Dibromochloromethane	ND		4.0	1.3	ug/L			11/29/17 05:40	4
Dichlorodifluoromethane	ND UJ		4.0	2.7	ug/L			11/29/17 05:40	4
Ethylbenzene	ND		4.0	3.0	ug/L			11/29/17 05:40	4
Isopropylbenzene	ND		4.0	3.2	ug/L			11/29/17 05:40	4
Methyl acetate	ND		10	5.2	ug/L			11/29/17 05:40	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			11/29/17 05:40	4
Methylcyclohexane	ND		4.0	0.64	ug/L			11/29/17 05:40	4
Methylene Chloride	ND	F1	4.0	1.8	ug/L			11/29/17 05:40	4
Styrene	ND		4.0	2.9	ug/L			11/29/17 05:40	4
Tetrachloroethene	ND		4.0	1.4	ug/L			11/29/17 05:40	4
Toluene	ND		4.0	2.0	ug/L			11/29/17 05:40	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			11/29/17 05:40	4
trans-1,3-Dichloropropene	ND	F1	4.0	1.5	ug/L			11/29/17 05:40	4
Trichloroethene	ND		4.0	1.8	ug/L			11/29/17 05:40	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			11/29/17 05:40	4
Vinyl chloride	**42**		4.0	3.6	ug/L			11/29/17 05:40	4
Xylenes, Total	ND		8.0	2.6	ug/L			11/29/17 05:40	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*11/29/17 05:40*	*4*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*11/29/17 05:40*	*4*
Dibromofluoromethane (Surr)	*87*		*75 - 123*		*11/29/17 05:40*	*4*
Toluene-d8 (Surr)	*94*		*80 - 120*		*11/29/17 05:40*	*4*

Client Sample ID: MW-2 (112717)

Lab Sample ID: 480-128035-4

Date Collected: 11/27/17 14:40
Matrix: Water
Date Received: 11/28/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/29/17 06:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/29/17 06:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/29/17 06:07	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/29/17 06:07	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/29/17 06:07	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/29/17 06:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/29/17 06:07	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/29/17 06:07	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/29/17 06:07	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/29/17 06:07	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/29/17 06:07	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/29/17 06:07	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/29/17 06:07	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/29/17 06:07	1
2-Butanone (MEK)	ND	UJ	10	1.3	ug/L			11/29/17 06:07	1
2-Hexanone	ND	* UJ	5.0	1.2	ug/L			11/29/17 06:07	1
4-Methyl-2-pentanone (MIBK)	ND	UJ	5.0	2.1	ug/L			11/29/17 06:07	1

Received 11/8/18

Client Sample ID: MW-2 (112717)

Lab Sample ID: 480-128035-4
Matrix: Water

Date Collected: 11/27/17 14:40
Date Received: 11/28/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*UJ	10	3.0	ug/L			11/29/17 06:07	1
Benzene	ND		1.0	0.41	ug/L			11/29/17 06:07	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/29/17 06:07	1
Bromoform	ND		1.0	0.26	ug/L			11/29/17 06:07	1
Bromomethane	ND		1.0	0.69	ug/L			11/29/17 06:07	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/29/17 06:07	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/29/17 06:07	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/29/17 06:07	1
Chloroethane	ND		1.0	0.32	ug/L			11/29/17 06:07	1
Chloroform	ND		1.0	0.34	ug/L			11/29/17 06:07	1
Chloromethane	ND		1.0	0.35	ug/L			11/29/17 06:07	1
cis-1,2-Dichloroethene	**16**		1.0	0.81	ug/L			11/29/17 06:07	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/29/17 06:07	1
Cyclohexane	ND		1.0	0.18	ug/L			11/29/17 06:07	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/29/17 06:07	1
Dichlorodifluoromethane	ND	UJ	1.0	0.68	ug/L			11/29/17 06:07	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/29/17 06:07	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/29/17 06:07	1
Methyl acetate	ND		2.5	1.3	ug/L			11/29/17 06:07	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/29/17 06:07	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/29/17 06:07	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/29/17 06:07	1
Styrene	ND		1.0	0.73	ug/L			11/29/17 06:07	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/29/17 06:07	1
Toluene	ND		1.0	0.51	ug/L			11/29/17 06:07	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/29/17 06:07	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/29/17 06:07	1
Trichloroethene	ND		1.0	0.46	ug/L			11/29/17 06:07	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/29/17 06:07	1
Vinyl chloride	**35**		1.0	0.90	ug/L			11/29/17 06:07	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/29/17 06:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*11/29/17 06:07*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*11/29/17 06:07*	*1*
Dibromofluoromethane (Surr)	*87*		*75 - 123*		*11/29/17 06:07*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*11/29/17 06:07*	*1*

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-128035-5
Matrix: Water

Date Collected: 11/27/17 00:00
Date Received: 11/28/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			11/29/17 06:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			11/29/17 06:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			11/29/17 06:34	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			11/29/17 06:34	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			11/29/17 06:34	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			11/29/17 06:34	1

Client Sample ID: TRIP BLANK

Date Collected: 11/27/17 00:00
Date Received: 11/28/17 01:00

Lab Sample ID: 480-128035-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			11/29/17 06:34	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			11/29/17 06:34	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			11/29/17 06:34	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			11/29/17 06:34	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			11/29/17 06:34	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			11/29/17 06:34	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			11/29/17 06:34	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			11/29/17 06:34	1
2-Butanone (MEK)	ND		10	1.3	ug/L			11/29/17 06:34	1
2-Hexanone	ND	*	5.0	1.2	ug/L			11/29/17 06:34	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			11/29/17 06:34	1
Acetone	ND	*	10	3.0	ug/L			11/29/17 06:34	1
Benzene	ND		1.0	0.41	ug/L			11/29/17 06:34	1
Bromodichloromethane	ND		1.0	0.39	ug/L			11/29/17 06:34	1
Bromoform	ND		1.0	0.26	ug/L			11/29/17 06:34	1
Bromomethane	ND		1.0	0.69	ug/L			11/29/17 06:34	1
Carbon disulfide	ND		1.0	0.19	ug/L			11/29/17 06:34	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			11/29/17 06:34	1
Chlorobenzene	ND		1.0	0.75	ug/L			11/29/17 06:34	1
Chloroethane	ND		1.0	0.32	ug/L			11/29/17 06:34	1
Chloroform	ND		1.0	0.34	ug/L			11/29/17 06:34	1
Chloromethane	ND		1.0	0.35	ug/L			11/29/17 06:34	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			11/29/17 06:34	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			11/29/17 06:34	1
Cyclohexane	ND		1.0	0.18	ug/L			11/29/17 06:34	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/29/17 06:34	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			11/29/17 06:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			11/29/17 06:34	1
Isopropylbenzene	ND		1.0	0.79	ug/L			11/29/17 06:34	1
Methyl acetate	ND		2.5	1.3	ug/L			11/29/17 06:34	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			11/29/17 06:34	1
Methylcyclohexane	ND		1.0	0.16	ug/L			11/29/17 06:34	1
Methylene Chloride	ND		1.0	0.44	ug/L			11/29/17 06:34	1
Styrene	ND		1.0	0.73	ug/L			11/29/17 06:34	1
Tetrachloroethene	ND		1.0	0.36	ug/L			11/29/17 06:34	1
Toluene	ND		1.0	0.51	ug/L			11/29/17 06:34	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			11/29/17 06:34	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			11/29/17 06:34	1
Trichloroethene	ND		1.0	0.46	ug/L			11/29/17 06:34	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			11/29/17 06:34	1
Vinyl chloride	ND		1.0	0.90	ug/L			11/29/17 06:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			11/29/17 06:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*11/29/17 06:34*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*11/29/17 06:34*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*11/29/17 06:34*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/29/17 06:34*	*1*

Appendix B
Laboratory Case Narrative

Job Narrative
480-128035-1

Receipt
The samples were received on 11/28/2017 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-389496 recovered above the upper control limit for 2-Hexanone and 4-Methyl-2-pentanone (MIBK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-12 (112717) (480-128035-1), MW-4 (112717) (480-128035-2), MW-6R (112717) (480-128035-3), MW-2 (112717) (480-128035-4) and TRIP BLANK (480-128035-5).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-389496 recovered above the upper control limit for 2-Butanone (MEK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-12 (112717) (480-128035-1), MW-4 (112717) (480-128035-2), MW-6R (112717) (480-128035-3), MW-2 (112717) (480-128035-4) and TRIP BLANK (480-128035-5).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-389496 recovered outside control limits for the following analytes: 2-Hexanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-12 (112717) (480-128035-1), MW-4 (112717) (480-128035-2), MW-6R (112717) (480-128035-3), MW-2 (112717) (480-128035-4) and TRIP BLANK (480-128035-5).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-389496 recovered outside control limits for the following analytes: Acetone. These analytes were biased high in the LCS and were not detected or below the reporting limit (RL) in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-12 (112717) (480-128035-1), MW-4 (112717) (480-128035-2), MW-6R (112717) (480-128035-3), MW-2 (112717) (480-128035-4) and TRIP BLANK (480-128035-5).

Method(s) 8260C: 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: MW-4 (112717) (480-128035-2). The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-6R (112717) (480-128035-3), (480-128035-B-3 MS) and (480-128035-B-3 MSD). 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.

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

480501-Albany

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-128035 COC

Client Information	Sampler: A. Thomas + E. Sousa	Lab PM: Deyo, Melissa L	Carr	COC No: 480-104680-24764.1
Client Contact: Stefan Bagnato	Phone: (518) 396-7296	E-Mail: melissa.deyo@testamericainc.com		Page: Page 1 of 3
Company: ARCADIS U.S. Inc				Job #:
Address: 855 Route 146 Suite 210	Due Date Requested:	Analysis Requested		Preservation Codes:
City: Clifton Park	TAT Requested (days): Standard			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify) Other:
State, Zip: NY, 12065				
Phone: (518) 250-7300	PO #: 00266444.0000			
Email: Stefan.Bagnato@arcadis.com	WO #:			
Project Name: NYSDEC - 222 South Ferry St Site - Schen	Project #: 48017030			
Site: 222 South Ferry St.	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	PFC_IDA - 6 PFAAs including PFOA/ PFOS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
MW-12 (112717)	11-27-17	1325	G	Water	N	N	X		3	
MW-4 (112717)	11-27-17	1310	G	Water	N	N	X		3	
MW-LOR(112717)	11-27-17	1435	G	Water	N	N	X		3	
MW-2 (112717)	11-27-17	1440	G	Water	N	N	X		3	
Trip Blank	—	—	—	Water	N	N	X		2	
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

11-27-17

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11-27-17 1535	Arcadis		11-27-17 1535	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11-27-17 1800	TA		11-28-17 0100	TAS
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:
		1.0 #1

Ver: 08/04/2016

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-128035-1

Login Number: 128035
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

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

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY:	ARCADIS U.S., Inc.
SITE NAME:	222 South Ferry Street
CONTRACTED LAB:	TestAmerica-Buffalo
QA/QC LEVEL:	DUSR
EPA SOW/METHODS:	SW-846
VALIDATION GUIDELINES:	USEPA Region II data validation SOPs
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	Volatile Organics (VOA), Fluorinated Hydrocarbons

SDG NUMBER: 480-128081-1

SAMPLES:

Client Sample #	Lab Sample #	Matrix	VOA	Fluorinated Hydrocarbons
MW-8 (112817)	480-128081-1	Water	X	X
EB-01	480-128081-2	Water		X
EB-02	480-128081-3	Water		X
TRIP BLANK	480-128081-4	Water	X	
MW-13 (112817)	480-128081-5	Water	X	X
MW-10 (112817)	480-128081-6	Water	X	X
DUP-01 (112817)	480-128081-7	Water	X	X
MW-16 (112817)	480-128081-8	Water	X	
MW-15 (112817)	480-128081-9	Water	X	
MW-17 (112817)	480-128081-10	Water	X	
MW-14 (112817)	480-128081-11	Water	X	
MW-5 (112817)	480-128081-12	Water	X	X
MW-1 (112817)	480-128081-13	Water	X	X
MW-13 (112817)MS	480-128081-5MS	Water	X	X
MW-13 (112817)MSD	480-128081-5MSD	Water	X	X

SUFFIX CODES: MD = MATRIX DUPLICATE, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE

DATA REVIEWER(S): Amy L. Hogan, Martha McGee

SECONDARY REVIEWER(S): Kevin C. Harmon

Data Qualifier Definitions

J	-	The associated numerical value is an estimated quantity.
JN	-	The compound/analyte was tentatively identified with estimated concentration.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA USABILITY SUMMARY

TestAmerica-Buffalo – 480-128081-1 – Organics

VOLATILE ORGANICS

SUMMARY

I.) General:

The analyses for Volatile Organics were performed by GC / MS according to SW-846 Method 8260C.

II.) Overall Assessment of Data:

All laboratory data were acceptable without qualification.

III.) Holding Times:

All Holding Time criteria were met. No data qualification was required.

IV.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Continuing Calibration:

All Continuing Calibration criteria were met. No data qualification was necessary.

VI.) Blanks:

Method Blanks:

There were no detections in the method blank associated with this SDG. No data qualification was necessary.

Trip Blank:

There were no detections in the trip blank associated with this SDG. No data qualification was necessary.

Tentatively Identified Compounds (TIC):

There were no TIC detections reported in the blanks associated with this SDG. No data qualification was required.

VII.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No data qualification was required.

VIII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this fraction of the SDG. All criteria were met. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed on SDG samples MW-13 (112817). All MS / MSD criteria were met. No data qualification was necessary.

X.) Field Duplicates:

One set of field duplicates (MW-10 (112817) / DUP-01) was identified in this SDG. The calculable Relative Percent Differences (RPDs) were 14.8% for cis-1,2-dichloroethane and 19.4% for vinyl chloride, which were within the advisory 30% QC limit for water samples. No data qualification was necessary.

XI.) Internal Standards Performance (ISTD):

All ISTD criteria were met. No data qualification was necessary.

XII.) TCL Compound Identification:

All sample data were reported in accordance with the cited method.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No data qualification was necessary.

FLUORINATED HYDROCARBONS

SUMMARY

I.) General:

The analyses for Fluorinated Hydrocarbons were performed by LCMS according to EPA Method 537.

II.) Overall Assessment of Data:

All laboratory data were acceptable with qualification.

III.) Holding Times:

All Holding Time criteria were met. No data qualification was necessary.

IV.) Instrument Performance:

All Instrument Performance criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Continuing Calibration:

All Continuing Calibration criteria were met. No data qualification was necessary.

VI.) Blanks:

Method Blanks:

Perfluorohexanesulfonic acid and perfluorobutanoic acid were detected at 0.314 ng/L and 0.572 ng/L, respectively, in method blank 320-197584. All positive results for perfluorohexanesulfonic acid in the SDG samples which were less than the CRQL were qualified as undetected (U) with the result being raised to the CRQL. All results for perfluorobutanoic acid in the samples were greater than the CRQL, so no further data qualification was necessary.

Equipment Blanks:

Perfluorohexanesulfonic acid was detected in associated equipment blanks at 0.26 ng/L in EB-01 and at 0.30 ng/L in EB-02. All positive results for this compound in the SDG samples which were less than the CRQL were qualified as undetected (U) with the result being raised to the CRQL.

Perfluorobutanoic acid was detected in associated equipment blanks 0.57 ng/L in EB-01 and 0.50 ng/L in EB-02. Since all sample results for this compound were greater than the CRQL, no data qualification was necessary.

VII.) Surrogate Recoveries:

The Percent Recoveries (%R's) for M2-8:2FTS exceeded the 25-150% QC limits for the following samples:

MW-8	180%
EB-01	155%
MW-10	167%
DUP-01	158%
MW-5	168%
MW-1	161%

Since only one %R for each sample exceeded the QC limits, no data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this fraction of the SDG. All criteria were met. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed on SDG sample MW-13 (112817). All MS / MSD criteria were met. No data qualification was necessary.

X.) Field Duplicates:

One set of field duplicates (MW-10 (112817)/ DUP-01) was identified in this SDG. The only calculable Relative Percent Difference (RPD) was 0% for perfluorobutanoic acid, which was within the advisory 30% QC limit for water samples. No data qualification was necessary.

XI.) TCL Compound Identification:

All sample data were reported in accordance with the cited method.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No data qualification was necessary.

Appendix A
Qualified Form Is

Client Sample ID: MW-8 (112817)

Date Collected: 11/28/17 09:55
Date Received: 11/29/17 01:00

Lab Sample ID: 480-128081-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		400	330	ug/L			12/06/17 21:02	400
1,1,2,2-Tetrachloroethane	ND		400	84	ug/L			12/06/17 21:02	400
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		400	120	ug/L			12/06/17 21:02	400
1,1,2-Trichloroethane	ND		400	92	ug/L			12/06/17 21:02	400
1,1-Dichloroethane	ND		400	150	ug/L			12/06/17 21:02	400
1,1-Dichloroethene	ND		400	120	ug/L			12/06/17 21:02	400
1,2,4-Trichlorobenzene	ND		400	160	ug/L			12/06/17 21:02	400
1,2-Dibromo-3-Chloropropane	ND		400	160	ug/L			12/06/17 21:02	400
1,2-Dibromoethane	ND		400	290	ug/L			12/06/17 21:02	400
1,2-Dichlorobenzene	ND		400	320	ug/L			12/06/17 21:02	400
1,2-Dichloroethane	ND		400	84	ug/L			12/06/17 21:02	400
1,2-Dichloropropane	ND		400	290	ug/L			12/06/17 21:02	400
1,3-Dichlorobenzene	ND		400	310	ug/L			12/06/17 21:02	400
1,4-Dichlorobenzene	ND		400	340	ug/L			12/06/17 21:02	400
2-Butanone (MEK)	ND		4000	530	ug/L			12/06/17 21:02	400
2-Hexanone	ND		2000	500	ug/L			12/06/17 21:02	400
4-Methyl-2-pentanone (MIBK)	ND		2000	840	ug/L			12/06/17 21:02	400
Acetone	ND		4000	1200	ug/L			12/06/17 21:02	400
Benzene	ND		400	160	ug/L			12/06/17 21:02	400
Bromodichloromethane	ND		400	160	ug/L			12/06/17 21:02	400
Bromoform	ND		400	100	ug/L			12/06/17 21:02	400
Bromomethane	ND		400	280	ug/L			12/06/17 21:02	400
Carbon disulfide	ND		400	76	ug/L			12/06/17 21:02	400
Carbon tetrachloride	ND		400	110	ug/L			12/06/17 21:02	400
Chlorobenzene	ND		400	300	ug/L			12/06/17 21:02	400
Chloroethane	ND		400	130	ug/L			12/06/17 21:02	400
Chloroform	ND		400	140	ug/L			12/06/17 21:02	400
Chloromethane	ND		400	140	ug/L			12/06/17 21:02	400
cis-1,2-Dichloroethene	**24000**		400	320	ug/L			12/06/17 21:02	400
cis-1,3-Dichloropropene	ND		400	140	ug/L			12/06/17 21:02	400
Cyclohexane	ND		400	72	ug/L			12/06/17 21:02	400
Dibromochloromethane	ND		400	130	ug/L			12/06/17 21:02	400
Dichlorodifluoromethane	ND		400	270	ug/L			12/06/17 21:02	400
Ethylbenzene	ND		400	300	ug/L			12/06/17 21:02	400
Isopropylbenzene	ND		400	320	ug/L			12/06/17 21:02	400
Methyl acetate	ND		1000	520	ug/L			12/06/17 21:02	400
Methyl tert-butyl ether	ND		400	64	ug/L			12/06/17 21:02	400
Methylcyclohexane	ND		400	64	ug/L			12/06/17 21:02	400
Methylene Chloride	ND		400	180	ug/L			12/06/17 21:02	400
Styrene	ND		400	290	ug/L			12/06/17 21:02	400
Tetrachloroethene	ND		400	140	ug/L			12/06/17 21:02	400
Toluene	ND		400	200	ug/L			12/06/17 21:02	400
trans-1,2-Dichloroethene	ND		400	360	ug/L			12/06/17 21:02	400
trans-1,3-Dichloropropene	ND		400	150	ug/L			12/06/17 21:02	400
Trichloroethene	ND		400	180	ug/L			12/06/17 21:02	400
Trichlorofluoromethane	ND		400	350	ug/L			12/06/17 21:02	400
Vinyl chloride	**19000**		400	360	ug/L			12/06/17 21:02	400
Xylenes, Total	ND		800	260	ug/L			12/06/17 21:02	400

Client Sample ID: MW-8 (112817)

Lab Sample ID: 480-128081-1
Matrix: Water
Date Collected: 11/28/17 09:55
Date Received: 11/29/17 01:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		12/06/17 21:02	400
4-Bromofluorobenzene (Surr)	98		73 - 120		12/06/17 21:02	400
Dibromofluoromethane (Surr)	98		75 - 123		12/06/17 21:02	400
Toluene-d8 (Surr)	99		80 - 120		12/06/17 21:02	400

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/30/17 12:43	12/05/17 01:15	1
Perfluoroheptanoic acid (PFHpA)	**0.55**	**J**	2.0	0.25	ng/L		11/30/17 12:43	12/05/17 01:15	1
Perfluorohexanesulfonic acid (PFHxS)	2.0 ~~1.7 J B~~ U		2.0	0.17	ng/L		11/30/17 12:43	12/05/17 01:15	1
Perfluorononanoic acid (PFNA)	**0.31**	**J**	2.0	0.27	ng/L		11/30/17 12:43	12/05/17 01:15	1
Perfluorooctanesulfonic acid (PFOS)	**3.1**		2.0	0.53	ng/L		11/30/17 12:43	12/05/17 01:15	1
Perfluorooctanoic acid (PFOA)	**2.4**		2.0	0.84	ng/L		11/30/17 12:43	12/05/17 01:15	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	93		25 - 150	11/30/17 12:43	12/05/17 01:15	1
13C4 PFOA	91		25 - 150	11/30/17 12:43	12/05/17 01:15	1
13C4 PFOS	89		25 - 150	11/30/17 12:43	12/05/17 01:15	1
13C4-PFHpA	96		25 - 150	11/30/17 12:43	12/05/17 01:15	1
13C5 PFNA	96		25 - 150	11/30/17 12:43	12/05/17 01:15	1
18O2 PFHxS	91		25 - 150	11/30/17 12:43	12/05/17 01:15	1

Client Sample ID: EB-01

Lab Sample ID: 480-128081-2
Matrix: Water
Date Collected: 11/28/17 08:25
Date Received: 11/29/17 01:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/30/17 12:43	12/05/17 01:23	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/30/17 12:43	12/05/17 01:23	1
Perfluorohexanesulfonic acid (PFHxS)	**0.26**	**J B**	2.0	0.17	ng/L		11/30/17 12:43	12/05/17 01:23	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/30/17 12:43	12/05/17 01:23	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/30/17 12:43	12/05/17 01:23	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.86	ng/L		11/30/17 12:43	12/05/17 01:23	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	90		25 - 150	11/30/17 12:43	12/05/17 01:23	1
13C4 PFOA	85		25 - 150	11/30/17 12:43	12/05/17 01:23	1
13C4 PFOS	89		25 - 150	11/30/17 12:43	12/05/17 01:23	1
13C4-PFHpA	98		25 - 150	11/30/17 12:43	12/05/17 01:23	1
13C5 PFNA	93		25 - 150	11/30/17 12:43	12/05/17 01:23	1
18O2 PFHxS	95		25 - 150	11/30/17 12:43	12/05/17 01:23	1

Client Sample ID: EB-02

Lab Sample ID: 480-128081-3
Matrix: Water
Date Collected: 11/28/17 08:25
Date Received: 11/29/17 01:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/30/17 12:43	12/05/17 01:31	1

11/15/18

Client Sample ID: EB-02

Lab Sample ID: 480-128081-3

Date Collected: 11/28/17 08:25
Matrix: Water
Date Received: 11/29/17 01:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/30/17 12:43	12/05/17 01:31	1
Perfluorohexanesulfonic acid (PFHxS)	**0.30**	**J B**	2.0	0.17	ng/L		11/30/17 12:43	12/05/17 01:31	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/30/17 12:43	12/05/17 01:31	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/30/17 12:43	12/05/17 01:31	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		11/30/17 12:43	12/05/17 01:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*90*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:31*	*1*
13C4 PFOA	*84*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:31*	*1*
13C4 PFOS	*88*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:31*	*1*
13C4-PFHpA	*94*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:31*	*1*
13C5 PFNA	*93*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:31*	*1*
18O2 PFHxS	*93*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:31*	*1*

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-128081-4

Date Collected: 11/28/17 00:00
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/06/17 21:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/06/17 21:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/06/17 21:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/06/17 21:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/06/17 21:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/06/17 21:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/06/17 21:30	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/06/17 21:30	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/06/17 21:30	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/06/17 21:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/06/17 21:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/06/17 21:30	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/06/17 21:30	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/06/17 21:30	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/06/17 21:30	1
2-Hexanone	ND		5.0	1.2	ug/L			12/06/17 21:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/06/17 21:30	1
Acetone	ND		10	3.0	ug/L			12/06/17 21:30	1
Benzene	ND		1.0	0.41	ug/L			12/06/17 21:30	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/06/17 21:30	1
Bromoform	ND		1.0	0.26	ug/L			12/06/17 21:30	1
Bromomethane	ND		1.0	0.69	ug/L			12/06/17 21:30	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/06/17 21:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/06/17 21:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/06/17 21:30	1
Chloroethane	ND		1.0	0.32	ug/L			12/06/17 21:30	1
Chloroform	ND		1.0	0.34	ug/L			12/06/17 21:30	1
Chloromethane	ND		1.0	0.35	ug/L			12/06/17 21:30	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/06/17 21:30	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/06/17 21:30	1

Client Sample ID: TRIP BLANKS

Lab Sample ID: 480-128081-4
Matrix: Water
Date Collected: 11/28/17 00:00
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0	0.18	ug/L			12/06/17 21:30	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/06/17 21:30	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/06/17 21:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/06/17 21:30	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/06/17 21:30	1
Methyl acetate	ND		2.5	1.3	ug/L			12/06/17 21:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/06/17 21:30	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/06/17 21:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/06/17 21:30	1
Styrene	ND		1.0	0.73	ug/L			12/06/17 21:30	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/06/17 21:30	1
Toluene	ND		1.0	0.51	ug/L			12/06/17 21:30	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/06/17 21:30	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/06/17 21:30	1
Trichloroethene	ND		1.0	0.46	ug/L			12/06/17 21:30	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/06/17 21:30	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/06/17 21:30	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/06/17 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*12/06/17 21:30*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*12/06/17 21:30*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*12/06/17 21:30*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/06/17 21:30*	*1*

Client Sample ID: MW-13 (112817)

Lab Sample ID: 480-128081-5
Matrix: Water
Date Collected: 11/28/17 11:05
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/06/17 21:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/06/17 21:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/06/17 21:57	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/06/17 21:57	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/06/17 21:57	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/06/17 21:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/06/17 21:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/06/17 21:57	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/06/17 21:57	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/06/17 21:57	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/06/17 21:57	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/06/17 21:57	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/06/17 21:57	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/06/17 21:57	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/06/17 21:57	1
2-Hexanone	ND		5.0	1.2	ug/L			12/06/17 21:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/06/17 21:57	1
Acetone	**3.3**	**J**	10	3.0	ug/L			12/06/17 21:57	1
Benzene	ND		1.0	0.41	ug/L			12/06/17 21:57	1

Client Sample ID: MW-13 (112817)

Date Collected: 11/28/17 11:05
Date Received: 11/29/17 01:00

Lab Sample ID: 480-128081-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.39	ug/L			12/06/17 21:57	1
Bromoform	ND		1.0	0.26	ug/L			12/06/17 21:57	1
Bromomethane	ND		1.0	0.69	ug/L			12/06/17 21:57	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/06/17 21:57	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/06/17 21:57	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/06/17 21:57	1
Chloroethane	ND		1.0	0.32	ug/L			12/06/17 21:57	1
Chloroform	ND		1.0	0.34	ug/L			12/06/17 21:57	1
Chloromethane	ND		1.0	0.35	ug/L			12/06/17 21:57	1
cis-1,2-Dichloroethene	**12**		1.0	0.81	ug/L			12/06/17 21:57	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/06/17 21:57	1
Cyclohexane	ND		1.0	0.18	ug/L			12/06/17 21:57	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/06/17 21:57	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/06/17 21:57	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/06/17 21:57	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/06/17 21:57	1
Methyl acetate	ND		2.5	1.3	ug/L			12/06/17 21:57	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/06/17 21:57	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/06/17 21:57	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/06/17 21:57	1
Styrene	ND		1.0	0.73	ug/L			12/06/17 21:57	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/06/17 21:57	1
Toluene	ND		1.0	0.51	ug/L			12/06/17 21:57	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/06/17 21:57	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/06/17 21:57	1
Trichloroethene	ND		1.0	0.46	ug/L			12/06/17 21:57	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/06/17 21:57	1
Vinyl chloride	**37**		1.0	0.90	ug/L			12/06/17 21:57	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/06/17 21:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*12/06/17 21:57*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*12/06/17 21:57*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*12/06/17 21:57*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*12/06/17 21:57*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/30/17 12:43	12/05/17 01:39	1
Perfluoroheptanoic acid (PFHpA)	**0.39**	**J**	2.0	0.25	ng/L		11/30/17 12:43	12/05/17 01:39	1
Perfluorohexanesulfonic acid (PFHxS)	J.U ~~0.42 J B~~ U		2.0	0.17	ng/L		11/30/17 12:43	12/05/17 01:39	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/30/17 12:43	12/05/17 01:39	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		11/30/17 12:43	12/05/17 01:39	1
Perfluorooctanoic acid (PFOA)	**1.6**	**J**	2.0	0.84	ng/L		11/30/17 12:43	12/05/17 01:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*87*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:39*	*1*
13C4 PFOA	*83*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:39*	*1*
13C4 PFOS	*88*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:39*	*1*
13C4-PFHpA	*91*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:39*	*1*

Client Sample ID: MW-13 (112817)

Lab Sample ID: 480-128081-5

Date Collected: 11/28/17 11:05
Matrix: Water
Date Received: 11/29/17 01:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C5 PFNA	*91*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:39*	*1*
18O2 PFHxS	*95*		*25 - 150*	*11/30/17 12:43*	*12/05/17 01:39*	*1*

Client Sample ID: MW-10 (112817)

Lab Sample ID: 480-128081-6

Date Collected: 11/28/17 12:40
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			12/06/17 22:25	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			12/06/17 22:25	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			12/06/17 22:25	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			12/06/17 22:25	10
1,1-Dichloroethane	ND		10	3.8	ug/L			12/06/17 22:25	10
1,1-Dichloroethene	**4.7**	**J**	10	2.9	ug/L			12/06/17 22:25	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			12/06/17 22:25	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			12/06/17 22:25	10
1,2-Dibromoethane	ND		10	7.3	ug/L			12/06/17 22:25	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			12/06/17 22:25	10
1,2-Dichloroethane	ND		10	2.1	ug/L			12/06/17 22:25	10
1,2-Dichloropropane	ND		10	7.2	ug/L			12/06/17 22:25	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			12/06/17 22:25	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			12/06/17 22:25	10
2-Butanone (MEK)	ND		100	13	ug/L			12/06/17 22:25	10
2-Hexanone	ND		50	12	ug/L			12/06/17 22:25	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			12/06/17 22:25	10
Acetone	ND		100	30	ug/L			12/06/17 22:25	10
Benzene	ND		10	4.1	ug/L			12/06/17 22:25	10
Bromodichloromethane	ND		10	3.9	ug/L			12/06/17 22:25	10
Bromoform	ND		10	2.6	ug/L			12/06/17 22:25	10
Bromomethane	ND		10	6.9	ug/L			12/06/17 22:25	10
Carbon disulfide	ND		10	1.9	ug/L			12/06/17 22:25	10
Carbon tetrachloride	ND		10	2.7	ug/L			12/06/17 22:25	10
Chlorobenzene	ND		10	7.5	ug/L			12/06/17 22:25	10
Chloroethane	ND		10	3.2	ug/L			12/06/17 22:25	10
Chloroform	ND		10	3.4	ug/L			12/06/17 22:25	10
Chloromethane	ND		10	3.5	ug/L			12/06/17 22:25	10
cis-1,2-Dichloroethene	**250**		10	8.1	ug/L			12/06/17 22:25	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			12/06/17 22:25	10
Cyclohexane	ND		10	1.8	ug/L			12/06/17 22:25	10
Dibromochloromethane	ND		10	3.2	ug/L			12/06/17 22:25	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			12/06/17 22:25	10
Ethylbenzene	ND		10	7.4	ug/L			12/06/17 22:25	10
Isopropylbenzene	ND		10	7.9	ug/L			12/06/17 22:25	10
Methyl acetate	ND		25	13	ug/L			12/06/17 22:25	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			12/06/17 22:25	10
Methylcyclohexane	ND		10	1.6	ug/L			12/06/17 22:25	10
Methylene Chloride	ND		10	4.4	ug/L			12/06/17 22:25	10
Styrene	ND		10	7.3	ug/L			12/06/17 22:25	10
Tetrachloroethene	ND		10	3.6	ug/L			12/06/17 22:25	10

Client Sample ID: MW-10 (112817)

Lab Sample ID: 480-128081-6

Date Collected: 11/28/17 12:40
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		10	5.1	ug/L			12/06/17 22:25	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			12/06/17 22:25	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			12/06/17 22:25	10
Trichloroethene	ND		10	4.6	ug/L			12/06/17 22:25	10
Trichlorofluoromethane	ND		10	8.8	ug/L			12/06/17 22:25	10
Vinyl chloride	**280**		10	9.0	ug/L			12/06/17 22:25	10
Xylenes, Total	ND		20	6.6	ug/L			12/06/17 22:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*12/06/17 22:25*	*10*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*12/06/17 22:25*	*10*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*12/06/17 22:25*	*10*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/06/17 22:25*	*10*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.1	0.21	ng/L		11/30/17 12:43	12/05/17 02:03	1
Perfluoroheptanoic acid (PFHpA)	ND		2.1	0.26	ng/L		11/30/17 12:43	12/05/17 02:03	1
Perfluorohexanesulfonic acid (PFHxS)	2.1 ~~0.51~~ J B U		2.1	0.17	ng/L		11/30/17 12:43	12/05/17 02:03	1
Perfluorononanoic acid (PFNA)	ND		2.1	0.28	ng/L		11/30/17 12:43	12/05/17 02:03	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.1	0.55	ng/L		11/30/17 12:43	12/05/17 02:03	1
Perfluorooctanoic acid (PFOA)	**1.1**	J	2.1	0.87	ng/L		11/30/17 12:43	12/05/17 02:03	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*90*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:03*	*1*
13C4 PFOA	*84*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:03*	*1*
13C4 PFOS	*88*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:03*	*1*
13C4-PFHpA	*92*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:03*	*1*
13C5 PFNA	*91*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:03*	*1*
18O2 PFHxS	*89*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:03*	*1*

Client Sample ID: DUP-01 (112817)

Lab Sample ID: 480-128081-7

Date Collected: 11/28/17 00:00
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			12/06/17 22:52	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			12/06/17 22:52	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			12/06/17 22:52	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			12/06/17 22:52	10
1,1-Dichloroethane	ND		10	3.8	ug/L			12/06/17 22:52	10
1,1-Dichloroethene	ND		10	2.9	ug/L			12/06/17 22:52	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			12/06/17 22:52	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			12/06/17 22:52	10
1,2-Dibromoethane	ND		10	7.3	ug/L			12/06/17 22:52	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			12/06/17 22:52	10
1,2-Dichloroethane	ND		10	2.1	ug/L			12/06/17 22:52	10
1,2-Dichloropropane	ND		10	7.2	ug/L			12/06/17 22:52	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			12/06/17 22:52	10

Client Sample ID: DUP-01 (112817)

Date Collected: 11/28/17 00:00
Date Received: 11/29/17 01:00

Lab Sample ID: 480-128081-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		10	8.4	ug/L			12/06/17 22:52	10
2-Butanone (MEK)	ND		100	13	ug/L			12/06/17 22:52	10
2-Hexanone	ND		50	12	ug/L			12/06/17 22:52	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			12/06/17 22:52	10
Acetone	ND		100	30	ug/L			12/06/17 22:52	10
Benzene	ND		10	4.1	ug/L			12/06/17 22:52	10
Bromodichloromethane	ND		10	3.9	ug/L			12/06/17 22:52	10
Bromoform	ND		10	2.6	ug/L			12/06/17 22:52	10
Bromomethane	ND		10	6.9	ug/L			12/06/17 22:52	10
Carbon disulfide	ND		10	1.9	ug/L			12/06/17 22:52	10
Carbon tetrachloride	ND		10	2.7	ug/L			12/06/17 22:52	10
Chlorobenzene	ND		10	7.5	ug/L			12/06/17 22:52	10
Chloroethane	ND		10	3.2	ug/L			12/06/17 22:52	10
Chloroform	ND		10	3.4	ug/L			12/06/17 22:52	10
Chloromethane	ND		10	3.5	ug/L			12/06/17 22:52	10
cis-1,2-Dichloroethene	**290**		10	8.1	ug/L			12/06/17 22:52	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			12/06/17 22:52	10
Cyclohexane	ND		10	1.8	ug/L			12/06/17 22:52	10
Dibromochloromethane	ND		10	3.2	ug/L			12/06/17 22:52	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			12/06/17 22:52	10
Ethylbenzene	ND		10	7.4	ug/L			12/06/17 22:52	10
Isopropylbenzene	ND		10	7.9	ug/L			12/06/17 22:52	10
Methyl acetate	ND		25	13	ug/L			12/06/17 22:52	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			12/06/17 22:52	10
Methylcyclohexane	ND		10	1.6	ug/L			12/06/17 22:52	10
Methylene Chloride	ND		10	4.4	ug/L			12/06/17 22:52	10
Styrene	ND		10	7.3	ug/L			12/06/17 22:52	10
Tetrachloroethene	ND		10	3.6	ug/L			12/06/17 22:52	10
Toluene	ND		10	5.1	ug/L			12/06/17 22:52	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			12/06/17 22:52	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			12/06/17 22:52	10
Trichloroethene	ND		10	4.6	ug/L			12/06/17 22:52	10
Trichlorofluoromethane	ND		10	8.8	ug/L			12/06/17 22:52	10
Vinyl chloride	**340**		10	9.0	ug/L			12/06/17 22:52	10
Xylenes, Total	ND		20	6.6	ug/L			12/06/17 22:52	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*12/06/17 22:52*	*10*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*12/06/17 22:52*	*10*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*12/06/17 22:52*	*10*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/06/17 22:52*	*10*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/30/17 12:43	12/05/17 02:10	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.25	ng/L		11/30/17 12:43	12/05/17 02:10	1
Perfluorohexanesulfonic acid (PFHxS)	J.0	~~0.36 J B~~ U	2.0	0.17	ng/L		11/30/17 12:43	12/05/17 02:10	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		11/30/17 12:43	12/05/17 02:10	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.55	ng/L		11/30/17 12:43	12/05/17 02:10	1

11/5/18

Client Sample ID: DUP-01 (112817)

Lab Sample ID: 480-128081-7
Matrix: Water
Date Collected: 11/28/17 00:00
Date Received: 11/29/17 01:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	0.94	J	2.0	0.87	ng/L		11/30/17 12:43	12/05/17 02:10	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*88*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:10*	*1*
13C4 PFOA	*83*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:10*	*1*
13C4 PFOS	*85*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:10*	*1*
13C4-PFHpA	*88*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:10*	*1*
13C5 PFNA	*87*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:10*	*1*
18O2 PFHxS	*90*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:10*	*1*

Client Sample ID: MW-16 (112817)

Lab Sample ID: 480-128081-8
Matrix: Water
Date Collected: 11/28/17 09:55
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			12/06/17 23:20	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			12/06/17 23:20	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			12/06/17 23:20	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			12/06/17 23:20	10
1,1-Dichloroethane	ND		10	3.8	ug/L			12/06/17 23:20	10
1,1-Dichloroethene	ND		10	2.9	ug/L			12/06/17 23:20	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			12/06/17 23:20	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			12/06/17 23:20	10
1,2-Dibromoethane	ND		10	7.3	ug/L			12/06/17 23:20	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			12/06/17 23:20	10
1,2-Dichloroethane	ND		10	2.1	ug/L			12/06/17 23:20	10
1,2-Dichloropropane	ND		10	7.2	ug/L			12/06/17 23:20	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			12/06/17 23:20	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			12/06/17 23:20	10
2-Butanone (MEK)	ND		100	13	ug/L			12/06/17 23:20	10
2-Hexanone	ND		50	12	ug/L			12/06/17 23:20	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			12/06/17 23:20	10
Acetone	ND		100	30	ug/L			12/06/17 23:20	10
Benzene	ND		10	4.1	ug/L			12/06/17 23:20	10
Bromodichloromethane	ND		10	3.9	ug/L			12/06/17 23:20	10
Bromoform	ND		10	2.6	ug/L			12/06/17 23:20	10
Bromomethane	ND		10	6.9	ug/L			12/06/17 23:20	10
Carbon disulfide	ND		10	1.9	ug/L			12/06/17 23:20	10
Carbon tetrachloride	ND		10	2.7	ug/L			12/06/17 23:20	10
Chlorobenzene	ND		10	7.5	ug/L			12/06/17 23:20	10
Chloroethane	ND		10	3.2	ug/L			12/06/17 23:20	10
Chloroform	ND		10	3.4	ug/L			12/06/17 23:20	10
Chloromethane	ND		10	3.5	ug/L			12/06/17 23:20	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			12/06/17 23:20	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			12/06/17 23:20	10
Cyclohexane	ND		10	1.8	ug/L			12/06/17 23:20	10
Dibromochloromethane	ND		10	3.2	ug/L			12/06/17 23:20	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			12/06/17 23:20	10
Ethylbenzene	ND		10	7.4	ug/L			12/06/17 23:20	10

Client Sample ID: MW-16 (112817)

Lab Sample ID: 480-128081-8

Date Collected: 11/28/17 09:55
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		10	7.9	ug/L			12/06/17 23:20	10
Methyl acetate	ND		25	13	ug/L			12/06/17 23:20	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			12/06/17 23:20	10
Methylcyclohexane	ND		10	1.6	ug/L			12/06/17 23:20	10
Methylene Chloride	ND		10	4.4	ug/L			12/06/17 23:20	10
Styrene	ND		10	7.3	ug/L			12/06/17 23:20	10
Tetrachloroethene	ND		10	3.6	ug/L			12/06/17 23:20	10
Toluene	ND		10	5.1	ug/L			12/06/17 23:20	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			12/06/17 23:20	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			12/06/17 23:20	10
Trichloroethene	ND		10	4.6	ug/L			12/06/17 23:20	10
Trichlorofluoromethane	ND		10	8.8	ug/L			12/06/17 23:20	10
Vinyl chloride	ND		10	9.0	ug/L			12/06/17 23:20	10
Xylenes, Total	ND		20	6.6	ug/L			12/06/17 23:20	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*12/06/17 23:20*	*10*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*12/06/17 23:20*	*10*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*12/06/17 23:20*	*10*
Toluene-d8 (Surr)	*101*		*80 - 120*		*12/06/17 23:20*	*10*

Client Sample ID: MW-15 (112817)

Lab Sample ID: 480-128081-9

Date Collected: 11/28/17 10:55
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			12/06/17 23:47	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			12/06/17 23:47	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			12/06/17 23:47	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			12/06/17 23:47	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			12/06/17 23:47	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			12/06/17 23:47	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			12/06/17 23:47	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			12/06/17 23:47	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			12/06/17 23:47	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			12/06/17 23:47	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			12/06/17 23:47	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			12/06/17 23:47	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			12/06/17 23:47	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			12/06/17 23:47	4
2-Butanone (MEK)	ND		40	5.3	ug/L			12/06/17 23:47	4
2-Hexanone	ND		20	5.0	ug/L			12/06/17 23:47	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			12/06/17 23:47	4
Acetone	ND		40	12	ug/L			12/06/17 23:47	4
Benzene	ND		4.0	1.6	ug/L			12/06/17 23:47	4
Bromodichloromethane	ND		4.0	1.6	ug/L			12/06/17 23:47	4
Bromoform	ND		4.0	1.0	ug/L			12/06/17 23:47	4
Bromomethane	ND		4.0	2.8	ug/L			12/06/17 23:47	4
Carbon disulfide	ND		4.0	0.76	ug/L			12/06/17 23:47	4

Client Sample ID: MW-15 (112817)
Lab Sample ID: 480-128081-9

Date Collected: 11/28/17 10:55
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon tetrachloride	ND		4.0	1.1	ug/L			12/06/17 23:47	4
Chlorobenzene	ND		4.0	3.0	ug/L			12/06/17 23:47	4
Chloroethane	ND		4.0	1.3	ug/L			12/06/17 23:47	4
Chloroform	ND		4.0	1.4	ug/L			12/06/17 23:47	4
Chloromethane	ND		4.0	1.4	ug/L			12/06/17 23:47	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			12/06/17 23:47	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			12/06/17 23:47	4
Cyclohexane	ND		4.0	0.72	ug/L			12/06/17 23:47	4
Dibromochloromethane	ND		4.0	1.3	ug/L			12/06/17 23:47	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			12/06/17 23:47	4
Ethylbenzene	ND		4.0	3.0	ug/L			12/06/17 23:47	4
Isopropylbenzene	ND		4.0	3.2	ug/L			12/06/17 23:47	4
Methyl acetate	ND		10	5.2	ug/L			12/06/17 23:47	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			12/06/17 23:47	4
Methylcyclohexane	ND		4.0	0.64	ug/L			12/06/17 23:47	4
Methylene Chloride	ND		4.0	1.8	ug/L			12/06/17 23:47	4
Styrene	ND		4.0	2.9	ug/L			12/06/17 23:47	4
Tetrachloroethene	ND		4.0	1.4	ug/L			12/06/17 23:47	4
Toluene	ND		4.0	2.0	ug/L			12/06/17 23:47	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			12/06/17 23:47	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			12/06/17 23:47	4
Trichloroethene	ND		4.0	1.8	ug/L			12/06/17 23:47	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			12/06/17 23:47	4
Vinyl chloride	ND		4.0	3.6	ug/L			12/06/17 23:47	4
Xylenes, Total	ND		8.0	2.6	ug/L			12/06/17 23:47	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*12/06/17 23:47*	*4*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*12/06/17 23:47*	*4*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*12/06/17 23:47*	*4*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/06/17 23:47*	*4*

Client Sample ID: MW-17 (112817)
Lab Sample ID: 480-128081-10

Date Collected: 11/28/17 12:00
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/07/17 00:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/07/17 00:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/07/17 00:15	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/07/17 00:15	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/07/17 00:15	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/07/17 00:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/07/17 00:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/07/17 00:15	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/07/17 00:15	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/07/17 00:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/07/17 00:15	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/07/17 00:15	1

Client Sample ID: MW-17 (112817)

Lab Sample ID: 480-128081-10

Date Collected: 11/28/17 12:00
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/07/17 00:15	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/07/17 00:15	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/07/17 00:15	1
2-Hexanone	ND		5.0	1.2	ug/L			12/07/17 00:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/07/17 00:15	1
Acetone	ND		10	3.0	ug/L			12/07/17 00:15	1
Benzene	ND		1.0	0.41	ug/L			12/07/17 00:15	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/07/17 00:15	1
Bromoform	ND		1.0	0.26	ug/L			12/07/17 00:15	1
Bromomethane	ND		1.0	0.69	ug/L			12/07/17 00:15	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/07/17 00:15	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/07/17 00:15	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/07/17 00:15	1
Chloroethane	ND		1.0	0.32	ug/L			12/07/17 00:15	1
Chloroform	ND		1.0	0.34	ug/L			12/07/17 00:15	1
Chloromethane	ND		1.0	0.35	ug/L			12/07/17 00:15	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/07/17 00:15	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/07/17 00:15	1
Cyclohexane	ND		1.0	0.18	ug/L			12/07/17 00:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/07/17 00:15	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/07/17 00:15	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/07/17 00:15	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/07/17 00:15	1
Methyl acetate	ND		2.5	1.3	ug/L			12/07/17 00:15	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/07/17 00:15	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/07/17 00:15	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/07/17 00:15	1
Styrene	ND		1.0	0.73	ug/L			12/07/17 00:15	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/07/17 00:15	1
Toluene	ND		1.0	0.51	ug/L			12/07/17 00:15	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/07/17 00:15	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/07/17 00:15	1
Trichloroethene	ND		1.0	0.46	ug/L			12/07/17 00:15	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/07/17 00:15	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/07/17 00:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/07/17 00:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*12/07/17 00:15*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*12/07/17 00:15*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*12/07/17 00:15*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/07/17 00:15*	*1*

Client Sample ID: MW-14 (112817)

Lab Sample ID: 480-128081-11

Date Collected: 11/28/17 13:30
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/07/17 00:42	1

Client Sample ID: MW-14 (112817)
Date Collected: 11/28/17 13:30
Date Received: 11/29/17 01:00

Lab Sample ID: 480-128081-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/07/17 00:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/07/17 00:42	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/07/17 00:42	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/07/17 00:42	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/07/17 00:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/07/17 00:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/07/17 00:42	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/07/17 00:42	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/07/17 00:42	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/07/17 00:42	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/07/17 00:42	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/07/17 00:42	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/07/17 00:42	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/07/17 00:42	1
2-Hexanone	ND		5.0	1.2	ug/L			12/07/17 00:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/07/17 00:42	1
Acetone	ND		10	3.0	ug/L			12/07/17 00:42	1
Benzene	ND		1.0	0.41	ug/L			12/07/17 00:42	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/07/17 00:42	1
Bromoform	ND		1.0	0.26	ug/L			12/07/17 00:42	1
Bromomethane	ND		1.0	0.69	ug/L			12/07/17 00:42	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/07/17 00:42	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/07/17 00:42	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/07/17 00:42	1
Chloroethane	ND		1.0	0.32	ug/L			12/07/17 00:42	1
Chloroform	ND		1.0	0.34	ug/L			12/07/17 00:42	1
Chloromethane	ND		1.0	0.35	ug/L			12/07/17 00:42	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/07/17 00:42	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/07/17 00:42	1
Cyclohexane	ND		1.0	0.18	ug/L			12/07/17 00:42	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/07/17 00:42	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/07/17 00:42	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/07/17 00:42	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/07/17 00:42	1
Methyl acetate	ND		2.5	1.3	ug/L			12/07/17 00:42	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/07/17 00:42	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/07/17 00:42	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/07/17 00:42	1
Styrene	ND		1.0	0.73	ug/L			12/07/17 00:42	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/07/17 00:42	1
Toluene	ND		1.0	0.51	ug/L			12/07/17 00:42	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/07/17 00:42	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/07/17 00:42	1
Trichloroethene	ND		1.0	0.46	ug/L			12/07/17 00:42	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/07/17 00:42	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/07/17 00:42	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/07/17 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*12/07/17 00:42*	*1*

Client Sample ID: MW-14 (112817)

Lab Sample ID: 480-128081-11

Date Collected: 11/28/17 13:30
Matrix: Water
Date Received: 11/29/17 01:00

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*12/07/17 00:42*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*12/07/17 00:42*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/07/17 00:42*	*1*

Client Sample ID: MW-5 (112817)

Lab Sample ID: 480-128081-12

Date Collected: 11/28/17 15:00
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			12/07/17 01:10	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			12/07/17 01:10	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			12/07/17 01:10	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			12/07/17 01:10	10
1,1-Dichloroethane	ND		10	3.8	ug/L			12/07/17 01:10	10
1,1-Dichloroethene	**6.5**	**J**	10	2.9	ug/L			12/07/17 01:10	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			12/07/17 01:10	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			12/07/17 01:10	10
1,2-Dibromoethane	ND		10	7.3	ug/L			12/07/17 01:10	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			12/07/17 01:10	10
1,2-Dichloroethane	ND		10	2.1	ug/L			12/07/17 01:10	10
1,2-Dichloropropane	ND		10	7.2	ug/L			12/07/17 01:10	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			12/07/17 01:10	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			12/07/17 01:10	10
2-Butanone (MEK)	ND		100	13	ug/L			12/07/17 01:10	10
2-Hexanone	ND		50	12	ug/L			12/07/17 01:10	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			12/07/17 01:10	10
Acetone	ND		100	30	ug/L			12/07/17 01:10	10
Benzene	ND		10	4.1	ug/L			12/07/17 01:10	10
Bromodichloromethane	ND		10	3.9	ug/L			12/07/17 01:10	10
Bromoform	ND		10	2.6	ug/L			12/07/17 01:10	10
Bromomethane	ND		10	6.9	ug/L			12/07/17 01:10	10
Carbon disulfide	ND		10	1.9	ug/L			12/07/17 01:10	10
Carbon tetrachloride	ND		10	2.7	ug/L			12/07/17 01:10	10
Chlorobenzene	ND		10	7.5	ug/L			12/07/17 01:10	10
Chloroethane	ND		10	3.2	ug/L			12/07/17 01:10	10
Chloroform	ND		10	3.4	ug/L			12/07/17 01:10	10
Chloromethane	ND		10	3.5	ug/L			12/07/17 01:10	10
cis-1,2-Dichloroethene	**530**		10	8.1	ug/L			12/07/17 01:10	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			12/07/17 01:10	10
Cyclohexane	ND		10	1.8	ug/L			12/07/17 01:10	10
Dibromochloromethane	ND		10	3.2	ug/L			12/07/17 01:10	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			12/07/17 01:10	10
Ethylbenzene	ND		10	7.4	ug/L			12/07/17 01:10	10
Isopropylbenzene	ND		10	7.9	ug/L			12/07/17 01:10	10
Methyl acetate	ND		25	13	ug/L			12/07/17 01:10	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			12/07/17 01:10	10
Methylcyclohexane	ND		10	1.6	ug/L			12/07/17 01:10	10
Methylene Chloride	ND		10	4.4	ug/L			12/07/17 01:10	10

Client Sample ID: MW-5 (112817)

Lab Sample ID: 480-128081-12

Date Collected: 11/28/17 15:00
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		10	7.3	ug/L			12/07/17 01:10	10
Tetrachloroethene	ND		10	3.6	ug/L			12/07/17 01:10	10
Toluene	ND		10	5.1	ug/L			12/07/17 01:10	10
trans-1,2-Dichloroethene	**15**		10	9.0	ug/L			12/07/17 01:10	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			12/07/17 01:10	10
Trichloroethene	**53**		10	4.6	ug/L			12/07/17 01:10	10
Trichlorofluoromethane	ND		10	8.8	ug/L			12/07/17 01:10	10
Vinyl chloride	**68**		10	9.0	ug/L			12/07/17 01:10	10
Xylenes, Total	ND		20	6.6	ug/L			12/07/17 01:10	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*12/07/17 01:10*	*10*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*12/07/17 01:10*	*10*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*12/07/17 01:10*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*12/07/17 01:10*	*10*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		11/30/17 12:43	12/05/17 02:26	1
Perfluoroheptanoic acid (PFHpA)	**1.6**	**J**	2.0	0.25	ng/L		11/30/17 12:43	12/05/17 02:26	1
Perfluorohexanesulfonic acid (PFHxS)	**4.4**	**B**	2.0	0.17	ng/L		11/30/17 12:43	12/05/17 02:26	1
Perfluorononanoic acid (PFNA)	**0.44**	**J**	2.0	0.27	ng/L		11/30/17 12:43	12/05/17 02:26	1
Perfluorooctanesulfonic acid (PFOS)	**3.2**		2.0	0.53	ng/L		11/30/17 12:43	12/05/17 02:26	1
Perfluorooctanoic acid (PFOA)	**2.7**		2.0	0.84	ng/L		11/30/17 12:43	12/05/17 02:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*82*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:26*	*1*
13C4 PFOA	*72*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:26*	*1*
13C4 PFOS	*77*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:26*	*1*
13C4-PFHpA	*73*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:26*	*1*
13C5 PFNA	*83*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:26*	*1*
18O2 PFHxS	*82*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:26*	*1*

Client Sample ID: MW-1 (112817)

Lab Sample ID: 480-128081-13

Date Collected: 11/28/17 13:45
Matrix: Water
Date Received: 11/29/17 01:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/07/17 01:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/07/17 01:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/07/17 01:37	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/07/17 01:37	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/07/17 01:37	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/07/17 01:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/07/17 01:37	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/07/17 01:37	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/07/17 01:37	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/07/17 01:37	1

Client Sample ID: MW-1 (112817)

Date Collected: 11/28/17 13:45
Date Received: 11/29/17 01:00

Lab Sample ID: 480-128081-13

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/07/17 01:37	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/07/17 01:37	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/07/17 01:37	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/07/17 01:37	1
2-Butanone (MEK)	**4.4**	**J**	10	1.3	ug/L			12/07/17 01:37	1
2-Hexanone	ND		5.0	1.2	ug/L			12/07/17 01:37	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/07/17 01:37	1
Acetone	**18**		10	3.0	ug/L			12/07/17 01:37	1
Benzene	ND		1.0	0.41	ug/L			12/07/17 01:37	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/07/17 01:37	1
Bromoform	ND		1.0	0.26	ug/L			12/07/17 01:37	1
Bromomethane	ND		1.0	0.69	ug/L			12/07/17 01:37	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/07/17 01:37	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/07/17 01:37	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/07/17 01:37	1
Chloroethane	ND		1.0	0.32	ug/L			12/07/17 01:37	1
Chloroform	ND		1.0	0.34	ug/L			12/07/17 01:37	1
Chloromethane	ND		1.0	0.35	ug/L			12/07/17 01:37	1
cis-1,2-Dichloroethene	**1.2**		1.0	0.81	ug/L			12/07/17 01:37	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/07/17 01:37	1
Cyclohexane	ND		1.0	0.18	ug/L			12/07/17 01:37	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/07/17 01:37	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/07/17 01:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/07/17 01:37	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/07/17 01:37	1
Methyl acetate	ND		2.5	1.3	ug/L			12/07/17 01:37	1
Methyl tert-butyl ether	**0.25**	**J**	1.0	0.16	ug/L			12/07/17 01:37	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/07/17 01:37	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/07/17 01:37	1
Styrene	ND		1.0	0.73	ug/L			12/07/17 01:37	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/07/17 01:37	1
Toluene	ND		1.0	0.51	ug/L			12/07/17 01:37	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/07/17 01:37	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/07/17 01:37	1
Trichloroethene	ND		1.0	0.46	ug/L			12/07/17 01:37	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/07/17 01:37	1
Vinyl chloride	**17**		1.0	0.90	ug/L			12/07/17 01:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/07/17 01:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*12/07/17 01:37*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*12/07/17 01:37*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*12/07/17 01:37*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/07/17 01:37*	*1*

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		2.4	0.24	ng/L		11/30/17 12:43	12/05/17 02:34	1
Perfluoroheptanoic acid (PFHpA)	**1.2**	**J**	2.4	0.30	ng/L		11/30/17 12:43	12/05/17 02:34	1

Client Sample ID: MW-1 (112817)
Date Collected: 11/28/17 13:45
Date Received: 11/29/17 01:00

Lab Sample ID: 480-128081-13
Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanesulfonic acid (PFHxS)	2.4 ~~0.85~~ ~~J B~~ U		2.4	0.20	ng/L		11/30/17 12:43	12/05/17 02:34	1
Perfluorononanoic acid (PFNA)	ND		2.4	0.32	ng/L		11/30/17 12:43	12/05/17 02:34	1
Perfluorooctanesulfonic acid (PFOS)	**1.8**	**J**	2.4	0.65	ng/L		11/30/17 12:43	12/05/17 02:34	1
Perfluorooctanoic acid (PFOA)	**4.3**		2.4	1.0	ng/L		11/30/17 12:43	12/05/17 02:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3-PFBS	*89*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:34*	*1*
13C4 PFOA	*82*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:34*	*1*
13C4 PFOS	*81*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:34*	*1*
13C4-PFHpA	*84*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:34*	*1*
13C5 PFNA	*87*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:34*	*1*
18O2 PFHxS	*85*		*25 - 150*	*11/30/17 12:43*	*12/05/17 02:34*	*1*

1/15/18

Appendix B
Laboratory Case Narrative

Job Narrative
480-128081-1

Receipt
The samples were received on 11/29/2017 1:00 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
Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-8 (112817) (480-128081-1), MW-10 (112817) (480-128081-6), DUP-01 (112817) (480-128081-7) and MW-5 (112817) (480-128081-12). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-16 (112817) (480-128081-8) and MW-15 (112817) (480-128081-9). Elevated reporting limits (RLs) are provided.

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

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

Organic Prep
Method(s) 3535: The following samples: MW-8 (112817) (480-128081-1), MW-13 (112817) (480-128081-5), MW-13 (112817) (480-128081-5[MS]), MW-13 (112817) (480-128081-5[MSD]), MW-10 (112817) (480-128081-6), DUP-01 (112817) (480-128081-7), MW-5 (112817) (480-128081-12) and MW-1 (112817) (480-128081-13) were decanted prior to preparation due to containing excess sediment that had the potential to clog the solid-phase column.
3535_PFC - water - batch 197584

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

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

Chain of Custody Record

TestAmerica

480-128081 COC

Client Information	Sampler: Athanas + Escusa	Lab PM: Deyo, Melissa L	COC No: 480-104680-24764.3
Client Contact: Stefan Bagnato	Phone: (518) 396-7746	E-Mail: melissa.deyo@testamericainc.com	Page: Page 3 of 3
Company: ARCADIS U.S. Inc			Job #:
Address: 855 Route 146 Suite 210	Due Date Requested:		
City: Clifton Park	TAT Requested (days): Standard		
State, Zip: NY, 12065			
Phone: (518) 250-7300	PO #: 00266444.0000		
Email: Stefan.Bagnato@arcadis.com	WO #:		
Project Name: NYSDEC - 222 South Ferry St Site - Schen	Project #: 48017030		
Site: 222 South Ferry St.	SSOW#:		

Analysis Requ

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	PFC_IDA - 6 PFAAs including PFOA/ PFOS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
MW-8 (112817)	11-28-17	0955	G	Water	N	N	X	X	5	
EB-01	11-28-17	0825	G	W	N	N		X	2	
EB-02	11-28-17	0825	G	W	N	N		X	2	
Trip Blanks	-	-	-	W	N	N	X		2	
MW-13 (112817)	11-28-17	1105	G	W	N	Y	X	X	5	
MW-10 (112817)	11-28-17	1240	G	W	N	N	X	X	5	
DUP-01 (112817)	11-28-17	-	G	W	N	N	X	X	5	
MW-16 (112817)	11-28-17	0955	G	W	N	N	X		3	
MW-15 (112817)	11-28-17	1055	G	W	N	N	X		3	
MW-17 (112817)	11-28-17	1200	G	W	N	N	X		3	
MW-14 (112817)	11-28-17	1330	G	W	N	N	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]	11-28-17 1640	Arcadis	[signature]	11-28-17 1640	TA
Relinquished by: [signature]	Date/Time: 11-28-17 1800	Company A	Received by: [signature]	Date/Time: 11-29-17 0100	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.6 #1

Ver: 08/04/2016

12/12/2017

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

Chain of Custody Record

TestAmerica

Client Information	Sampler: Andrew + ESousa	Lab PM: Deyo, Melissa L	Carrier Tracking No(s):	COC No: 480-104680-24764.2
Client Contact: Stefan Bagnato	Phone: (518)396-7296	E-Mail: melissa.deyo@testamericainc.com		Page: Page 2 of 3
Company: ARCADIS U.S. Inc				Job #:
Address: 855 Route 146 Suite 210	Due Date Requested:			
City: Clifton Park	TAT Requested (days): Standard			
State, Zip: NY, 12065				
Phone: (518)250-7300	PO #: 00266444.0000			
Email: Stefan.Bagnato@arcadis.com	WO #:			
Project Name: NYSDEC - 222 South Ferry St Site - Schen	Project #: 48017030			
Site: 222 South Ferry St	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	PFC_IDA - 6 PFAAs including PFOA/ PFOS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
MW-5 (112817)	11-28-17	1500	G	Water	N	N	X	X	5	
MW-1 (112817)	11-28-17	1345	G	Water	N	N	X	X	2	1 sample container of each
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

11-28-17

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

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

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

Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		11-28-17 1640	Arcadis		11-28-17 1640	TA
2	Karl Zadra	11-28-17 1800	TA		11-29-17 0100	TA
3						

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 0.6 #1

Ver: 08/04/2016

12/12/2017

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

480501-Albany

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Athanas + Escusa	Lab PM: Deyo, Melissa L	Carrier Tracking No(s):	COC No: 480-104680-24764.3
Client Contact: Stefan Bagnato	Phone: (518) 396-7796	E-Mail: melissa.deyo@testamericainc.com		Page: Page 3 of 3
Company: ARCADIS U.S. Inc				Job #:
Address: 855 Route 146 Suite 210	Due Date Requested:			
City: Clifton Park	TAT Requested (days): Standard			
State, Zip: NY, 12065				
Phone: (518) 250-7300	PO #: 00266444.0000			
Email: Stefan.Bagnato@arcadis.com	WO #:			
Project Name: NYSDEC - 222 South Ferry St Site - Schen	Project #: 48017030			
Site: 222 South Ferry St.	SSOW#:			

480-128081 Chain of Custody

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	PFC_IDA - 6 PFAAs including PFOA/ PFOS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
MW-8 (112817)	11-28-17	0955	G	Water	N	N	X	X	5	
EB-01	11-28-17	0825	G	W	N	N		X	2	
EB-02	11-28-17	0825	G	W	N	N		X	2	
Trip Blanks	-	-	-	W	N	N	X		2	
MW-13 (112817)	11-28-17	1105	G	W	N	Y	X	X	5	
MW-10 (112817)	11-28-17	1240	G	W	N	N	X	X	5	
DUP-01 (112817)	11-28-17	-	G	W	N	N	X	X	5	
MW-16 (112817)	11-28-17	0955	G	W	N	N	X		3	
MW-15 (112817)	11-28-17	1055	G	W	N	N	X		3	
MW-17 (112817)	11-28-17	1200	G	W	N	N	X		3	
MW-14 (112817)	11-28-17	1330	G	W	N	N	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
	11-28-17 1640	Arcadis		11-28-17 1640	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	11-28-17 1800	TA		11/29/17 1025	TALS
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

Ver: 08/04/2016

12/12/2017

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

48050 Quality

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Attorney + ESousa	Lab PM: Deyo, Melissa L	Carrier Tracking No(s):	COC No: 480-104680-24764.2
Client Contact: Stefan Bagnato	Phone: (518)396-7296	E-Mail: melissa.deyo@testamericainc.com		Page: Page 2 of 3
Company: ARCADIS U.S. Inc				Job #:
Address: 655 Route 146 Suite 210	Due Date Requested:			
City: Clifton Park	TAT Requested (days): Standard			
State, Zip: NY, 12065				
Phone: (518)250-7300	PO #: 00266444.0000			
Email: Stefan.Bagnato@arcadis.com	WO #:			
Project Name: NYSDEC - 222 South Ferry St Site - Schen	Project #: 48017030			
Site: 222 South Ferry St	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	PFC_IDA - 6 PFAAs including PFOA/ PFOS	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
MW-5 (112817)	11-28-17	1500	G	Water	N	N	X	X	3	
MW-1 (112817)	11-28-17	1345	G	Water	N	N	X	X	2	1 sample container of each PFAS not FM1
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

11-28-17

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	11-28-17 1640	Arcadis		11-28-17 1640	TA
Relinquished by:	Date/Time: 11-28-17 1800	Company: TA	Received by:	Date/Time: 11/29/17 1025	Company: TAWS
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: 1.8

Ver: 08/04/2016

12/12/2017

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-128081-1

Login Number: 128081
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

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

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-128081-1

Login Number: 128081
List Number: 2
Creator: Hytrek, Cheryl

List Source: TestAmerica Sacramento
List Creation: 11/29/17 12:17 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 (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

VALIDATA
Chemical Services, Inc.
2159 Wynnton Pointe, Duluth, GA 30097
(770) 232-0130
(770) 232-5082 (Fax)
www.datavalidator.com

DATA USABILITY SUMMARY REPORT

COMPANY:	ARCADIS U.S., Inc.
SITE NAME:	222 South Ferry Street
CONTRACTED LAB:	TestAmerica-Buffalo
QA/QC LEVEL:	DUSR
EPA SOW/METHODS:	SW-846
VALIDATION GUIDELINES:	USEPA Region II data validation SOPs
SAMPLE MATRIX:	Water
TYPES OF ANALYSES:	Semivolatile Organics (SVOA)

SDG NUMBER: 480-133532-1

SAMPLES:

Client Sample #	Lab Sample #	Matrix	SVOA
EB-01-040318	480-133532-1	Water	X
EB-02-040318	480-133532-2	Water	X
MW-10-040318	480-133532-3	Water	X
MW-5-040318	480-133532-4	Water	X
MW-13-040318	480-133532-5	Water	X
MW-8-040318	480-133532-6	Water	X
MW-12-040318	480-133532-7	Water	X
DUP-1-040318	480-133532-8	Water	X
MW-13-040318MS	480-133532-5MS	Water	X
MW-13-040318-MSD	480-133532-5MSD	Water	X

* - sample results were reported for 1,4-dioxane only.

SUFFIX CODES: MD = MATRIX DUPLICATE, MS = MATRIX SPIKE,
MSD = MATRIX SPIKE DUPLICATE

DATA REVIEWER(S): Amy L. Hogan, Marth McGee

SECONDARY REVIEWER(S): Kevin C. Harmon

Data Qualifier Definitions

J	-	The associated numerical value is an estimated quantity.
JN	-	The compound/analyte was tentatively identified with estimated concentration.
R	-	The data are unusable (the compound/analyte may or may not be present). Resampling and reanalysis are necessary for verification.
U	-	The compound/analyte was analyzed for, but not detected. The associated numerical value is the sample quantitation limit.
UJ	-	The compound/analyte was analyzed for, but not detected. The sample quantitation limit is an estimated quantity.

DATA USABILITY SUMMARY

TestAmerica-Buffalo – 480-133532-1 – Organics

SEMIVOLATILE ORGANICS

SUMMARY

I.) General:

The analyses for Semivolatile Organics were performed by GC / MS according to SW-846 Method 8270D-SIM.

II.) Overall Assessment of Data:

All laboratory data were acceptable without qualification.

III.) Holding Times:

All Holding Time criteria were met. No data qualification was necessary.

IV.) GC / MS Tuning:

All GC / MS Tuning criteria were met. No data qualification was necessary.

V.) Calibration:

Initial Calibration:

All Initial Calibration criteria were met. No data qualification was necessary.

Continuing Calibration:

All Continuing Calibration criteria were met. No data qualification was necessary.

VI.) Blanks:

Method Blanks:

There were no detections in the method blank associated with this SDG. No data qualification was

necessary.

Tentatively Identified Compounds (TIC):

There were no TIC detections reported in the blanks associated with this SDG. No data qualification was required.

VII.) Surrogate Recoveries:

All Surrogate Recovery criteria were met. No data qualification was necessary.

VIII.) Laboratory Control Samples (LCS):

One LCS was analyzed for this fraction of the SDG. All criteria were met. No data qualification was necessary.

IX.) Matrix Spike / Matrix Spike Duplicate (MS / MSD):

MS / MSD analyses were performed on SDG sample MW-13-040318. All criteria were met. No data qualification was necessary.

X.) Field Duplicates:

One set of field duplicates (MW-5-040318 / DUP-01-040318) was identified in this SDG. There was no calculable Relative Percent Difference (RPD). No data qualification was necessary.

XI.) Internal Standards Performance (ISTD):

The Area Count Percent Recoveries (%R's) for 1,4-dichlorobenzene-d4 exceeded the 50-200% QC limits for the following samples:

MB 480-407201/1-A	266%
LCS 480-407201/2-A	306%
MW-13-040318MS	298%

The laboratory stated in the case narrative that these three samples were inadvertently spiked with the wrong ITSD mix, which resulted in the elevated recoveries. Since the listed sample were all QC samples and there were no issues with the SDG samples; citing professional judgment, the validator has determined that data qualification was not necessary.

XII.) TCL Compound Identification:

All sample data were reported in accordance with the cited method.

XIII.) Compound Quantitation and Reported Contract Required Quantitation Limits (CRQL):

All CRQL criteria were met. No data qualification was necessary.