REMEDIAL INVESTIGATION/REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Weber Knapp Company
441 Chandler Street
Jamestown, New York

NYSDEC Site # C907048

Prepared For: Weber Knapp Company
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Jamestown, New York 14701

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Date: January 7, 2020

CERTIFICATION STATEMENT

441 Chandler Street
Jamestown, New York

NYSDEC Site # C907048

I, Raymond L. Kampff, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Remedial Investigation/Remedial Alternatives Analysis Work Plan was prepared in substantial accordance with applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Raymond L. Kampff, PG

Day Environmental, Inc.

Table of Contents

Tables

Figures

Appendices

1.0 INTRODUCTION

This Remedial Investigation/Remedial Alternatives Analysis (RI/RAA) Work Plan was prepared by Day Environmental, Inc. (DAY) for tax parcel 387.08-3-20 located at 441 Chandler Street, Jamestown, New York (Site). The Site is currently owned by the Weber-Knapp Company. A Project Locus map is presented as Figure 1, and a Survey Map that includes the Site is presented as Figure 2.

1.1 Site Description

The Site is comprised of approximately 2.65 acres of land, and it is developed with an approximate 105,000 square foot slab-on-grade building originally constructed in about 1910 with subsequent additions through the 1960s. Currently manufacturing (i.e., sheet metal cutting/stamping, welding, metal turning, and powder coat finishing), warehousing, and office operations are conducted within the building at the Site.

An approximate 16,500 square foot asphalt-paved parking/loading dock area is located in the southeastern corner of the Site. An approximate 1,750 square foot asphalt-paved parking area is located on the south side of the building, and an approximate 220-foot-long by 15-foot-wide concrete-paved driveway is located on the north side of the Site. With the exception of an approximate 425 square foot landscape area in the southwestern corner of the Site and an earthen berm along the eastern side of the parking lot located in the southeastern corner of the Site, there are no areas on the Site that are not covered with buildings or pavement.

The Site is bound to the north by a parcel owned by the Jamestown Urban Renewal Agency and beyond is the former DC Rollforms site (i.e., a NYSDEC State Superfund Site No. 907019); east by Allen Street; south by Chandler Street; and west by the Chadakoin River (i.e., the western property boundary of the Site abuts the river). In addition to the DC Rollforms site, the surrounding parcels include residential properties east of Allen Street (i.e., uphill from the Site); an asphalt-paved parking lot used by Weber-Knapp Company employees and visitors and a bar/restaurant (The Fifth Wheel) south of Chandler Street; and the Weber-Knapp Company plating building/wastewater treatment plant west of the Chadakoin River. Commercial/Industrial properties are located immediately to the west of the Weber-Knapp Company plating building/wastewater treatment plant. The former TRW Bearings Site, a NYSDEC spill site (No. 8602953) is located adjacent to the southwest of the Site on the west side of the Chadakoin River.

1.2 Objectives

The objectives of the remedial investigation work defined in this RI/RAA Work Plan are described below.

- Define the nature and extent of on-site contamination.
- Characterize the surface and subsurface characteristics of the Site, including topography, surface drainage, stratigraphy and depth to groundwater.
- Identify and characterize contaminant source areas.
- Produce data of sufficient quantity and quality for remedial decision-making.

- Delineate the areal and vertical extent of soil contamination that may be leaching to and impacting groundwater quality at the Site.

- Implement an Interim Remedial Measure(s) (IRM), which could be used to potentially remediate or mitigate contaminated source areas present in subsurface soil and groundwater.

- Evaluate and characterize the extent and magnitude of the overburden and bedrock groundwater contamination at the Site.

- Describe the volume, concentration, persistence, mobility, state, and other significant characteristics of the on-site contamination.

- Determine the extent to which natural or anthropogenic barriers currently contain or impact migration or mobility of the contamination.

- Define the extent to which the contaminants have migrated on the Site or are expected to migrate off-Site, and whether future migration may pose a threat to human health or the environment.

- Perform an exposure assessment to identify potential routes of exposure, populations, and environmental receptors at risk.

- Define hydrogeological factors (e.g., groundwater flow, depth to the saturated zone, hydraulic gradients, hydraulic conductivity; and proximity to a drinking water aquifer, floodplain, or wetland).

- Describe groundwater characteristics, and current and potential groundwater use, including the identification of private wells, if possible, and public water supply wells in the area.

- Describe the Site's contribution to an air, land, water, biota, or bioaccumulation contamination problem.

- Upon completion of the RI assess the active and potential threats to human health and the environment, including the potential for off-site impacts.

Based on the findings of the RI, potential remedial alternatives will be evaluated to select a recommended remedial alternative that is protective of public health and the environment.

Upon NYSDEC request, additional investigation activities will be completed in accordance with addenda to this Work Plan until these objectives are achieved to the extent possible.

1.3 Applicable Project Standards, Criteria and Guidance

Applicable standards, criteria, and guidance (SCG) values that will be used for this project are outlined below:

- Appropriate Soil Cleanup Objectives (SCO) and other guidance as set forth in 6 NYCRR Part 375-2 Inactive Hazardous Waste Disposal Program dated December 14, 2006. [Note: Appropriate SCO for this Site are the Protection of Groundwater SCO and Restricted Industrial Use SCO.]

- Appropriate Soil Cleanup Levels (SCL) and other guidance as set forth in NYSDEC CP-51 Soil Cleanup Guidance dated October 21, 2010.

- Guidelines referenced in the NYSDEC document titled *DER-10 Technical Guidance for Site Investigation and Remediation* dated May 10, 2010.

- Appropriate water quality standards and guidance values (WQS/GV) as set forth in the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) document titled *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* dated June 1998, and amended by a January 1999 Errata Sheet, an April 2000 Addendum, and a June 2004 Addendum.

- City of Jamestown Board of Public Utility Sewer Use Permit requirements.

- New York State Department of Health (NYSDOH) document entitled *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006.

- Guidelines referenced in the NYSDEC document titled *Sampling for 1,4-Dioxane and Per- and Polyfluoroalkyl Substances (PFAS) Under DEC's Part 375 Remedial Programs* dated February 2019

The work described in this RI/RAA Work Plan will be performed in accordance with the SCGs listed above.

2.0 BACKGROUND AND PREVIOUS STUDIES

This section describes the history of the Site and surrounding properties, and provides a summary of previous environmental site assessments and investigations that have been conducted at the Site.

2.1 Site History

Based on information obtained from historic fire insurance maps and building plans, residential and industrial activities have been conducted on the Site since at least 1902. Provided below is a summary of activities that have been documented at the Site. Copies of available historic Sanborn Fire Insurance Maps overlain on the current building plan, and historic building plans, are included in Appendix A. The various building additions/expansions completed on the Site to create the current building configuration are depicted on Figure 3.

- Approximately 14 apparent residential buildings and several apparent out-buildings are shown within the limits of the Site on the Fire Insurance Map dated 1902. The Morse Avenue right-of-way is also depicted, trending north-northeast from Chandler Street and ending near the northern edge of the Site.

- Weber-Knapp Company is depicted on the southwestern portion of the Site on the Fire Insurance Map dated 1930. A brass foundry is depicted in the northern portion of the Weber-Knapp Company building. Approximately 14 apparent residential buildings and several apparent out-buildings are also depicted on the Site, located to the east of the Morse Avenue right-of-way.

- An addition to the north side of the Weber-Knapp factory building is depicted on a blueprint dated August 1941. The blueprint shows a retaining wall to be constructed along the east bank of the Chadakoin River, connecting to an existing retaining wall (i.e., circa 1910 construction) and extending to the northern boundary of the Site. The depth of the proposed retaining wall depicted on the blueprint is between approximately nine and ten feet (ft.) below ground surface (bgs) that existed at the time of construction.

- Weber-Knapp Company is depicted on the western portion of the Site on the Fire Insurance Map dated 1949, expanded from the previous building footprint to the north, along the Chadakoin River. A brass foundry is depicted in the northern portion of the Weber-Knapp Company building and a "plating department" is depicted in the central portion of the building. Two apparent residential buildings and several apparent out-buildings are also depicted on the Site, these structures are located near the intersection of Allen Street and Chandler Street. The Morse Avenue right-of-way is no longer depicted.

- The building plan dated August 1960 depicts the Weber-Knapp Company building extending over the western and southwestern portions of the Site, with a proposed addition located on the east side of the existing building. The outlines of several small structures are depicted in the area of the proposed addition, with a note indicating, "exist. buildings to be removed". A transformer to be "remove(d) by others" and an adjacent "new transformer pad" are depicted to the south of the proposed addition and to the east of the existing building.

- The building plan dated January 27, 1966 depicts the Weber-Knapp Company building extending over the western and southwestern portions of the Site, the addition shown on the August 1960 building plan, a subsequent addition to the northeast (i.e., the 1964 addition depicted on Figure 3), and a proposed addition located to the south of the 1960 and 1964 additions. The January 27, 1966 building plan depicts an existing transformer pad and tank slab, located to the south of the proposed addition and to the east of the existing building. The plan also depicts a storm sewer line located to the east of the existing building, trending north-south from the area of the tank/transformer slabs and under the proposed (1966) addition and existing (1960) building. A floor drain is depicted in the vicinity of the former vapor degreaser on the January 27, 1966 building plan. This floor drain appears to be connected to the storm sewer line depicted on the 1966 building plan.

- A vapor degreaser that used a trichloroethene (TCE) based solvent operated in the central portion of the building at the Site between about 1969 and 1993. The location of this former degreaser is depicted on Figure 3.

- Weber-Knapp Company is depicted on the Fire Insurance Map dated 1980 in a configuration similar to the current building footprint. No residential buildings are depicted on the Site.

Two NYSDEC Spills are listed for the Site, as briefly described below:

- On February 9, 1989, cutting oil was released (spilled) at the Site when a delivery line broke while transferring product. This spill reportedly occurred "on the sidewalk at the back corner of the building" (i.e., the northeast corner of the Main Building) and it was "… immediately contained to an area approximately 10 ft. by 30 ft. by forming a dike of absorbent clay and snow". The release was reported to the NYSDEC and spill file No.8808794 was opened. The NYSDEC spill file report indicates that approximately 15 gallons of cutting oil was spilled and that the spill was cleaned up by the material supplier (i.e., American Lubricants) and, subsequent to an inspection of the spill area by the NYSDEC, spill file No. 8808794 was closed on April 3, 1989.

- During the performance of the work described in Environmental Evaluation (Refer to Section 2.3), evidence of a historic petroleum release of apparent cutting oil at the Site became apparent. As a result, a DAY representative called the NYSDEC Region 9 Spills Division on behalf of the Weber-Knapp Company to report this historic release on November 21, 2018. The NYSDEC opened spill file 1808886 at that time and subsequently requested a copy of a report describing the findings of work completed to assess environmental conditions at the Site. Spill file 1808886 was closed on February 11, 2019 and the case was transferred to the Inactive Hazardous Waste Division, following a communication to the NYSDC that the Weber-Knapp Company would apply for admittance to the BCP.

2.2 Surrounding Properties

The parcels surrounding the Site are currently used for a combination of commercial, residential, and industrial purposes (refer to Figure 4). The nearest occupied residential property is approximately 70 feet northeast of the Site at 562 Allen Street. This residential property, and adjacent residential parcels along Allen Street, are located upslope from the Site (i.e., at an elevation approximately five to ten ft. higher than the Site).

Properties that adjoin the Site are discussed below.

West: The Chadakoin River runs along the edge of the Site forming the western boundary, and flows from south to north. The building on the Site is connected by a covered bridge/pathway to an approximate 39,000 square foot building (the 'Plating Building', located on the tax parcel addressed 415 Chandler Street), which is located on the west side of the Chadakoin River. The Plating Building is currently owned and occupied by Weber-Knapp Company and it contains several metals plating lines in the eastern portion of the building and a wastewater treatment plant in the western portion of the building. The Plating Building is bordered to the south and west by asphalt paved parking and drive areas and to the north by undeveloped land. Several commercial/industrial properties (i.e., a vacant asphalt paved lot and an apparent warehouse) are located to the west of 415 Chandler Street).

North: Vacant grassed land is located to the north of the Site. A narrow strip of the vacant land adjacent to the north of the Site is owned by Jamestown Urban Renewal Agency (i.e., approximately 20 ft. wide at the along the eastern edge of the Chadakoin River and approximately 70 ft. wide at the western edge of Allen Street). The DC Rollforms property, located adjacent to north of the Jamestown Urban Renewal Agency property, is a New York State (NYS) listed superfund site (NYSDEC Site No. 907019). Buildings used for the manufacture of metal tools on the DC Rollforms site since at least 1910 were demolished and removed from the property in 1986. A small structure that houses a remedial treatment system is located on the south-central portion of the property. The primary contaminants of concern at the DC Rollforms site are TCE and associated breakdown products.

East: The Allen Street right-of-way is located along the eastern edge of the Site. Two residential structures (addressed 562 and 566 Allen Street) are located near the northeast corner of the Site, on the east side of Allen Street. [Note: 558 Allen Street formerly contained a residence, but a fire destroyed the structure in about 2014 and this parcel is currently vacant land.] The parcels located to the south 562 Allen Street and extending to the Allen Street/Chandler Street intersection (i.e., along the east side of Allen Street) are vacant, except for the parcel located at the northeast corner of the Allen Street/Chandler Street intersection, which is developed as a community garden.

South: The Chandler Street right-of-way is located along the southern edge of the Site. A parking lot and a vacant lot, both owned by Weber-Knapp Company, are located to the south of Chandler Street, south of the eastern portion of the Site. The "Fifth Wheel" bar/restaurant is located on the parcel that is adjacent to the west of Weber Knapp parking lot/vacant lot properties, and is adjacent to the east of the Chadakoin River. The former TRW Bearing site (NYSDEC Spill No.189702) is located southwest of the Site on the west side of the Chadakoin River. Reportedly, 10,000 gallons of hydraulic oil were spilled at this site and remediation has been ongoing since 1988. In addition, a vapor degreaser previously operated at this site and reportedly chlorinated VOCs were identified within the groundwater on this property.

2.3 Previous Environmental Studies

To date, the following environmental studies were completed at the Site:

- *Babcock Industries, Inc. Environmental Assessment, Weber-Knapp Division, 441 Chandler Street, Jamestown, NY*, dated February 14, 1989-Prepared by Dames & Moore (the Dames & Moore Environmental Assessment);

- *Environmental Site Assessment Report, Weber-Knapp Company, 415, 441, 448 and an Unaddressed Parcel on Chandler Street, Jamestown, New York, dated July 5, 2011*-Prepared by LCS, Inc. (the LCS Phase I ESA).

- *Environmental Evaluation, 415 and 441 Chandler Street, Jamestown, New York, NYSDEC Spill File No. 1808886,* dated February 8, 2019 - Prepared by Day Environmental, Inc. (the Environmental Evaluation).

In conjunction with the Dames & Moore Environmental Assessment, three soil gas and three groundwater samples were collected from locations on the Site and screened using a portable Gas Chromatograph. TCE was detected in two of the soil vapor samples tested (i.e., a location on the north side of the Site in proximity of the DC Rollforms site and within the parking lot in the southeast portion of the Site). TCE was detected in groundwater samples collected in the northern portion of the Site (in proximity of the location where TCE was detected in the soil gas).

The LCS Phase I ESA included the following "known or suspect" recognized environmental conditions (RECs) at the Site:

- Three UTSs were filled-in-place north of the building in 1987 (refer to Figure 3); no post-closure soil or groundwater sampling was apparently conducted.

- Hazardous/regulated materials located on-site included general cleaning supplies, caustics, alkaline, mineral acids, cyanide components, waste-water treatment chemicals, paints, waxes, dyes and oils/lubes.

- Solid/hazardous/regulated wastes generated on-site included waste oil, waste-water treatment sludge, scrap metal and gas cylinders. No releases or spills were noted in the vicinity of these wastes.

- Dry machine pits (no outlets) were noted throughout the shop area of the building.

- A previous study also identified concerns associated with an historic vapor degreaser and documented VOCs and TCE in soil, groundwater and/or soil gas.

- According to the First Search report, the subject property was listed as a Resource Conservation and Recovery Act (RCRA) TSD-Facility with all violations resolved; RCRA CORRACTS facility with a low priority for corrective action; RCRA large quantity generator of hazardous waste with all violations resolved; FINDS database due to NPDES, NEI, FIS and RCRA, FRS, TRIS and AIRS listings; TRIS site with a status of "open".

- According to the FirstSearch report, the subject property was listed as an underground storage tank (UST) / aboveground storage tank (AST) facility with the following tanks identified on-site:

    - One 15,000-gallon #6 fuel oil AST installed in 1977 and currently in service.
    - One 275-gallon #2 fuel oil AST installed in 1974 and currently in service
    - One 2,000-gallon #2 fuel oil UST installed in 1948 and closed prior to micro-conversion in 1991.
    - One 10,000-gallon #2 fuel oil UST installed in 1973 and closed prior to micro-conversion in 1991.

    - The subject property was listed as a CBS AST facility with the following ASTs identified on-site:
    - One 1,500-gallon AST and one 2,000-gallon AST of trichloroethene installed in 1989 and closed/removed in 1994.

- South adjacent properties were identified as MRC Bearings and Dahl-Strom Sheet Metal.

- A north adjacent property was fallow land with a remediation shed.

- A north adjacent property at 583 Allen Street was identified as a RCRA TSD facility with all violations resolved; RCRA CORRACTS listed facility with a medium priority for corrective action; RCRA Large-Quantity Generator with no violations listed; and, a NYSDEC listed state hazardous waste site.

The Environmental Evaluation included the collection and testing of subsurface soil samples, groundwater samples, soil vapor samples and concrete floor samples from various locations at the Site. Chlorinated volatile organic compound (VOC) impacts to soil vapor suggesting the need for mitigation were identified below the concrete floor slab in four of the five samples (i.e., two locations in proximity of a former vapor degreaser located in the central/eastern portion of the Site and two locations in the northern portion of the Site in proximity to the adjacent DC Rollforms site). Soil vapor test locations and the concentrations of select VOCs measured are presented on Figure 5. TCE and/or its associated degradation products [cis-1,2-dichloroethene (cis-1,2-DCE) and/or vinyl chloride] were detected in soil/fill samples collected from six locations at concentrations exceeding the Protection of Groundwater SCO, and one location exceeding the Restricted Industrial Use SCO, and the concentrations of VOCs detected in soil/fill above these SCO are presented on Figure 6. Concentrations of TCE and breakdown products exceeding applicable TOGS 1.1.1 standards were detected in groundwater samples collected/tested from seven of the fourteen monitoring wells at the Site. As shown on Figure 7, the highest concentrations were detected in monitoring wells located in proximity of the former vapor degreaser with significantly lower concentrations measured in monitoring wells located away/downgradient of this area.

In addition to the chlorinated VOCs, the following impacts to soil and/or groundwater were also identified at the Site during the Environmental Evaluation:

- Light non-aqueous phase liquid (LNAPL) (i.e., apparent petroleum product with characteristics similar to a lubricant or cutting oil) was encountered in test borings MW-A and TB-22 at the time of drilling and in monitoring wells MW-A, MW-G and MW-N at the time of well development and sampling (refer to Figure 3 for locations). The maximum LNAPL thicknesses measured to date in monitoring wells MW-A, MW-G and MW-N are approximately 0.36 ft., 0.05 ft., and 0.06 ft., respectively.

  [Note: Closed in-place USTs, which formerly contained heating oil or lubricant oil, are located outside the northeast portion of the building in the vicinity of monitoring wells TB-11 and MW-L. The area of the closed in-place USTs was evaluated in December 2018.Petroleum-related VOCs and semi-volatile organic compounds (SVOCs) were not detected in the groundwater samples collected, and LNAPL was not observed in these locations. Therefore, the LNAPL observed in test locations TB-22, MW-A, MW-G and MW-N is not considered to originate from the closed in-place USTs.]

- Arsenic was detected in a groundwater sample collected from monitoring well MW-D at a concentration [i.e., 134 parts per billion (ppb)] that exceeds the TOGS 1.1.1 standard of 25 ppb.

- The concentrations of several polycyclic aromatic hydrocarbons (PAH) SVOCs [i.e., benzo(a)anthracene (0.28 micrograms per liter - µg/L), benzo(a)pyrene(0.18 µg/L), benzo(b)fluoranthene (0.16 µg/L), benzo(k)fluoranthene(0.16 µg/L), chrysene (0.30 µg/L) and indeno(1,2,3-cd)pyrene (0.14 µg/L)] that were detected in a groundwater sample collected from monitoring well MW-C exceeded the respective groundwater standards. The concentrations of VOCs, PAH SVOCs and metals detected above the TOGS 1.1.1 standards or guidance values are shown on Figure 7.

A copy of the Environmental Evaluation report is included in Appendix B.

3.0 CONCEPTUAL SITE MODEL

The preliminary conceptual site model presented in this section identifies and describes: (1) the currently known or potential sources of contamination; (2) the types of contaminants and affected media; (3) release mechanisms and potential migration pathways; and (4) actual/potential human health and environmental receptors. This preliminary conceptual site model was used as the basis for the studies described herein. The data collected during the RI will be used to refine this model as the project progresses and assist in evaluating remedial options for the Site.

The Site is currently developed with an approximate 104,800 square foot, combined one-story and two-story masonry construction building currently used for sheet metal cutting and stamping, welding, metal turning, powder coat finishing and also offices. Exterior portions of the Site are generally covered by asphalt and/or concrete pavement. However, an approximate 425 square foot area at the southwest corner of the Site is covered by grass and landscaping beds. The Chadakoin River runs along the western edge of the Site. The building on the Site is connected by a covered bridge/pathway to an approximate 39,000 square foot building that is located on the west side of the river (i.e., the tax parcel addressed 415 Chandler Street that is also owned by Weber-Knapp Company, but not considered part of the Site).

The Weber-Knapp Company began operations at the Site in about 1910 in a building located in what is now the southwest portion of the Site. Subsequent additions to the original building were made to the north and east [i.e., over the Morse Avenue Right-of-Way and former residential properties] in 1941, 1953, 1960, 1964 and 1966. Office areas are located on the ground floor and second floor of the southwest portion of the building, and the manufacturing areas are located in the remainder of the building. The shipping and receiving area is located on the south side of the eastern portion of the building. There is a scrap metal waste storage area located beneath a canopy, and a paved parking/storage lot adjacent to the west and east (respectively) of the shipping and receiving area. An electrical transformer and a liquid nitrogen tank are located to the south of the scrap metal waste storage area. A concrete-paved access drive is located north of the building. Two concrete block storage sheds are located north of the building.

Industrial operations have been performed by Weber-Knapp Company at the Site since at least around 1910. These include manufacture of metal hardware from around 1910 until the present; brass foundry operations from around 1910 until at least 1949; metal plating operations from at least 1949 until around 1975, when plating operations were moved to the attached building (off-site); and degreasing operations using TCE-based solvent between about 1969 and 1993.

3.1 Subsurface Conditions

During the fieldwork completed as part of the Environmental Evaluation (refer to Section 2.3), fill/reworked soil was encountered in each test boring advanced within, and around the perimeter of, the building at the Site (i.e., MW-A through MW-F, TB-01 through TB-14 and TB-22; refer to Figure 3 for test boring locations) beginning below the concrete floor/pavement surface. The fill material encountered generally consists of sand and gravel, extending to depths ranging between approximately 2.5 ft. bgs (i.e., TB-08) and 9.5 ft. bgs (i.e., MW-D). In some locations, the fill material is mixed with lesser amounts of concrete fragments (i.e., MW-A, TB-07, TB-09 and TB-10), brick (i.e., MW-B, TB-09 and TB-22), ash (i.e., MW-C, MW-D and TB-01), coal fragments (i.e., MW-C, TB-01 and TB-05), glass shards (i.e., MW-D, TB-04, TB-13 and TB-22), metal fragments (i.e., MW-D), cinders (i.e., TB-01, TB-02, TB-06, TB-08, TB-11 and TB-12), crushed rock (i.e., TB-08) and/or wood/plant fibers (i.e., TB-13). Indigenous soil was encountered

below the fill in each test boring. The indigenous soil generally consists of a silt layer containing plant fibers/peat material that extends to depths between 6 ft. bgs (i.e., TB-03) and 11.5 ft. bgs (i.e., TB-13); underlain by a layer of fine-to-coarse sand and gravel extending to depths between 9 ft. bgs (i.e., TB-03) and 11.5 ft. bgs (i.e., MW-A); underlain in some locations by glacial till that extends to the bottom of the test boring. Equipment refusal on apparent bedrock, identified as weathered shale, was encountered in 14 of the 19 test borings advanced at the Site, at depths ranging between approximately 9 ft. bgs (i.e., TB-03) and 13 ft. bgs (i.e., TB-22). [Note: Test borings TB-07, TB-12, TB-13 and TB-14 were terminated at depths of 12 ft. bgs, prior to encountering equipment refusal on apparent bedrock.]

The depth to the top of the apparent bedrock was observed to increase from east to west across the Site. Specifically, the elevation of the top of the apparent bedrock in test boings TB-03, TB-08, and TB-11 was approximately 3.8 ft., 2.6 ft., and 2.8 ft. (respectively) higher than the elevation of the top of the bedrock encountered in the vicinity of test borings MW-A, TB-01 and TB-02. In proximity of the Chadakoin River, the depth to apparent bedrock is suspected to be at least three ft. lower than that measured in proximity to test borings MW-A, TB-01 and TB-02 based upon test borings advanced on the 415 Chandler Street parcel. In addition, glacial till was not encountered above the top of apparent bedrock in test borings TB-03, TB-08, and TB-11.

Groundwater was measured in the monitoring wells installed at the Site as part of the Environmental Evaluation work at depths ranging between approximately 2.0 ft. bgs (i.e., MW-K) and 6.4 ft. bgs (MW-J). Based on the depth to groundwater measurements made on December 27, 2018 and the calculated groundwater elevations, groundwater flow across the Site varies based on location. Specifically, shallow groundwater in the northern portion generally flows from north to south (i.e., from the DC Rollforms property onto the Site); shallow groundwater in the eastern portion appears to flow toward the west, away from Allen Street; and shallow groundwater on the western portion appears to flow toward the east-southeast, away from the Chadakoin River. The shallow groundwater from the eastern and western portions merge in the central portion (i.e., an area of the Site that was previously occupied by Morse Avenue, which was subsequently abandoned and covered by a portion of the Main Building), and thereafter groundwater in the Main Building portion of the Site generally appears to flow toward the south. A groundwater contour map prepared based on static water level measurements made on December 27, 2018 is included on Figure 7.

3.2 Known or Suspected On-Site Sources of Contamination

This section presents a discussion of potential sources of the contaminants of concern at the Site based on the findings of the studies discussed in Section 2.3.

Volatile Organic Compounds

Reportedly, a vapor degreaser that used a TCE-based solvent was historically located in the approximate location depicted on Figure 3, from approximately 1969 until approximately 1993. Samples of soil vapor, soil, and groundwater collected/tested in proximity of this former vapor degreaser identified concentrations of TCE and associated breakdown products suggesting a source area of chlorinated VOC impact.

A second potential area of chlorinated VOC impact was identified in soil vapor samples collected from the northern portion of the Site (i.e., in proximity of the DC Rollforms site). Since comparable VOC impact in

soil and/or groundwater samples collected from this area was not identified, it appears that the source of this impact may be vapors migrating onto the Site from the DC Rollforms site.

Semi-Volatile Organic Compounds and Metals

Although isolated locations contained concentrations of SVOCs and arsenic that exceeded regulatory standards or guidance, a specific source of these constituents has not been identified to date. It is possible these constituents could be attributable to historic operations (e.g., the previous foundry operations, metals plating, etc.), and/or fill material that was observed throughout the Site some of which contained coal, ash, and other materials.

Light Non-Aqueous Phase Liquid

LNAPL (i.e., apparent petroleum product with characteristics similar to a lubricant or cutting oil) was detected in several locations at the Site including test borings MW-A and TB-22 at the time of drilling and in monitoring wells MW-A, MW-G and MW-N at the time of well development. It is likely the LNAPL encountered in locations near the former vapor degreaser (i.e., MW-A and TB-22) is cutting oil removed during the degreasing operations. The LNAPL encountered in other locations of the Site (e.g., MW-G and MW-N) may be related to fill material and/or isolated historic spills. The LNAPL identified at the Site does not appear to be attributable to leaking tanks.

3.3 Potential Release Mechanisms and Contaminant Migration Pathways

Potential release mechanisms and contaminant migration pathways away from known or suspected source areas may have included one or more of the following:

- Volatilization from impacted soil and/or groundwater into the soil vapor that collects beneath the floor slab of the building at the Site and potentially discharges into the indoor air;
- Preferential subsurface migration within subsurface utilities or their bedding materials could occur along active and abandoned structures;
- Migration horizontally and vertically through the overburden soil, fill, bedrock, or groundwater; and/or
- Migration along impermeable subsurface layers

3.4 Potential Human and Environmental Receptors

Most of the Site is covered with the approximate 105,000 square foot building and asphalt-paved parking and concrete-paved driveway areas south and north of the building. Access to the Site is generally restricted by fences and locked/monitored doors. There is a potential that off-site migration of contaminants could impact environmental and/or human receptors via the groundwater and/or through the soil vapor. Active and closed utilities at the Site may serve as preferential pathways for contaminants that are flowing along the bedding of the utility lines. There is the potential that historic operations could have resulted in discharges to the Chadakoin River that abuts the Site to the west.

Based on an internet search, the following churches/schools are located within one-half mile of the Site.

Name	Address	Relative Location to Site
Little Bear Daycare	73 Johnson Street	approximately 1,000 ft. ENE
Immanuel Lutheran Church	556 East Second Street	approximately 1,600 ft. WSW
First Lutheran Church of Jamestown	138 Chandler Street	approximately 1,900 ft. WSW
Faith Outreach Center Church	105 Chandler Street	approximately 2,200 ft. WSW
Iglesia Movimiento Pentecostes Arca De Salvacion	119-123 Chandler Street	approximately 2,000 ft. WSW

The nearest residences and commercial facilities to the Site are depicted on Figure 4.

3.5 Nearby Known Off-Site Contamination Sources

The DC Rollforms property, located adjacent to the north of the Site, is a New York State listed superfund site (NYSDEC Site No. 907019), and the primary contaminant of concern at this site is TCE and associated breakdown products, although elevated concentrations of SVOCs and metals have been detected in some locations, and LNAPL was identified leaching into the Chadakoin River. This 2.4-acre site was formerly the location of the Proto Tool Company, which was a unit of the Ingersoll Rand Company. Proto Tool manufactured specialty tools for mechanics, electricians, and plumbers until operations ceased in 1984. Starting in 1997, a series of environmental investigations began at the site. These investigations included testing of on-site surface and subsurface soil, groundwater, and sediments from the Chadakoin River. In order to address immediate environmental concerns associated with the contaminants found at the site, an Interim Remedial Measure (IRM) was undertaken in 2000. This IRM cleanup activities included:

- removal of oil from two wells using passive recovery canisters;
- excavation and off-site disposal of 400 cubic yards of lead-contaminated soil and 49 tons of polychlorinated biphenyl (PCB) contaminated soil; and
- enhanced reductive dechlorination, which included injecting molasses into contaminated areas in an attempt to create contaminant-degrading conditions.

Subsequent to the IRM and based on the Record of Decision for this site, additional remedial activities were completed that included:

- installing sheet piling along sections of the river to prevent seepage of contaminants into the river;
- excavating contaminated soil between installed sheet pile and the river, and backfilling with clean soil;
- removing elevated VOCs in groundwater through Vacuum-Enhanced Recovery;
- decommissioning outfall pipes that drained into the river;
- dewatering and treating impacted groundwater during soil excavation;
- covering surface soil along the river with clean soil;
- constructing fish habitat in the river; and
- stabilizing and restoring the river bank following construction activities through regrading and planting.

A release of hydraulic oil at the TRW Bearing Division property, which is located in proximity of the Site to the southwest on the west side of the Chadakoin River, was reported to the NYSDEC in July 1986 and spill file No.189702 was opened. Information included in NYSDEC file Spill No. 189702 indicates that remediation

efforts have been ongoing at the TRW Bearing Division property since 1988. As part of the remediation efforts conducted at this site, it is reported that between August 1 and December 31, 2017, the average rate of groundwater extraction by the pumping system installed at the TRW Bearing Division property was approximately 11.5 gallons per minute (gpm). The primary contaminants of concern at the TRW Bearing Division property are petroleum compounds. However, records for this site indicate that a vapor degreaser formerly operated on the property, and that remedial activities have been completed to address impacts from chlorinated VOCs that were detected in the groundwater.

4.0 REMEDIAL INVESTIGATION SCOPE OF WORK

The anticipated scope of work required to achieve the objectives stated in Section 1.2 is presented in this section. The rationale for the sample locations described in this section and the proposed testing program are summarized on Table 1 and discussed below. The work completed during the RI will be done in accordance with the provisions described presented in the Quality Assurance Project Plan (QAPP) included in Appendix C and the Health and Safety Plan (HASP) included as Appendix D.

4.1 Utility Assessment

Identifying potential preferred contamination migration pathways is an objective of the RI, and understanding the active and former utility infrastructure at the Site is critical for identifying potential preferred contamination pathways. To this end, publicly available utility records will be obtained from the City of Jamestown, and utility companies that service the Site. Utility records obtained will be reviewed and verified with field observations in order to identify utilities on-site and immediately off-site, including buried sewer systems (e.g., storm, sanitary or combined), electric lines, natural gas lines, water delivery lines, etc. In addition, historic building plans and records will be compiled and reviewed to assess the nature, size, depth, and discharge locations of buried utilities present at the Site. In addition, to the extent possible, the status of these buried utilities (e.g., active, removed, closed in place, etc.) will be evaluated and documented.

Depending on the completeness of the available documentation, utility accessibility and utility field testing may be implemented. These studies may include the introduction of non-toxic and biodegradable dye testing, remote video examination of accessible utilities and drains, and/or tracing of drains using a sonde, in order to evaluate the flow path, the location, and/or the discharge location and/or integrity of select utilities. [Note: Building plans for the 1960 and 1966 building additions indicate that floor drains that may have been connected to the storm sewer system were installed in the vicinity of the former vapor degreaser. Visible floor drains in this area (and other locations if warranted) will be opened and included as part of the utility assessment.]

4.2 Surface Soil Samples

<u>Human Health Exposure Samples and Historic Fill Material Characterization</u>

Surface soil samples will be collected from two locations that are not covered by pavement or building (designated SS-1 and SS-2, refer to Figure 8A) in order to characterize surface soil in relation to possible human health exposure [i.e., the 0 to 2-inch bgs interval (0 to 6-inch interval for VOCs)], and to characterize historic fill material (HFM) in the 0 to 2 ft. bgs interval (if present) in these locations. [Note: HFM samples will also be collected from test borings advanced during this RI. HFM samples will be collected from locations throughout the Site. The number of samples collected will depend on the nature of the fill materials observed at the time of collection, but based on the findings of the Environmental Evaluation it is anticipated that at least seven HFM samples will be collected.] The surface soil samples from 0 to 2 ft. bgs will be collected using a post-hole digger and/or round-headed shovel, which will be decontaminated prior to each sample collection using brushes, Alconox detergent and tap water. [Note: HFM collected from test borings will be handled, and the equipment decontaminated, as described in Section 4.5.] Refer to Section 4.8.1 for a discussion of the analyses that will be performed on these samples.

Polychlorinated Biphenyl Assessment

An electrical transformer is located on the south exterior of the building, to the southwest of the receiving area. This electrical transformer is located on a concrete pad which is surrounded by a concrete berm. The area between the concrete pad and concrete berm is filled with crushed stone. Four surface soil/sediment samples (designated SS-3 through SS-6, refer to Figure 8A) will be collected from the area of the electrical transformer (i.e., one from each side, per DER-10 requirements, from below the crushed stone within the area of the concrete berm) in order to characterize the material in the location of the transformer for PCBs. These samples will be collected using a post-hole digger and/or round-headed shovel which will be decontaminated prior to each sample collection using brushes, Alconox detergent and tap water.

Soil/sediment samples will be classified, logged, screened with a photoionization detector (PID), and the headspace above portions of the samples will also be screened with a PID. Refer to Section 4.8.1 for a discussion of the analyses that will be performed on these samples.

Sampling in the vicinity of the electrical transformers identified on the 1960 and 1966 building plans (refer to Section 2.1) will be completed during the advancement of test borings TB-104 and TB-105 (respectively). The advancement of test borings is described in Section 4.5.1.

4.3 Site Perimeter Assessment

Various test borings/monitoring wells and soil vapor probes will be installed and sampled in order to assess conditions at the Site boundaries. Specifically, the following proposed test borings/monitoring wells/soil vapor sampling points will provide information to assess potential migration of contaminants both onto and off of the Site:

Upgradient (North and Northeast) Locations: MW-L and TB-11 (previously installed overburden groundwater monitoring well); TB-102 (proposed test boring); MW-07 (proposed bedrock monitoring well); and VP-2 (proposed soil vapor probe).

Crossgradient (Northwest) Locations: MW-D, MW-K (previously installed overburden groundwater monitoring wells); TB-101, TB-108 (proposed test borings); MW-02, MW-03 (proposed glacial till zone monitoring wells), MW-08 (proposed bedrock monitoring well); and VP-1(proposed soil vapor probe).

Crossgradient (Southeast) Locations: TB-106/MW-13 (proposed monitoring well); MW-10 (proposed bedrock monitoring well); VP-3 and VP-4 (proposed soil vapor probe)

Downgradient (South and Southwest) Locations: MW-J, MW-M (previously installed overburden groundwater monitoring wells); MW-05, MW-06 (proposed glacial till zone monitoring wells); MW-10 (proposed bedrock monitoring well); VP-5 (proposed soil vapor probe)

Refer to Figure 3 for the location of previously installed test borings/monitoring wells and Figure 8Afor the locations of the proposed soil vapor probes and test borings/monitoring wells described above. Sections 4.4 through 4.6 provide additional information about the installation, development and sampling of the proposed test locations.

4.4 Soil Vapor Studies

This section describes the soil vapor assessment to be completed in exterior locations of the Site, and vapor intrusion testing to assess soil and indoor air vapor impacts within the building.

4.4.1 Soil Vapor Assessment

An initial soil vapor assessment will be conducted in accordance with applicable provisions outlined by the NYSDOH in the document titled *Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006* (Guidance Document), including Section 2.7 (Sampling Protocols) and Section 2.8 (Quality Assurance/Quality Control).

DAY will retain the services of a drilling subcontractor to advance soil vapor probes (designated VP-1 through VP-5) in the locations presented on Figure 8A. [Note: Vapor point VP-5 is located in proximity of the Fifth Wheel Bar and Restaurant, which is located on an adjacent property to the south of the Site. Depending on the concentrations detected in VP-5, a paired (i.e., sub-slab and indoor air sample point may be required within this structure.] The soil vapor probes will be installed by advancing a direct-push test boring to a depth approximately 1 foot above the top of the groundwater based upon conditions observed in nearby monitoring wells. After reaching the targeted depth, a soil vapor probe (e.g., 6-inch long double woven stainless-steel screen attached to 3/8-inch Teflon lined tubing) will be installed in the borehole at the targeted depth. The borehole will then be backfilled with clean filter sand to a depth of at least 6 inches above the top of the soil vapor probe. Thereafter the remaining borehole will be backfilled with bentonite. Depending on location, a flush-mounted curb box will be installed over each vapor probe.

Subsequent to soil vapor probe installation; the reusable equipment will be cleaned with Alconox soap, or similar, and clean tap water.

Prior to sampling, the soil vapor sample probes will be tested for potential surface air infiltration using a helium tracer gas test in accordance with the provisions outlined in the NYSDOH guidance document. Assuming the helium concentration measured in the soil vapor probe is below 10% of the enriched atmosphere as required by NYSDOH guidance, the soil vapor probe will be purged of 1 to 3 volumes of air at a flow rate that does not exceed 0.2 liters per minute. Subsequent to purging of the soil vapor probe, sampling will commence. In the event a soil vapor probe fails the helium tracer test, the surface seal will be repaired and the test repeated until the helium is measured below the NYSDOH guidance.

Samples will be collected using 6-liter Summa canisters equipped with 2-hour regulators. The vacuum reading will be recorded at the start of the test and monitored throughout the test. Following collection, the Summa canisters will be transported under chain-of-custody control to the analytical laboratory for testing.

Refer to Section 4.8.2 for a discussion of the analyses that will be performed on the soil vapor samples and the background outdoor air sample.

4.4.2 Soil Vapor Intrusion

Prior to the collection of samples, a vapor intrusion pre-sampling building inspection and product inventory will be completed. This inspection and inventory will be undertaken in general accordance with the NYSDOH Guidance Document. This task will include the completion of the NYSDOH Indoor Air Quality Questionnaire and Building Inventory including a chemical inventory of the indoor areas of the building. A PID capable of sensing VOCs in the part per billion range will be utilized to scan chemical containers for volatile emissions. Should materials be identified during the inventory that contain TCE (or other chlorinated VOCs) that would potentially be detected during the indoor air testing, they will be removed from the building, to the extent practical, and stored in a secure location during the testing.

Following the completion of the building inspection and product inventory, paired sub-slab soil vapor and indoor air samples will be collected from below/within the building at the Site from nine locations, designated SSV/IA-1 through SSV/IA-9 (refer to Figure 8A for locations). In addition, one ambient air sample will be collected in the exterior portion of the Site to evaluate background outdoor air quality at the time of indoor sampling. The sub-slab soil vapor and indoor air sampling will be conducted in general accordance with the NYSDOH Guidance Document protocols and DER-10.

Each sub-slab soil vapor sample point will be constructed using a rotary-hammer drill to drive an approximate 3/8-inch diameter hole through the concrete floor and approximately two inches into the underlying subbase material. Dedicated polyethylene tubing will be installed through the hole in the floor slab and sealed at the surface using hydrated bentonite, beeswax or modeling clay, or another non-VOC containing material. Prior to purging and sampling, the sub-slab soil vapor sample points will be tested for potential surface air infiltration using a helium tracer gas test, using the procedure described in Section 4.4.1 The temporary sub-slab soil vapor point will be purged to evacuate approximately three volumes of soil vapor at a purge flow rate not to exceed 0.2 liters per minute. After purging, the tubing will be connected to a laboratory-supplied batch certified clean SUMMA canister equipped with a flow regulator. Sub-slab soil vapor samples will be collected in SUMMA canisters for an approximate 8-hour sampling period. Upon completion, the tubing will be removed and the hole in the concrete floor will be backfilled to near grade surface with the drill cuttings, and patched with concrete to restore to the floor to its original condition.

The proposed indoor air samples will be collected adjacent to the sub-slab soil vapor locations during the same sampling period (i.e., an approximate 8-hour sampling period). The indoor air samples and ambient air sample will be collected from a height of between 3 to 5 ft. above grade surface. The indoor air samples and ambient air sample will be collected using batch certified clean SUMMA vacuum canisters, equipped with laboratory calibrated flow controllers.

[Note: Based on available information, an environmental health assessment (i.e., soil vapor intrusion evaluation) is not being proposed at the nearby residential property (i.e., 562 Allen Street) at this time. Specifically, the elevation of the residential property is approximately 5 to10 feet higher than the finished floor elevation at the Site; the residential property is hydraulically upgradient relative to the Site; and the analytical laboratory test results for a sub-slab soil vapor sample (i.e., SSV-3, collected in September 2018 from below the floor slab at a location in proximity of the residential property, near the northeast corner of the building at the Site) did not contain concentrations of chlorinated VOCs in the soil vapor suggesting a potential concern. Further, a SVI preferential pathway analysis was completed at the DC Rollforms Site (SSF Site ID 907019) in 2015, in proximity to the 562 Allen Street property. The study did not identify vapor migration away from the DC Rollforms Site in the direction of Allen Street at that time. Proposed soil vapor probe VP-2 is located between the Site and the residential property (refer to Figure 8A). Should the analytical laboratory test results from soil vapor sample VP-2 indicate the presence of chlorinated VOCs, an environmental health assessment at the 562 Allen Street property may be warranted. If so, a separate work plan will be prepared and presented to the NYSDEC.]

4.5 Test Borings and Monitoring Wells

The number and locations of the proposed test borings and monitoring wells described in this section is based upon available information. It is possible that some locations may be adjusted and/or additional test borings/monitoring wells completed based on the results of the utility assessment described in Section 4.1 and/or conditions encountered during the advancement of the test borings/monitoring wells described below.

4.5.1 Test Borings/Subsurface Soil Samples

Seven test borings (designated TB-101 through TB-105, TB-107 and TB-108) will be advanced in the locations shown on Figure 8A. [Note: SS-1 and SS-2 may also be advanced to greater than two ft. bgs, based on the nature of the HFM at these locations and/or observations made at the time of sampling.] These test borings will be advanced using direct-push sampling equipment. Where required, a concrete coring device will be used prior to advancement of the test boring.

Macrocore samples will be collected in continuous four-foot intervals. Samples will be classified, logged, screened with a PID, and the headspace above portions of the samples will be screened with a PID. Select soil samples will be collected for potential analytical laboratory testing to confirm the field observation findings.

The soil sample selection for analysis criteria is provided below:

- Potential evidence of field contamination (elevated PID readings, staining, odors, presence of NAPL, etc.). Samples will be collected from the zone of greatest evidence of field contamination;
- Adjacent to subsurface structures of environmental concern such as utilities or other preferential pathways for contaminant migration;
- Characterization of HFM, if encountered; and,
- At or just above a confining layer (i.e., glacial till) surface.

Refer to Section 4.8.1 for a discussion of the analyses that will be performed on these soil samples.

Note: Study-derived wastes generated during the RI will be containerized and disposed of in accordance with applicable regulations. Procedures for managing investigative derived wastes (IDW) are provided in Section 4.10.

4.5.2 LNAPL Monitoring Wells

Two LNAPL monitoring wells (designated MW-11 and MW-12) will be installed in the locations shown on Figure 8A. [Note: TB-108 will be converted into an LNAPL monitoring well if LNAPL is detected in the soil samples observed during the advancement of the test boring.] These monitoring wells will be installed using a two-inch inside diameter, schedule 40 PVC casing and screen materials within test borings advanced approximately four ft. below the top of the saturated soil interval, determined at the time of drilling (i.e., approximately 8-10 ft. bgs). The screened section of the LNAPL monitoring wells will consist of a 5 to 10-foot-long section of No. 10 slot screen placed to intercept the top of the groundwater table.

The annulus around the well screen will be filled with a washed and graded silica sand pack that will be placed at least one foot above the top of the screen interval. A minimum one-foot thick bentonite seal will be placed above the sand pack and hydrated with potable water. Following hydration of the bentonite, the remaining annulus will be filled with cement/bentonite grout consisting of approximately 96% Portland type 1 (or similar) cement and 4% granular bentonite mixture, and water. The cement/bentonite grout will be tremied into the well annulus to approximately one foot below grade. A curb box with locking cap will be placed over each well. A schematic showing the construction details for the LNAPL monitoring wells is included as Figure 9.

4.5.3 Glacial Till Zone Monitoring Well Installation

Seven glacial till zone groundwater monitoring wells (MW-01 through MW-06 and TB-106/MW-13) will be installed using a two-inch inside diameter, schedule 40 PVC casing and screen materials. Refer to Figure 8A for the locations of these monitoring wells. A schematic glacial till zone monitoring well construction diagram is shown on Figure 10. The well screen will consist of a 5-foot section of No. 10 slot screen PVC and attached to a solid PVC riser casing with a PVC cap that will extend from the top of the screened section to the ground surface. The actual length of the well screen may vary due to the field conditions encountered. Prior to installation of the well screen, the open test boring will be advanced to equipment refusal using hollow-stem augers.

The annulus around the well screen will be filled with a washed and graded silica sand pack that will be placed at least one foot above the top of the screen interval. A minimum one-foot thick bentonite seal will be placed above the sand pack and hydrated with potable water. Following hydration of the bentonite, the remaining annulus will be filled with cement/bentonite grout consisting of approximately 96% Portland type 1 (or similar) cement and 4% granular bentonite mixture, and water. The cement/bentonite grout will be tremied into the well annulus to approximately one foot below grade. A curb box or steel protective casing with locking cap will be placed over each well.

[Note: Based on the shallow direct push drilling equipment refusal depths encountered in test borings advanced along the eastern edge of the Site during the Environmental Evaluation (e.g., TB-03 at 9.0 ft. below the surface of the concrete floor, TB-08/MW-I at 10.0 ft bgs, and TB-11 at 11.5 ft. bgs), it is anticipated that the shallowest glacial till zone will be encountered on the eastern edge of the Site, at proposed test location TB-106/MW-13. Further, it is possible that a glacial till deposit will not be encountered in the subsurface at proposed test location TB-106/MW-13 (i.e., as observed in test borings TB-03, TB-08/MW-I, and TB-11, which were advanced on the eastern portion of the site during the Environmental Evaluation). Also, during the groundwater sampling event that was completed on December 26, 2018, groundwater monitoring well TB-08/MW-I did not produce a sufficient quantity of groundwater to sample the monitoring well using low flow sampling methods (i.e., presumably due to the shallow depth of the overburden). Therefore, in the event that 'dry' soil conditions (i.e., indicating that the glacial till zone groundwater monitoring well is not likely to produce a sufficient quantity of groundwater for future sample collection) are encountered during the advancement of proposed test boring TB-106/MW-13, or if a glacial till deposit is not encountered during drilling of proposed test boring TB-106/MW-13, drilling at this location may advance into the bedrock; and proposed test boring TB-106/MW-13 may be completed as a bedrock monitoring well, as described in Section 4.5.4. The determination to complete proposed test location TB-106/MW-13 as a glacial till zone monitoring well or a bedrock monitoring well will be made at the time of drilling and following consultation with the NYSDEC Project Manager.]

4.5.4 Bedrock Monitoring Well Installation

Four bedrock monitoring wells (designated MW-07 through MW-10) will be installed using a macro-core and hollow stem auger [assumed 6.25-inch inner diameter (ID)] to advance a test boring from the surface to the top of bedrock. Refer to Figure 8A for the location of these bedrock monitoring wells. A minimum 2-foot rock socket will be advanced into competent bedrock using a roller bit to accommodate a 4-inch steel surface casing, which will be grouted in place and allowed to set for a minimum of 24 hours. The bedrock monitoring wells will be cored approximately 10 ft. below the surface casing using a HQ/HX-sized core barrel. These bedrock wells will be completed as open-hole wells. A curb box or steel protective casing with locking cap will be placed over each well. A schematic showing the proposed construction of the bedrock monitoring wells is included as Figure 11.

4.6 Groundwater Monitoring Well Development and Sampling

Well Development

At least two days following installation, the monitoring wells will be developed in accordance with the protocol outlined in the QAPP (Appendix C).

Groundwater Sampling

Two groundwater sampling events will be completed during this RI. During the first event (which will be conducted approximately two weeks after the development of monitoring wells installed during this RI, groundwater samples will be collected from existing monitoring wells MW-B, MW-D, MW-G, MW-H, MW-I, MW-J, MW-L and the monitoring wells installed during the RI (i.e., monitoring wells MW-01 through MW-12 and TB-06/MW-13). [Note: It is anticipated that existing monitoring well MW-A, MW-E and MW-F will be removed as part of a soil removal Interim Remedial Measure (refer to Section 5.0). Therefore, it is anticipated that these monitoring wells will not be available for sampling. In the event these monitoring wells (or replacement monitoring wells) are available, samples will also be obtained from these locations during the initial sampling event.] The second groundwater sampling event will be conducted approximately four months after the first groundwater sampling event, and it is anticipated that the monitoring wells to be sampled, and the parameters tested, may be reduced pending the results of the initial groundwater monitoring event.

The groundwater samples will be collected using low-flow purging and sampling procedures. Low-flow sampling procedures are outlined in the QAPP (Appendix C). The groundwater samples collected during the first groundwater sampling event will be analyzed for the suite of parameters outlined in Table 1. Dependent on the results of the initial sampling event and pending NYSDEC concurrence, it is assumed that during the second sampling event the groundwater samples collected will only be tested for target compound list (TCL) VOCs plus tentatively identified compounds (TICs) via USEPA Method 8260. [Note: Dependent on NYSDEC input, groundwater samples in the second round may also be collected using Passive Diffusion Bags (PDBs), as an alternative to low-flow sampling.]

During sampling events, field parameters of pH, temperature, turbidity, dissolved oxygen (DO), and oxygen reduction potential (ORP) will be measured using a YSI water quality meter, or similar (refer to the QAPP in Appendix C).

Prior to use, and between the sampling of each monitoring well, reusable (non-disposable) groundwater sampling equipment will be decontaminated as described in the QAPP. Water generated from the well sampling and equipment decontamination activities will be containerized as IDW for later disposal. Procedures for managing IDW are provided in Section 4.10.

Groundwater samples that will be tested for PFAS and 1,4-dioxane will be collected in accordance with the current NYSDEC protocols at the time of sample collection.

Surveying and Groundwater Potentiometric Surface Evaluation

A licensed land surveyor will measure the location and elevation of each new and previously installed monitoring well; and other sampling points deemed necessary. The elevations of the new monitoring wells will be measured in reference to an established benchmark. During each sampling event and at various times during the RI, static groundwater measurements will be collected using an electronic static water level meter or an oil/water interface meter. At a minimum, groundwater elevations will be calculated for the two groundwater sampling events, and corresponding potentiometric groundwater contour maps will be prepared illustrating the approximate groundwater elevations and groundwater flow direction(s).

Physical Characterization

Slug tests will be conducted in five overburden/glacial till monitoring wells and each of the bedrock monitoring wells installed at the Site following completion of the first groundwater sampling event. The location and water-bearing units of the slug tests will be determined based on an evaluation of the RI data that was obtained. Based on the extent of contamination in the groundwater, the number of slug tests conducted in each water-bearing unit may change.

4.7 Sediment Sampling

Sediment samples will be collected from three locations within the Chadakoin River (designated SED-1 SED-2 and SED-3, refer to Figure 8A). The sediment samples will be collected from the east bank of the river at locations upstream of the Site (i.e., SED-1), downstream of the Site (i.e., SED-3) and in the vicinity of the former stormwater drain discharge locations (i.e., SED-2).

It is anticipated that the sediment samples will be collected during a period when the flow in the Chadakoin River is at a minimum. Further, sampling will be coordinated with the Washington Street dam operator, as necessary, to further reduce the water volume at the time of sampling. Sediment samples will be collected at each location from depths between 0 and approximately 0.5 ft. below the river bed using a stainless-steel hand auger or stainless-steel hand trowel that will be decontaminated prior to each sample collection using brushes, Alconox and tap water. Sediment samples will be classified, logged, screened with a PID, and the headspace above portions of the samples will also be screened with a PID. Refer to Section 4.8.4 for a discussion of the analyses that will be performed on these samples.

4.8 Analytical Laboratory Testing and QA/QC

Select samples collected during the RI will be submitted to a NYSDOH Environmental Laboratory Approved Program (ELAP)-certified analytical laboratory. The analytical laboratory will test the samples

submitted using the procedures listed below, and the data will be provided in an Analytical Services Protocol (ASP) Category B data package.

- Total Petroleum Hydrocarbons (TPH) via USEPA Method 8100/8015;
- Target Analyte List (TAL) Metals by various USEPA methods;
- Cyanide via USEPA via Method 9012B;
- TCL/CP-51 List VOCs plus TICs via USEPA Method 8260;
- TCL or CP-51 List SVOCs plus TICs via USEPA Method 8270;
- PCBs via USEPA Method 8082A;
- Pesticides via USEPA Method 8081B;
- PFAS via USEPA Method 537 Modified;
- 1,4-Dioxane via USEPA Method 8270D with SIM (groundwater samples); and,
- Soil Vapor and Indoor Air via USEPA Method TO-15.

4.8.1 Soil/Fill Samples

Soil/fill samples will be collected to supplement existing data and characterize the nature of soil/fill and the extent of contamination that may be identified. The proposed sample locations, are shown on Figure 8, and described below. The rationale for the selection of the proposed soil/fill sample locations is presented on Table 1, and further discussed below.

Shallow Soil/Historic Fill Material

Two samples (SS-1 and SS-2) will be tested for the following parameters:

- TPH;
- TAL Metals;
- Cyanide;
- TCL/CP-51 List VOCs plus TICs;
- TCL and CP-51 List SVOCs plus TICs;
- PCBs;
- Pesticides; and
- 1,4-Dioxane

Four surface samples (SS-3 through SS-6) will be collected from the locations depicted on Figure 8A, composited in the field into a single sample (i.e., 4:1 composite), and tested for the following parameters:

- TAL Metals;
- Cyanide;
- TCL or CP-51 List SVOCs plus TICs;
- PCBs;
- Pesticides;
- PFAS; and,
- 1,4-Dioxane

One or more of the discrete surface soil samples (i.e., SS-3 through SS-6) will also be tested for TCL/CP-51 List VOCs plus TICs.

If evidence of HFM is encountered during the collection of the surface samples, a test boring or hand auger will be advanced through the HFM to obtain a sample(s) for testing of some or each of the parameters referenced above, subject to NYSDEC approval.

The testing of the shallow soil/HFM as outlined above is expected to sufficiently characterize soils located in areas without a cover (e.g., areas not under a concrete slab, asphalt-pavement, etc.).

Subsurface Soil/HFM

Subsurface soil and/or HFM samples will be collected in consecutive intervals from the ground surface to completion of the test borings completed as part of this RI (i.e., TB-101 through TB-107, and MW-01 through MW-12). It is anticipated that HFM samples will be collected from six locations (i.e., tentatively based on the conditions observed to include TB-101, TB-102, TB-103, TB-104, TB-105, and TB-107), and tested for some or all the following parameters:

- TAL Metals;
- Cyanide;
- TCL/CP-51 List VOCs plus TICs;
- TCL or CP-51 List SVOCs plus TICs;
- PCBs;
- Pesticides;
- PFAS; and,
- 1,4-Dioxane

As presented on Table 1, it is anticipated that seven additional soil/fill samples will be collected and tested for various parameters to further characterize subsurface conditions and/or delineate impacts based on the findings of the Environmental Evaluation. These soil/fill samples will be collected from TB-106/MW-13, TB-108, MW-01, MW-02, MW-03, MW-04 and MW-05, and tested for the parameters listed on Table 1. Depending on the results of observations and field screening at the time of drilling, additional subsurface soil/fill samples may be submitted for testing. If such testing is deemed necessary, the NYSDEC will be consulted.

The results of the laboratory analyses of the soil/fill samples will be evaluated by comparing them to applicable NYSDEC SCOs (i.e., the Industrial SCO and the Protection of Groundwater SCO). The testing of the subsurface soil, as outlined above and as completed during the Environmental Evaluation, is expected to sufficiently characterize soil across the Site and delineate the previously identified chlorinated VOCs.

4.8.2 Soil Vapor and Indoor Air Samples

The five soil vapor samples (VP-1 through VP-5), nine sub-slab soil vapor samples (SSV-1 through SSV-9), nine indoor air samples (IA-1 through IA-9) and a background outdoor air sample will be submitted to a NYSDOH ELAP-certified analytical laboratory for analysis of VOCs via USEPA Method TO-15 using applicable ASP protocol. The analytical laboratory will be requested to meet the minimum reporting limit

of 0.2 ug/m^3 for TCE, *cis-1,2-DCE, 1,1-DCE,* vinyl chloride and carbon tetrachloride, and 3 ug/m^3 for the remaining TO-15 list VOCs.

4.8.3 Groundwater Samples

A minimum of nine overburden groundwater samples, seven glacial till zone groundwater samples, and four bedrock groundwater samples will be collected from the monitoring wells to be installed or previously installed at the Site. These samples will be analyzed for the parameters identified on Table 1, as discussed below.

Initial (1st Round) Groundwater Sampling Event

Overburden /Glacial Till Zone Groundwater Samples

During the initial groundwater monitoring event, samples will be collected from monitoring wells installed during the RI (i.e., MW-01 through MW-06, and TB-06/MW-13) and previously installed monitoring wells (MW-B, MW-D, MW-G, MW-H, MW-I, MW-J, and MW-L) and tested for the parameters identified on Table 1.

LNAPL Well Product Samples

Groundwater and/or LNAPL samples will be collected from monitoring wells MW-11 and MW-12, which will be installed in areas where LNAPL was identified during the studies completed as part of the Environmental Evaluation. These two groundwater and/or product samples will be tested for the parameters indicated on Table 1. [Note: TB-108 will be converted into an LNAPL monitoring well if LNAPL is detected in the soil samples observed during the advancement of the test boring.]

Bedrock Groundwater

As part of the initial (1st Round) groundwater sampling event, groundwater samples will be collected from four bedrock monitoring wells (i.e., MW-07 through MW-10). The bedrock groundwater samples collected from the bedrock monitoring wells will be tested for the parameters identified on Table 1.

[Note: As shown on Table 1, groundwater samples collected during the initial groundwater sampling event from monitoring wells MW-03, MW-04, MW-07, MW-11, and MW-12 will be tested for the full suite, including 1,4-dioxane and PFAS. Groundwater samples were collected from monitoring wells MW-C and MW-H on January 2, 2019 were tested for 1,4-dioxane and PFAS as part of the Environmental Evaluation.]

Second (2nd Round) Groundwater Sampling Event

It is anticipated that the testing program completed during the second groundwater sampling event will only require testing for TCL/CP-51 List VOCs plus TICs. However, additional parameters may be added based on the results from the first groundwater sampling event and discussions with the NYSDEC.

4.8.4 Sediment Samples

Three sediment samples (SED-1, SED-2 and SED-3) will be tested for the following parameters:

- TCL/CP-51 List VOCs plus TICs
- TCL and CP-51 List SVOCs plus TICs
- TAL Metals
- Cyanide
- TPH
- PFAS; and,
- 1,4-Dioxane.

The testing outlined above is expected to characterize sediment in the Chadakoin River adjacent to the Site.

4.8.5 Analytical Laboratory Quality Assurance/Quality Control

The QA/QC program to be implemented by the laboratory used for this project is described in the QAPP. Analytical laboratory test results will be reported in NYSDEC ASP Category B deliverable reports. In addition, analytical laboratory results will be provided to the NYSDEC using the NYSDEC's Equis Format.

A NYSDEC approved data validator (currently anticipated to be Vali-Data of Western New York, refer to the QAPP) will independently prepare a Data Usability Summary Report (DUSR) in accordance with the provisions set forth in Appendix 2B of DER-10. The findings of the DUSR(s) will be incorporated into analytical laboratory tables that will be included in the RI report and other associated reports, as applicable. Further information is provided in the QAPP.

4.9 Fish and Wildlife Impact Analysis

An evaluation will be performed using the Fish and Wildlife Resource Impact Analyses (FWRIA) Decision Key to determine whether a Fish and Wildlife Resource Impact Analysis is needed. If this evaluation concludes that a Fish and Wildlife Resource Impact Analyses is required, then that document will be prepared and submitted to NYSDEC as part of the work to be implemented in accordance with this RI/RAA Work Plan.

4.10 Investigation Derived Wastes

It is anticipated that solid and liquid study-derived wastes will be generated during the RI. This investigation derived waste (IDW) will be managed in general accordance with the applicable provisions set forth of DER-10 Section 3.3(e). The method for handling, characterization and disposal of IDW is described below.

- Potentially contaminated liquid wastes will likely include: decontamination water, drilling water, well development water, and purge water. Storage of liquid IDW will be generally collected in 55-gallon drums, which will be stored on the Site in a secure location. Liquids that are grossly contaminated or suspected to contain NAPL may be placed in separate drums, will be stored in an area with secondary containment, and labeled accordingly. Management of liquid IDW following completion of the groundwater sampling may be modified following review of the data generated during the RI. It is anticipated that liquid IDW will be discharged to the City of Jamestown sanitary sewer system under a sewer use permit.

- Obtaining a sewer use permit may require sampling the IDW for parameters of concern. Sampling results of IDW necessary to obtain a sewer use permit will be incorporated into the RI/RAA Report. A copy of the sewer use permit will be provided to the NYSDEC prior to any discharge to the sanitary sewer system, and will also be included in the RI/RAA Report. Drummed liquid IDW that is grossly contaminated or suspected to contain NAPL will also be characterized using the investigation test results and other sampling data as necessary to dispose or treat the material in accordance with applicable regulations.

- Potentially contaminated solid wastes will likely include disposable sampling equipment and personal protective equipment (PPE), soil samples that were collected but not selected for analytical laboratory testing, and soil cuttings from rotary drilling operations. It is anticipated that the solid IDW will be placed in 55-gallon drums. As an exception, solids that are grossly contaminated or suspected to contain NAPL may be placed in separate drums and labeled accordingly. The IDW solids will be characterized and disposed off-site in accordance with applicable regulations. If re-use of the IDW is possible based on a review of the RI analytical results, the NYSDEC will be notified of the proposed re-use of IDW for approval prior to implementation.

5.0 INTERIM REMEDIAL MEASURE

An IRM consisting of a soil removal in the area of the former vapor degreaser is anticipated. An IRM Work Plan dated December 12, 2019 was approved by the NYSDEC on December 13, 2019. The IRM Work Plan describes the proposed areal and vertical extent of the soil removal IRM, and it identifies the data needed to complete design activities prior to implementing the IRM (e.g., structural assessment and delineation of the extent of impact). The IRM Work Plan also presents proposed confirmatory testing to assess the effectiveness of the IRM, describes the handling and disposal of material removed during the IRM, and describes the restoration of the Site. A project schedule is also included in the IRM Work Plan. Currently it is anticipated that the soil removal IRM will be completed prior to the field work described in this RI/RAA Work Plan (i.e., with the exception of the utility assessment described in Section 4.1, which will be completed concurrently).

5.1 Contained-In Determination

Following the completion of the delineation studies described in Section 3.1 of the IRM Work Plan and receipt of the data provided by the analytical laboratory, DAY prepared and transmitted a letter, dated November 19, 2019, to notify the NYSDEC of origins of the proposed waste pursuant to obtaining approval of a "contained in" demonstration for the soil/fill materials described in Section 3.4.1.1 of the IRM Work Plan (i.e., generally soil impacted by chlorinated VOCs, located in the area of the former vapor degreaser at depths between about 9.5 ft. and 13 ft. below the surface of the concrete floor). As outlined in the NYSDEC Technical Administrative Guidance Memorandum (TAGM) 3028, dated November 30, 1992, "environmental media containing hazardous constituents from listed hazardous waste identified in 6 NYCRR Part 371, must be managed as hazardous wastes unless or until the media contain hazardous constituent concentrations which are at or below action level concentrations." The NYSDEC's "contained-in" policy is primarily intended for situations where contaminated media, especially soil, is expected to contain low concentrations of listed hazardous waste for which treatment may not be practical or feasible.

The response from the NYSDEC, dated November 29, 2019 indicated, "…excavated soils, to a depth of approximately 13 feet below grade, do not have to be managed as hazardous waste when transported to a permitted solid waste landfill with liner and leachate collection system, for proper disposal as non-hazardous waste." The NYSDEC response also instructed, "During the soil excavation, if Day encounters stains, discoloration or soils that exhibit odors suggesting contamination, such material shall be separated from the excavated material and should be properly stockpiled and analyzed as per the approved Remedial Work Plan, and depending on the results, Day may request a "Contained-In" determination for this material. Also prior to disposal, the concrete needs to be segregated and sampled for VOCs (8260 and TCLP) and depending on the results, Day may request a "Contained-In" determination for the concrete." A copy of the November 29, 2019 contained-in determination letter from the NYSDEC is provided as Appendix E.

Depending on the analytical laboratory test results for media samples (i.e., sediment, surface soil, subsurface soil, groundwater, etc.) collected during the RI, samples of containerized IDW may be collected and tested for "contained in" determination approval, prior to disposal of the IDW.

6.0 REMEDIAL INVESTIGATION/REMEDIAL ALTERNATIVES ANALYSIS REPORT

The RI/RAA report will be prepared in accordance with provisions set forth in DER-10. The RI/RAA report will present the findings and outcome of the RI, the results of the IRM completed, and an analysis of remedial alternatives. An executive summary will be included in the RI/RAA report.

The RI portion of the report will include, but will not be limited to, the following components:

- Technical overview and details on the investigative work performed;
- A description of the physical characteristics of the Site, including soil/fill types, hydrogeological characteristics, proximity to a drinking water aquifer, absence of surface water, floodplains, and wetlands for this specific Site, etc.;
- Identification of the nature and extent of contamination, including identification of known or suspected sources of contamination;
- A discussion on contaminant fate and transport, including potential routes of migration, contaminant persistence, and documented contaminant migration, as well as, factors that affect contaminant migration;
- A qualitative human health exposure assessment and completion of a FWRIA Decision Key;
- A Summary and Conclusions section, including identification of data limitations or recommendations for future work;
- Identification of recommended Remedial Action Objectives (RAOs);
- A discussion of the IRM implemented at the Site;
- Appropriate figures including a project locus map, site plan depicting Site features, sample location figures and results of various testing [e.g., contaminants of concern (if any) detected in soil, groundwater or other media, including isopleth maps], overburden potentiometric groundwater contour maps, a figure showing the extent of fill material at the Site, etc.;
- Stratigraphic cross-sections prepared using information and data obtained during the investigation;
- Identification of SCG values that pertain to the Site;
- Data tables including:
    - tables providing specifics on each sample tested (e.g., sample designation; locations specified by New York West FIPS 3103 NAD 83 coordinates, sample point elevations in feet above mean sea level for surveyed locations, consistent with reference datum to be

used for the electronic data deliverable (EDD) submittal, date, depth interval and test parameters)

- summary tables comparing detected constituents to appropriate regulatory SCG values;
- tables summarizing the nature and extent of constituents detected at the Site; and
- tables for other various investigation-related data or information.

The analytical laboratory results for soil samples tested will be compared to appropriate NYSDEC Part 375 SCOs and CP-51 Supplemental SCOs. The analytical laboratory results for groundwater samples will be compared to NYSDEC TOGS 1.1.1 groundwater standards and guidance values;

- Analytical laboratory reports and associated QA/QC evaluation (e.g., DUSRs) as an electronic appendix in .pdf format;

- Field logs and data, including test boring logs, well construction diagrams, well development logs, well sampling logs, hydraulic conductivity testing data, PID readings from soil screening, and any Community Air Monitoring Plan (CAMP) monitoring;

- Photographs;

- Conclusions and recommendations regarding the extent of the areas of concern, identification of any complete or potentially complete exposure pathways, and recommendations for future work (e.g. none, additional investigation, or an evaluation of remedial alternatives);

- An updated conceptual site model; and,

- Other information as deemed appropriate.

Data generated as part of the RI will be submitted to the NYSDEC in the appropriate EDD format. Analytical data will be submitted when the DUSR is received, but no later than 90 days after receipt of the laboratory data package. Any required non-analytical data will be submitted within 90 days of being generated.

The RAA portion of the report will discuss potential remediation options for addressing impacts documented in the RI portion of the report. A detailed evaluation will be conducted for each identified remedial alternative, taking into consideration factors identified in DER-10. Evaluation criteria include, but are not limited to:

- Overall protection of human health and the environment, including potential exposures;
- Compliance with SCG values;
- Long-term effectiveness and permanence;
- Short-term impact and effectiveness;
- Reduction of toxicity, mobility and/or volume;
- Implementability;

- Land use;
- Community acceptance; and,
- Cost effectiveness.

The RAA will identify general response actions including an estimate of the volumes/areas of contaminated media. General response actions include categories such as treatment, containment, excavation, extraction, disposal, institutional controls, engineering controls, or various combinations. Cumulative data will be used as the project progresses to modify general response actions as deemed appropriate. Where presumptive remedies are available to address an area of contaminated media, they will be strongly considered; however, innovative technologies will also be considered. Applicable general response actions will be developed on a medium-specific basis, similar to the development of RAOs. For each medium addressed, the volumes or areas to be remediated will be identified and characterized with respect to requirements for protectiveness, taking into account the chemical and physical characterization. During this step, technologies that are not suitable for the Site will be eliminated from further consideration.

Technology types for each general response action associated with an impacted media will be screened for appropriateness. Technology types may include chemical treatment, enhanced biodegradation, capping, thermal destruction, dewatering, etc. The technologies that appear feasible and capable of meeting the SCG goals will be used in development of remedial alternatives for the Site. The technologies will then be assembled into site-wide remedial alternatives. The following components of each alternative will be discussed: size and configuration of processes; anticipated remediation duration; spatial requirements; disposal options; permit requirements; and beneficial or adverse impacts on fish and wildlife.

An Unrestricted Use alternative and a No Action alternative will also be developed and evaluated for the Site. Other alternatives will be developed that consider the following hierarchy of preference:

- Source removal: Free product, concentrated solid or semi-solid hazardous substances, dense non-aqueous phase liquid (DNAPL), LNAPL and/or grossly contaminated media will be removed and/or treated to the greatest extent feasible.

- Containment of source: Any source remaining following removal and/or treatment shall be contained to the greatest extent feasible.

- Eliminate/limit exposures to the source to the greatest extent feasible.

- Treatment at point of exposure as a last resort.

The remedial alternatives will then be compared to the evaluation criteria and a comparative analysis will be completed. Based on the remedial alternative analysis, a remedial alternative for the Site will be recommended, which will include a discussion on the reasons for selection. The criteria of community acceptance will be evaluated upon completion of the public comment period.

The objectives of the RAA for this project are to identify, evaluate, and select a remedy or alternative remedies to address the contamination identified by the RI in accordance with the provision of Chapter 4 of DER-10. This includes:

1. Identifying remedial goals.

2. Identifying RAOs for the protection of public health and the environment.

3. Evaluating baseline considerations associated with:
    a. protection of public health and the environment;
    b. addressing sources of contamination;
    c. bulk storage tank and containment vessels; and
    d. groundwater protection and control measures.

4. Evaluating other considerations associated with remedial alternatives to address the contamination on the Site to the extent applicable, such as the potential for soil vapor intrusion, and impacts on adjacent properties.

5. Evaluating the need for a cover system, such as a soil or pavement cover, if contamination is present in exposed surface soil.

6. Evaluating the alternatives in relation to threshold criteria and primary balancing criteria listed in Section 4.2 of DER-10.

The RI/RAA Report will be submitted to the NYSDEC for review and comment. Following review and comment from the NYSDEC, the RI/RAA Report will be finalized, stamped and signed by a currently-registered New York State licensed Professional Engineer (P.E.) prior to approval by the NYSDEC. Based on the findings of the RI/RAA Report, the NYSDEC will prepare a Proposed Remedial Action Plan (PRAP) summarizing the proposed remedy for the Site. The final RI/RAA Report will include an electronic copy in the appropriate PDF format required by the NYSDEC.

7.0 PROJECT SCHEDULE

The project schedule for the scope of work described in this Work Plan is presented on Table 2. This schedule will be updated and adjusted as the project progresses. Adjustments required to the project schedule will be identified in monthly progress reports that will be submitted to NYSDEC.

8.0 REFERENCES

NYSDEC: NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 document titled "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (TOGS 1.1.1). New York State Department of Environmental Conservation; June 1998, including April 2000 and June 2004 addendum tables.

NYSDOH: Guidance for Evaluating Soil Vapor Intrusion in the State of New York; New York State Department of Health; October 2006.

NYSDEC: 6 NYCRR Part 375-2 Inactive Hazardous Waste Disposal Program; New York State Department of Environmental Conservation; December 14, 2006.

NYSDEC: CP-51/Soil Cleanup Guidance. New York State Department of Environmental Conservation; October 21, 2010.

NYSDEC: DER-10 Technical Guidance for Site Investigation and Remediation, New York State Department of Environmental Conservation; May 3, 2010.

9.0 ACRONYMS

ASP	Analytical Services Protocol
AST	Aboveground Storage Tank
bgs	Below Ground Surface
CAMP	Community Air Monitoring Plan
cis-1,2-DCE	cis-1,2-Dichloroethene
CP-51 List	NYSDEC Commissioner's Policy No. 51-List
DAY	Day Environmental, Inc.
DNAPL	Dense Non-Aqueous Phase Liquid
DUSR	Data Usability Summary Report
ELAP	Environmental Laboratory Approval Program
EDD	Electronic Data Deliverable
FWRIA	Fish and Wildlife Resource Impact Analyses
gpm	Gallons per Minute
HASP	Health and Safety Plan
HFM	Historic Fill Material
IDW	Investigation-Derived Waste
IRM	Interim Remedial Measure
LNAPL	Light Non-Aqueous Phase Liquid
µg/l	micrograms per liter
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PAH	Polycyclic Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PFAS	Polyfluoroalkyl Substances
PID	Photoionization Detector
Phase I ESA	Phase I Environmental Site Assessment
ppb	Parts per Billion
PPE	Personal Protective Equipment
PVC	Polyvinyl Chloride
QAP	Quality Assurance Plan
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RAOs	Remedial Action Objectives
RCRA	Resource Conservation and Recovery Act
RI/RAA	Remedial Investigation/Remedial Alternatives Analysis
SCG	Standards, Criteria, and Guidance
SCO	Soil Cleanup Objectives
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TCE	Trichloroethene
TCL	Target Compound List
TIC	Tentatively Identified Compounds
TPH	Total Petroleum Hydrocarbons
TOGS	Technical and Operational Guidance Series
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WQS/GV	Water Quality Standards and Guidance Values

TABLES

TABLE 1
Rationale for the Selection of the Proposed Sample Locations and Proposed Analytical Laboratory Testing Program
441 Chandler Street
Jamestown, New York
NYSDEC Site No. C907048

Test ID	Primary Rationale for Completion	Sample Matrix	Proposed Tests and Quantities									
			TO-15 List VOCs	TCL/CP-51 VOC & TICs	TCL or CP-51 SVOC & TICs	Pesticides	TAL Metals	PCBs	Cyanide	TPH	PFAS	1,4-Dioxane
		Total Tests:	24	38	25	3	25	20	22	7	15	17
SED-1	Assess river sediments located upstream from the Site	sediment		1	1		1		1	1	1	1
SED-2	Assess river sediments located adjacent to the Site, in the vicinity of historic storm water discharge points	sediment		1	1		1		1	1	1	1
SED-3	Assess river sediments located downstream from the Site	sediment		1	1		1		1	1	1	1
SS-1	Assess surface soil from landscape/lawn area in order to assess potential human exposure	soil/fill		1	1	1	1	1	1	1		1
SS-2	Assess surface soil from portion of the Site not covered with buildings or pavement in order to assess potential human exposure	soil/fill		1	1	1	1	1	1	1		1
SS-3	Assess surface soil/sediment collected from area of current electrical transformer	soil/sediment		+	1	1	1	1	1		1	1
SS-4				+								
SS-5				+								
SS-6				+								
VP-1	Assess soil vapor in the vicinity of the DC Rollforms remedial well field (NYSDEC SSF Site # 907019)	soil vapor	1									
VP-2	Assess potential off-site soil vapor along the eastern perimeter of the Site, in proximity to the former vapor degreaser	soil vapor	1									
VP-3	Assess soil vapor along the eastern perimeter of the Site, hydraulically crossgradient from the former vapor degreaser	soil vapor	1									
VP-4	Assess soil vapor along the southeastern perimeter of the Site, hydraulically downgradient from the former vapor degreaser	soil vapor	1									
VP-5	Assess soil vapor on the adjacent property to the south of the Site, hydraulically downgradient from the former vapor degreaser and in proximity to the nearest commercial property	soil vapor	1									
SSV/IA-1	Evaluate potential for soil vapor intrusion - Circa 1910 concrete floor slab	soil vapor	1									
		indoor air	1									
SSV/IA-2	Evaluate potential for soil vapor intrusion - Circa 1941 concrete floor slab	soil vapor	1									
		indoor air	1									
SSV/IA-3	Evaluate potential for soil vapor intrusion - Circa 1953 concrete floor slab; above former Morse Avenue ROW	soil vapor	1									
		indoor air	1									
SSV/IA-4	Evaluate potential for soil vapor intrusion - Circa 1960 concrete floor slab; above former Morse Avenue ROW	soil vapor	1									
		indoor air	1									
SSV/IA-5	Evaluate potential for soil vapor intrusion - Circa 1953 concrete floor slab	soil vapor	1									
		indoor air	1									
SSV/IA-6	Evaluate potential for soil vapor intrusion - Circa 1966 concrete floor slab	soil vapor	1									
		indoor air	1									
SSV/IA-7	Evaluate potential for soil vapor intrusion in the vicinity of previous sampling location SSV-1	soil vapor	1									
		indoor air	1									
SSV/IA-8	Evaluate potential for soil vapor intrusion in the vicinity of previous sampling location SSV-4	soil vapor	1									
		indoor air	1									
SSV/IA-9	Evaluate potential for soil vapor intrusion in the vicinity of previous sampling location SSV-5	soil vapor	1									
		indoor air	1									
Background/ outdoor air	Background sample for soil vapor intrusion evaluation	outdoor air	1									
TB-101	Assess subsurface soil/fill conditions within the former plating department, and historic fill material	soil/fill		1	1		1	1	1		1	1
TB-102	Assess subsurface soil/fill conditions in the area of the former lacquer room, and historic fill material	soil/fill		1	1		1	1	1		1	1
TB-103	Fill data gap in the area located to the west of the former vapor degreaser	soil/fill		1	1		1	1	1		1	1
TB-104	Assess subsurface soil/fill conditions in the area of a former storage tank and electrical transformer, removed for the 1966 building addition	soil/fill		1	1		1	1	1		1	1
TB-105	Assess subsurface soil/fill conditions in the area of a former electrical transformer	soil/fill		1	1		1	1	1		1	1
TB-106/MW-13	Assess subsurface soil/fill conditions in the southeastern portion of the Site. Delineate the extent of TCE impacts to soil and groundwater within the glacial till zone.	soil/fill		1	1		1	1				
		groundwater		1	1		1	1	1			
TB-107	Assess soil/fill conditions along the former Morse Avenue right-of-way, and histroric fill material	soil/fill		1	1		1	1	1		1	1
TB-108	Assess soil/fill conditions in the vicinity of SSV-5 (may be converted to a LNAPL MW)	soil/fill		1								
MW-01	Acess soil/fill and groundwater conditions in the former Morse Avenue right-of-way, and histroic fill material	soil/fill		1								
		groundwater		1								
MW-02	Assess TCE impacts to soil and groundwater within the glacial till zone, in proximity to the DC Rollforms remedial well field (NYSDEC SSF Site # 907019), and historic fill material	soil/fill		1	1		1	1				
		groundwater		1								
MW-03	Assess historic fill in the vicinity of historic foundry operations and former plating operations. Delineate the extent of TCE impacts to soil and groundwater within the glacial till zone	soil/fill		1								
		groundwater		1	1		1	1	1		1	1
MW-04	Delineate the extent of TCE impacts to soil and groundwater within the glacial till zone, hydrologically down-gradient from the former vapor degreaser	soil/fill		1								
		groundwater		1	1		1	1	1		1	1
MW-05	Delineate the extent of TCE impacts to groundwater within the glacial till zone in proximity to the river, at the southwest corner of the Site	soil/fill		1	1		1	1				
		groundwater		1	1		1		1			
MW-06	Delineate the extent of TCE impacts to groundwater within the glacial till zone in proximity to the river, at the western edge of the Site											
		groundwater		1								
MW-07	Assess TCE impacts to groundwater within bedrock, hydraulically upgradient from the former vapor degreaser	bedrock groundwater		1	1		1	1	1		1	1
MW-08	Assess TCE impacts to groundwater within bedrock, in proximity to the DC Rollforms remedial well field (NYSDEC SSF Site # 907019)	bedrock groundwater		1	1		1	1	1			
MW-09	Assess TCE impacts to groundwater within bedrock in proximity to the river, at the southwest corner of the Site	bedrock groundwater		1	1		1	1	1			
MW-10	Assess TCE impacts to groundwater within bedrock, in proximity to TCE impacts identified during previous investigations	bedrock groundwater		1								
MW-11	Delineate the vertical extent of LNAPL at locations where LNAPL was identified during previous investigations	LNAPL		1	1		1	1	1	1	1	1
MW-12		LNAPL		1	1		1	1	1	1	1	1
MW-B*	Assess TCE impacts to groundwater	groundwater		1								
MW-D*	Evaluate impacts to groundwater - northwest portion of the Site	groundwater		1	1		1		1			
MW-G*	Evaluate impacts to groundwater - east-central portion of the Site	groundwater		1								
MW-H*	Evaluate impacts to groundwater - west-central portion of the Site	groundwater		1								
MW-I*	Assess TCE impacts to groundwater	groundwater		1								
MW-J*	Evaluate impacts to groundwater - southern portion of the Site	groundwater		1								
MW-L*	Evaluate impacts to groundwater - northeast portion of the Site, in proximity to closed in-plase USTs	groundwater		1								

Notes:

TO-15 = Toxic Organics 15 List

TPH = Total Petroleum Hydrocarbons

VOCs = Volatile Organic Compounds

SVOCs = Semi-Volatile Organic Compounds

PCBs = Polychlorinated Biphenyl

PFAS = Per- and Poly-Fluorinated Alkyl Substances

TCL = Target Compound List

TAL = Target Analyte List

TICs = Tentatively Identified Compounds

+ = One or more of the discrete surface soil samples (i.e., SS-3 through SS-6) will also be tested for TCL/CP-51 List VOCs plus TICs.

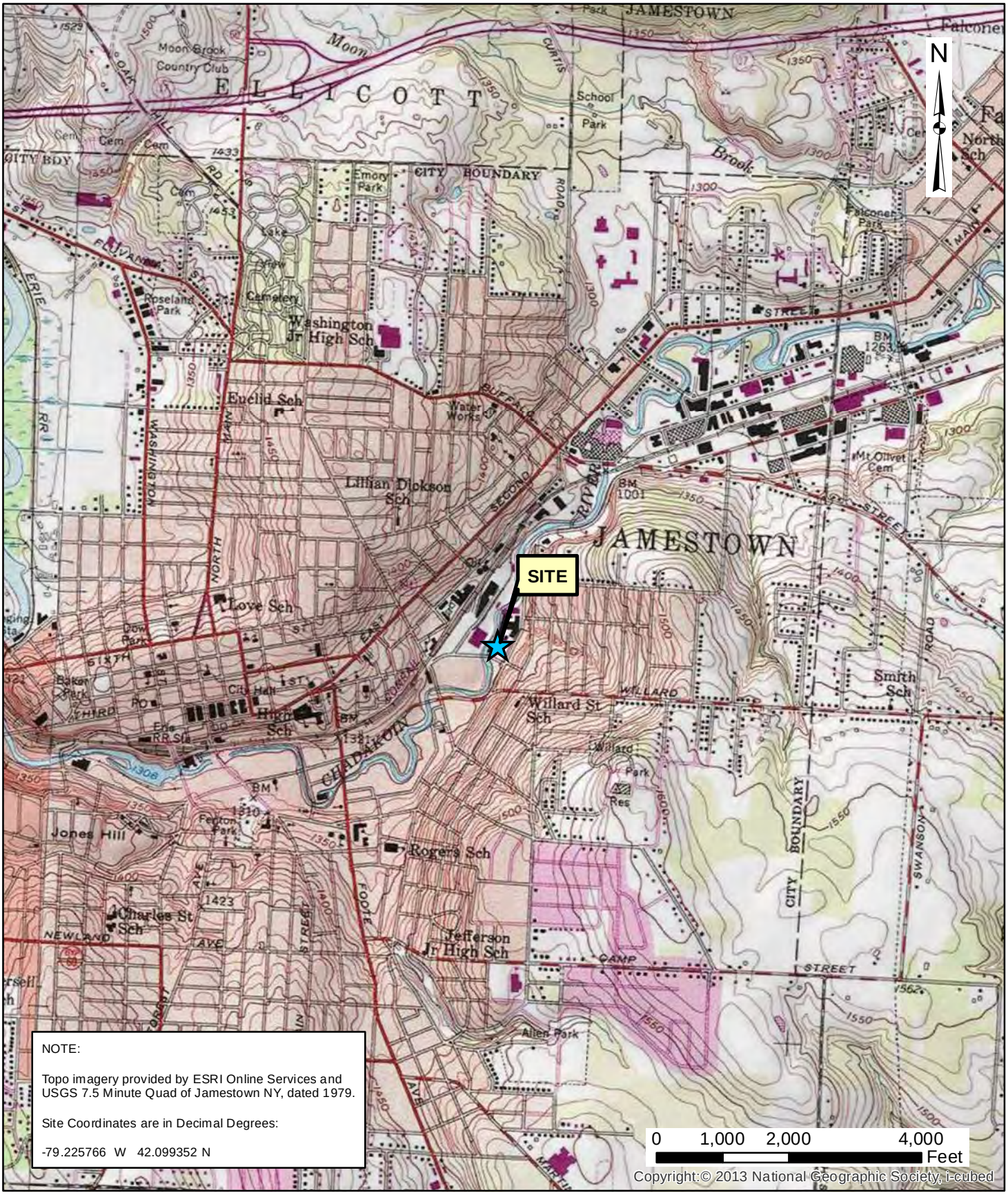
* existing monitoring well

The Groundwater samples listed above are proposed for the initial (1st Round) Groundwater Sampling Event. NYSDEC concurrence will be obtained regarding the analyses that will be conducted during the Second Round Groundwater Sampling Event

TABLE 2
Proposed RI/RAA Project Schedule
441 Chandler Street
Jamestown, New York
NYSDEC Site No. C907048

TASK	Duration (weeks)	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
		2019									2020											
Remedial Investigation / Remedial Alternatives Analysis (RI/RAA)																						
-Submittal of RI/RAA Work Plan, HASP and CAMP (in conjunction with BCP Application and IRM Work Plan)	0	▼																				
-NYSDEC approval of RI/RAA Work Plan	0										▼											
Implement IRM Work Plan																						
-IRM Preparation, Source Removal and Backfill activities	9							■	■	■	■											
Implement Remedial Investigation																						
Utility Assessment, Contractor Selection, Surface Soil and Sediment Sample Collection	3										■											
-Soil Borings, Vapor Point and Well Installation (Soil/Soil Vapor Sample Lab Analyses and begin DUSR Preparation)	6												■	■								
-Groundwater Sampling (1st round), Slug Tests, Site Survey	4													■	■							
-Groundwater Sample Lab Analyses and begin DUSR Preparation	4														■	■						
-Soil Vapor Intrusion Assessment Sampling	1												■									
-Groundwater Sampling (2nd round)	2																			■		
-Groundwater Sample Lab Analyses and begin DUSR Preparation	4																			■	■	
Reporting																						
-Prepare and Submit Draft RI/RAA Report	16																		■	■	■	■
-Submit addendum to Draft RI/RAA Report (to include the 2nd round groundwater sampling results)	0																					▼

FIGURES



NOTE:

Topo imagery provided by ESRI Online Services and USGS 7.5 Minute Quad of Jamestown NY, dated 1979.

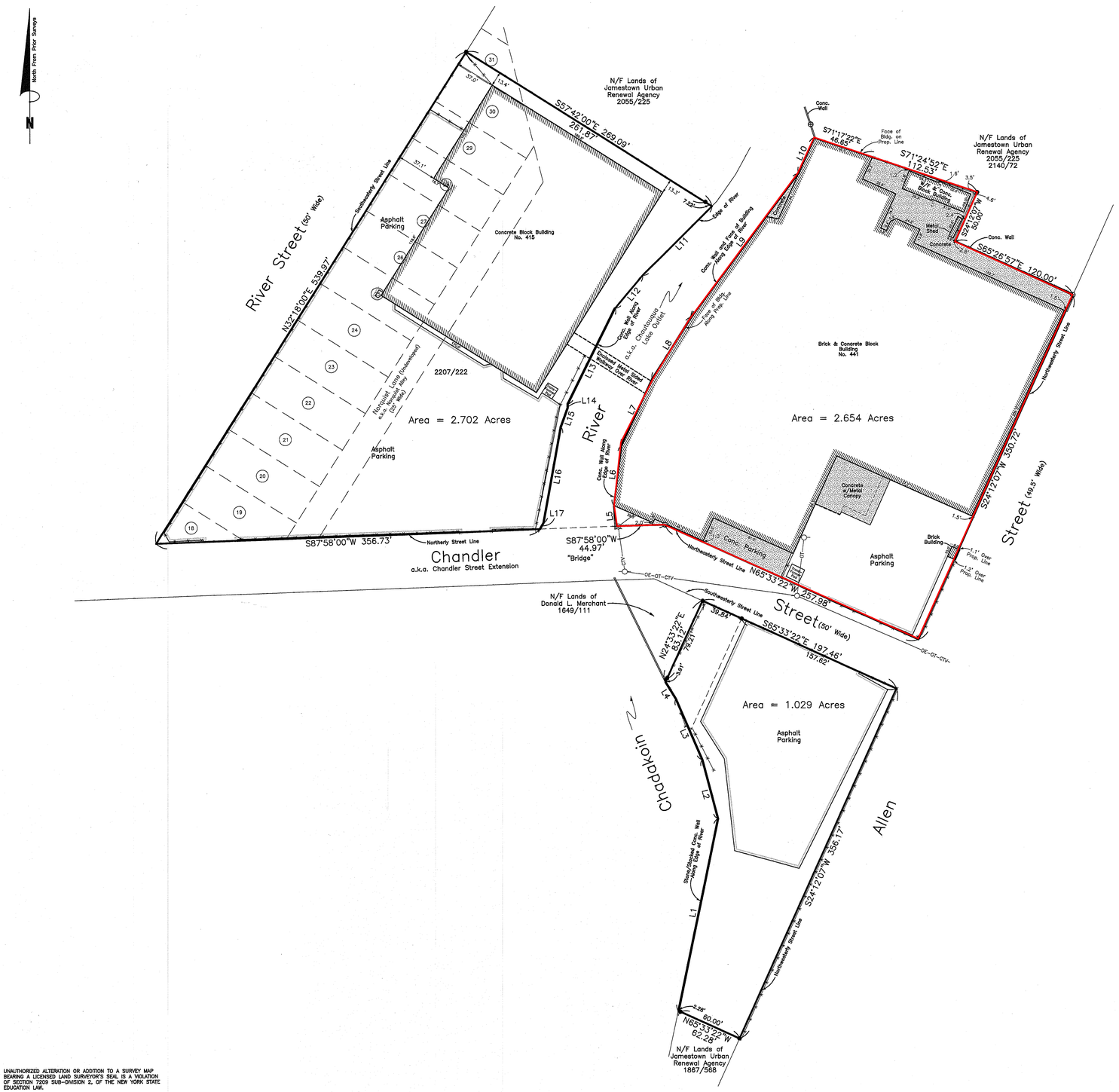
Site Coordinates are in Decimal Degrees:

-79.225766 W 42.099352 N

Document Path: E:\GIS Mapping\5529S-18Weber\5529S-51 RI-AA Locus_441 Chandler St 20190411.mxd

Last Date Saved: 11 Apr 2019

Date: 04-11-2019 Drawn By: CAH Scale: AS NOTED	day **DAY ENVIRONMENTAL, INC.** **Environmental Consultants** **Rochester, New York 14606** **New York, New York 10170**	Project Title: 441 CHANDLER STREET JAMESTOWN, NEW YORK REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN Drawing Title: Project Locus Map	Project No. 5529S-19 FIGURE 1



LEGEND :

- o – IRON STAKE SET
- ● – IRON STAKE FOUND
- ⊕ – DRILL HOLE FOUND
- N/F – NOW OR FORMERLY
- H.L.C.S. – HOLLAND LAND COMPANY'S SURVEY
- W/F – WOOD FRAME
- –X–X–X– – 6' CHAIN LINK FENCE (TYP.)
- –OT– – OVERHEAD TELEPHONE
- –CTV– – OVERHEAD CABLE TELEVISION
- –OE/OT/CTV– – OVERHEAD ELECTRIC/TELEPHONE/CABLE TELEVISION
- –o– – UTILITY POLE
- (24) – LOT NUMBERS AS SHOWN ON A MAP OF O.F. PRICE'S ALLOTMENT "I" IN THE CITY OF JAMESTOWN, N.Y. DATED 1888 BY G.W. JONES, SURVEYOR

COURSES ALONG CHADAKOIN RIVER

NUMBER	BEARING	DISTANCE
L1	N11°38'27"E	182.21 FT
L2	N14°47'56"W	56.70 FT
L3	N23°21'34"W	61.37 FT
L4	N31°29'59"W	18.26 FT
L5	N06°45'08"W	19.30 FT
L6	N07°18'56"E	56.16 FT
L7	N24°31'17"E	68.38 FT
L8	N32°19'22"E	67.81 FT
L9	N36°47'09"E	166.67 FT
L10	N23°58'55"E	36.30 FT
L11	S44°55'48"W	90.88 FT
L12	S39°45'08"W	39.79 FT
L13	S26°20'04"W	99.28 FT
L14	S01°09'30"E	3.31 FT
L15	S19°52'42"W	19.07 FT
L16	S10°13'51"W	90.71 FT
L17	S30°36'27"W	6.44 FT

Approximate extent of the Site

FIGURE 2

50 0 50 100 150
Scale: 1" = 50'

Map of a Survey for
Weber–Knapp Company
415 & 441 Chandler Street
City of Jamestown
County of Chautauqua
State of New York

Being Part of Lot 25 & 26 – Town 2 – Range 11 of the H.L.C.S.

DATE OF SURVEY:	August 16, 2011	SCALE: 1" = 50'	DR. BY: JSR
DATE OF PLAN:	August 22, 2011	F.B.:	SHEET NO.:

RODGERS LAND SURVEYING
583 FALCONER STREET - JAMESTOWN, NY 716-665-2828 ph. 716-665-2888 fax.
MICHAEL J. RODGERS, LS NYS Lic. No. 49232 - KEVIN M. RODGERS, LS NYS Lic. No. 50247 - JAMIE S. REYNOLDS, LS NYS Lic. No. 50840

4-A-14

Legend

- Sub-slab vapor sample collected September 5, 2018
- Monitoring well installed in 2018
- Test boring advanced in 2018
- Approximate location of manway to closed in-place UST
- Parcel Boundary

Approximate Date of Facility Construction

- 1911
- 1941
- 1941 (foundation)
- 1953
- 1956
- 1960
- 1964
- 1966

N

SSV-5
TB-10/MW-K
MW-D
TB-12/MW-L
SSV-4
TB-11
MW-C
MW-B
Approximate location of the former vapor degreaser
TB-05
SSV-3
TB-01/MW-E
TB-22
TB-07/MW-H
MW-A
SSV-1
TB-02/MW-F
TB-04
TB-03
SSV-2
TB-14/MW-N
TB-06/MW-G
TB-08/MW-I
TB-13/MW-M
TB-09/MW-J
Chandler Street
Allen Street
MAIN PLANT 87,000 SQ. FT. (APPROXIMATE)
PARKING AREA 16600 SQ. FT.
138'
131'

NOTES:

The locations of test borings and groundwater monitoring wells were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

0 25 50 100 Feet

Last Date Saved: 15 Oct 2019 Document Path: E:\GIS Mapping\Weber-Knapp\5635S-19Weber\RI-AA\Workplan\5529S-06 RI-AA - Completed\Test Loc. - 441 Chandler St.mxd

DESIGNED BY	CAH
DATE	04-2019
DRAWN BY	CAH
DATE DRAWN	04-2019
SCALE	AS NOTED
DATE ISSUED	10-15-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
Site Plan with Test Locations Completed to Date

Project No.
5529S-18

FIGURE 3

Last Date Saved: 11 Apr 2019 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-53 RI-AA - Adjacent Parcels.mxd

DESIGNED BY	DRAWN BY	SCALE	DATE
CAH	CAH	AS NOTED	04-2019

DATE DRAWN	DATE ISSUED
04-2019	04-11-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
Site Plan with Surrounding Properties

Project No.
5529S-18

FIGURE 4

SSV-5

Trichloroethene - **44,000** ug/m3
cis-1,2-Dichloroethene - **5,600** ug/m3
1,1-Dichloroethene - ND (44 ug/m3)
Carbon Tetrachloride - ND (42 ug/m3)

Tetrachloroethene - ND (39 ug/m3)
1,1,1-Trichloroethane - ND (37 ug/m3)
Methylene Chloride - ND (85 ug/m3)

Vinyl Chloride - ND (32 ug/m3)

SSV-4

Trichloroethene - **13,000** ug/m3
cis-1,2-Dichloroethene - 22 ug/m3
1,1-Dichloroethene - ND (2.6 ug/m3)
Carbon Tetrachloride - ND (2.5 ug/m3)

Tetrachloroethene - 42 ug/m3
1,1,1-Trichloroethane - 19 ug/m3
Methylene Chloride - ND (5 ug/m3)

Vinyl Chloride - ND (1.9 ug/m3)

SSV-3

Trichloroethene - 33 ug/m3
cis-1,2-Dichloroethene - ND (0.14 ug/m3)
1,1-Dichloroethene - ND (0.14 ug/m3)
Carbon Tetrachloride - ND (0.13 ug/m3)

Tetrachloroethene - 35 ug/m3
1,1,1-Trichloroethane - ND (0.14 ug/m3)
Methylene Chloride - ND (0.27 ug/m3)

Vinyl Chloride - ND (0.10 ug/m3)

SSV-1

Trichloroethene - **110,000** ug/m3
cis-1,2-Dichloroethene - **3,600** ug/m3
1,1-Dichloroethene - ND (75 ug/m3)
Carbon Tetrachloride - ND (84 ug/m3)

Tetrachloroethene - 800 ug/m3
1,1,1-Trichloroethane - ND (88 ug/m3)
Methylene Chloride - ND (170 ug/m3)

Vinyl Chloride - ND (65 ug/m3)

SSV-2

Trichloroethene - **5,800** ug/m3
cis-1,2-Dichloroethene - ND (1.3 ug/m3)
1,1-Dichloroethene - ND (1.3 ug/m3)
Carbon Tetrachloride - ND (1.2 ug/m3)

Tetrachloroethene - 15 ug/m3
1,1,1-Trichloroethane - ND (1.1 ug/m3)
Methylene Chloride - ND (2.5 ug/m3)

Vinyl Chloride - ND (0.95 ug/m3)

Allen Street

Chandler Street

MAIN PLANT 87,000 SQ. FT. (APPROXIMATE)

PARKING AREA 16,000 SQ. FT.

Legend

N

Property Boundary

Sub-slab vapor sample collected September 5, 2018

NYSDOH Matrix A compound	Trichloroethene cis-1,2-Dichloroethene 1,1-Dichloroethene Carbon Tetrachloride
NYSDOH Matrix B compound	Tetrachloroethene 1,1,1-Trichloroethane Methylene Chloride
NYSDOH Matrix C compound	Vinyl Chloride

Notes:
ug/m3 - micrograms per cubic meter or parts per billion (ppb)
ND - not detected at a concentration greater than indicated inparenthesis
110,000 - Concentration exceeds NYSDOH Matrix "mitigate" level

NOTES:
The locations of samples collected September 5, 2018 were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

0 25 50 100 Feet

DESIGNED BY	DRAWN BY	SCALE
CAH	CAH	AS NOTED

DATE	DATE DRAWN	DATE ISSUED
04-2019	04-2019	04-11-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK

REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
Select Volatile Organic Compounds Measured in Sub-Slab Vapor Samples Collected September 5, 2018

Project No.
5529S-18

FIGURE 5

Last Date Saved: 11 Apr 2019 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-54 RI-AA - EE SSV Sample Results.mxd

Legend

- Property Boundary
- Monitoring well istalled in 2018
- Test boring advanced in 2018

Sample Designation: MW-A (4')

Halocarbon with concentration in mg/kg or ppm: Trichloroethene - **24.5** mg/kg; cis-1,2-Dichloroethene - 0.074 mg/kg; Vinyl Chloride - ND (0.0048 mg/kg)

Notes:
mg/kg - milligrams per kilogram or parts per million(ppm)
ND - not detected at a concentration greater than indicated in parenthesis
4,400 - concentration exceeds Restricted Industrial Use SCO
34.0 - concentration or detection limit exceeds Protection of Groundwater SCO

N

0 40 80 160 Feet

TB-10 (4')

Trichloroethene - **ND (0.290 mg/kg)**
cis-1,2-Dichloroethene - **ND (0.290 mg/kg)**
Vinyl Chloride - **ND (0.290 mg/kg)**

MW-B (9.5')

Trichloroethene - 0.0104 mg/kg
cis-1,2-Dichloroethene - ND (0.0101mg/kg)
Vinyl Chloride - ND (0.0101mg/kg)

MW-B (11')

Trichloroethene - 0.0048 mg/kg
cis-1,2-Dichloroethene - 0.0018 mg/kg
Vinyl Chloride - 0.004 mg/kg

MW-D (9')

Trichloroethene - 0.108 mg/kg
cis-1,2-Dichloroethene - ND (0.0405mg/kg)
Vinyl Chloride - **ND (0.0405 mg/kg)**

TB-05 (12.5')

Trichloroethene - **100** mg/kg
cis-1,2-Dichloroethene - **2.9** mg/kg
Vinyl Chloride - **0.021** mg/kg

TB-01 (11')

Trichloroethene - **4,400** mg/kg
cis-1,2-Dichloroethene - **34.0** mg/kg
Vinyl Chloride - **ND (46 mg/kg)**

TB-01 (12.5')

Trichloroethene - **10** mg/kg
cis-1,2-Dichloroethene - **0.26** mg/kg
Vinyl Chloride - **ND (0.160 mg/kg)**

TB-03 (9')

Trichloroethene - 0.00087 mg/kg
cis-1,2-Dichloroethene - 0.00037 mg/kg
Vinyl Chloride - ND (0.0025 mg/kg)

MW-A (4')

Trichloroethene - **24.5** mg/kg
cis-1,2-Dichloroethene - 0.074 mg/kg
Vinyl Chloride - ND (0.0048 mg/kg)

MW-A (8')

Trichloroethene - 0.0382 mg/kg
cis-1,2-Dichloroethene - ND (0.0562 mg/kg)
Vinyl Chloride - ND (0.0562 mg/kg)

MW-A (11')

Trichloroethene - **32.4** mg/kg
cis-1,2-Dichloroethene - **12** mg/kg
Vinyl Chloride - **0.48** mg/kg

MW-A (13')

Trichloroethene - **198** mg/kg
cis-1,2-Dichloroethene - **12.6** mg/kg
Vinyl Chloride - **0.193** mg/kg

TB-02 (11.5')

Trichloroethene - **81** mg/kg
cis-1,2-Dichloroethene - **17** mg/kg
Vinyl Chloride - **1.5** mg/kg

TB-04 (11.5')

Trichloroethene - **29** mg/kg
cis-1,2-Dichloroethene - **22** mg/kg
Vinyl Chloride - **1.7** mg/kg

TB-04 (12.9')

Trichloroethene - **1.5** mg/kg
cis-1,2-Dichloroethene - **3.6** mg/kg
Vinyl Chloride - **0.42** mg/kg

TB-22 (13')

Trichloroethene - **1.4** mg/kg
cis-1,2-Dichloroethene - **2.9** mg/kg
Vinyl Chloride - **0.025** mg/kg

Chandler Street

Allen Street

Barrows Street

NOTES:
The locations of test borings/groundwater monitoirng wells advanced/installed on November 6, 2018 were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

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CAH	CAH	AS NOTED	04-2019

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day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK

REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
Site Plan Depicting Select Halocarbon Concentrations in Soil Samples Collected November and December, 2018

Project No.
5529S-18

FIGURE 6

Legend

- Property Boundary
- Monitoring well installed 2018
- Potentiometric groundwater contour
- Inferred direction of groundwater

N

MW-B

11/08/2018	12/27/2018
Chloroethane: ND (0.4)	Chloroethane: ND (0.2)
1,1-DCE: 0.6 J	1,1-DCE: 0.3 J
cis-1,2-DCE: **26.7**	cis-1,2-DCE: **44**
trans-1,2-DCE: 0.6 J	trans-1,2-DCE: 0.3 J
PCE: ND (0.3)	PCE: 0.2
TCE: **42.5**	TCE: 3
VC: **15.6**	VC: **36**
PAH*: NT	PAH*: NT
Arsenic: NT	Arsenic: NT

MW-D

11/08/2018	12/27/2018
Chloroethane: ND (0.4)	Chloroethane: ND (0.2)
1,1-DCE: ND (0.3)	1,1-DCE: 0.2
cis-1,2-DCE: 3.2	cis-1,2-DCE: 0.8 J
trans-1,2-DCE: ND (0.4)	trans-1,2-DCE: 0.3 J
PCE: ND (0.3)	PCE: ND (0.2)
TCE: 0.9 J	TCE: 0.2
VC: **5.5**	VC: **6**
PAH*: NT	PAH*: ND (0.02)
Arsenic: NT	Arsenic: **134**

MW-C

11/08/2018	12/27/2018
Chloroethane: ND (0.4)	Chloroethane: ND (0.2)
1,1-DCE: ND (0.3)	1,1-DCE: ND (0.2)
cis-1,2-DCE: ND (0.4)	cis-1,2-DCE: ND (0.2)
trans-1,2-DCE: ND (0.4)	trans-1,2-DCE: ND (0.2)
PCE: ND (0.3)	PCE: ND (0.2)
TCE: 1.5	TCE: 0.8 J
VC: ND (0.4)	VC: ND (0.2)
PAH*: NT	PAH*: See Note
Arsenic: NT	Arsenic: ND (16)

TB-10/MW-K
12/27/2018
Chloroethane: ND (0.2)
1,1-DCE: ND (0.2)
cis-1,2-DCE: 0.2 J
trans-1,2-DCE: ND (0.2)
PCE: ND (0.2)
TCE: 0.4 J
VC: ND (0.2)
PAH*: ND (0.02)
Arsenic: ND (16)

TB-12/MW-L
12/27/2018
Chloroethane: ND (0.2)
1,1-DCE: ND (0.2)
cis-1,2-DCE: 0.4 J
trans-1,2-DCE: ND (0.2)
PCE: ND (0.2)
TCE: 0.7 J
VC: 0.3 J
PAH*: ND (0.02)
Arsenic: NT

TB-11
12/27/2018
Chloroethane: ND (0.2)
1,1-DCE: ND (0.2)
cis-1,2-DCE: 0.3 J
trans-1,2-DCE: ND (0.2)
PCE: ND (0.2)
TCE: 0.5 J
VC: ND (0.2)
PAH*: ND (0.02)
Arsenic: NT

TB-01/MW-E
12/27/2018
Chloroethane: **340 J**
1,1-DCE: ND (200)
cis-1,2-DCE: **32,000**
trans-1,2-DCE: ND (200)
PCE: ND (200)
TCE: **780,000**
VC: **1,100**
PAH*: NT
Arsenic: NT

MW-A

11/08/2018	12/27/2018
Chloroethane:ND (202)	ChloroethaneND (20)
1,1-DCE: ND (157)	1,1-DCE: **230**
cis-1,2-DCE: **1,310**	cis-1,2-DCE: **20,000**
trans-1,2-DCE: ND (190)	trans-1,2-DCE: **52** J
PCE:ND (156)	PCE: ND (20)
TCE: **46,900**	TCE: **82,000**
VC: ND (201)	VC: **1,500**
PAH*: NT	PAH*: NT
Arsenic: NT	Arsenic:NT

TB-02/MW-F
12/27/2018
Chloroethane: **150 J**
1,1-DCE: **500 J**
cis-1,2-DCE: **140,000**
trans-1,2-DCE: **240 J**
PCE: ND (100)
TCE: **230,000**
VC: **6,200**
PAH*: NT
Arsenic: NT

TB-06/MW-G
12/27/2018
Chloroethane: ND (0.2)
1,1-DCE: ND (0.2)
cis-1,2-DCE: 2
trans-1,2-DCE: ND (0.2)
PCE: ND (0.2)
TCE: ND (0.2)
VC: **3**
PAH*: NT
Arsenic: NT

TB-07/MW-H
12/27/2018
Chloroethane: ND (0.2)
1,1-DCE: ND (0.2)
cis-1,2-DCE: 0.8 J
trans-1,2-DCE: ND (0.2)
PCE: ND (0.2)
TCE: ND (0.2)
VC: 0.5 J
PAH*: NT
Arsenic: 18 J

TB-14/MW-N
12/26/2018
Chloroethane: ND (0.2)
1,1-DCE: ND (0.2)
cis-1,2-DCE: ND (0.2)
trans-1,2-DCE: ND (0.2)
PCE: ND (0.2)
TCE: ND (0.2)
VC: ND (0.2)
PAH*: ND (0.02)
Arsenic: NT

TB-13/MW-M

TB-09/MW-J
12/26/2018
Chloroethane: ND (0.2)
1,1-DCE: ND (0.2)
cis-1,2-DCE: 3
trans-1,2-DCE: ND (0.2)
PCE: ND (0.2)
TCE: 0.5 J
VC: 0.6 J
PAH*: NT
Arsenic: NT

TB-08/MW-I
12/27/2018
Chloroethane: ND (0.2)
1,1-DCE: ND (0.2)
cis-1,2-DCE: **8**
trans-1,2-DCE: ND (0.2)
PCE: ND (0.2)
TCE: **61**
VC: 0.8 J
PAH*: NT
Arsenic: NT

92.5 93.5 93 92 91.5

Allen Street

0 30 60 120 Feet

Results shown are presented in ug/l or parts per billion (ppb).

1,1-DCE = 1,1-Dichloroethene
cis1,2-DCE = cis 1,2-Dichloroethene
trans1,2-DCE = trans 1,2-Dichloroethene
PCE = Tetrachloroethene
TCE = Trichloroethene
VC = Vinyl Chloride
PAH = Polycyclic aromatic hydrocarbons
NT = Sample was not tested for this parameter

780,000 = concentration exceeds respective Class GA groundwater standard

PAH detected in monitoring well MW-C that exceed Class GA groundwater standards include: benz(a)anthracene (0.28 ug/l), benzo(a)pyrene(0.18 ug/l) , benzo(b)fluoranthene (0.16 ug/l), benzo(k)fluoranthene(0.16 ug/l), chrysene (0.30 ug/l) and indeno(1,2,3-cd)pyrene (0.14 ug/l).

NOTES:
Potentiometric groundwater contours are depicted for measurements made December 27, 2018.

The locations of groundwater monitoring wells installed were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

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DESIGNED BY CAH | DRAWN BY CPS | SCALE AS NOTED | DATE 04-2019 | DATE DRAWN 04-2019 | DATE ISSUED 04-11-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title: 441 CHANDLER STREET JAMESTOWN, NEW YORK

REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title: Compound/Analyate Concentrations Measured in Groundwater Samples Collected November 2018 and December 2018, Exceeding NYSDEC Class GA Standards/Guidance Values

Project No. 5529S-18

FIGURE 7

Legend

Proposed Test Locations

- Surface Soil Sample
- Soil Vapor Point
- Paired Soil Vapor/Indoor Air Point (SVI Evaluation)
- Test Boring
- LNAPL Monitoring Well
- Glacial Till Zone Monitoring Well
- Bedrock Monitoring Well
- River Sediment Sample

N

SED-3
TB-108
SSV/IA-9
VP-1
MW-08
MW-02
TB-101
MW-03
SSV/IA-8
SED-2
SSV/IA-4
TB-102
SSV/IA-2
TB-103
MW-07
TB-107
SSV/IA-7
MW-04
TB-104
VP-2
MW-12
MW-06
MW-11
SSV/IA-5
MW-01
SSV/IA-6
SSV/IA-1
SSV/IA-3
TB-105
MW-10
VP-3
MW-05
SS-1
MW-09
Chandler Street
SS-3
SS-4
SS-5
SS-6
SED-1
TB-106/MW-13
SS-2
VP-5
VP-4
Allen Street
MAIN PLANT 87,000 SQ. FT. (APPROXIMATE)
PARKING AREA 16000 SQ. FT.
122'
131'

0 25 50 100 Feet

NOTES:

The locations of test borings and groundwater monitoirng wells were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

DESIGNED BY	DATE	DRAWN BY	DATE DRAWN	SCALE	DATE ISSUED
CAH	04-2019	CAH	04-2019	AS NOTED	10-01-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK

REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
Proposed Remedial Investigation Sample Locations

Project No.
5529S-18

FIGURE 8A

Last Date Saved: 01 Oct 2019 Document Path: E:\GIS Mapping\Weber-Knapp\5635S-19Weber\RI-AA Workplan\5635S-01 RI workplan - Proposed Test Locations-All.mxd

Legend

Proposed Test Locations

- LNAPL Monitoring Well
- Glacial Till Zone Monitoring Well
- Bedrock Monitoring Well

N

CHADAKOIN RIVER

MW-08
MW-02
MW-03
MW-07
MW-04
MW-12
MW-06
MW-11
MW-01
MW-10
MW-05
MW-09
TB-106/MW-13

Allen Street

Chandler Street

MAIN PLANT 87,000 SQ. FT. (APPROXIMATE)

PARKING AREA 16600 SQ. FT.

123'

131'

0 25 50 100 Feet

NOTES:

The locations of test borings and groundwater monitoirng wells were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Last Date Saved: 01 Oct 2019 Document Path: E:\GIS Mapping\Weber-Knapp\5635S-19\Weber\RI-AA Workplan\5635S-02 RI workplan - Proposed Test Locations-MW.mxd

DESIGNED BY	DATE
CAH	04-2019
DRAWN BY	DATE DRAWN
CAH	04-2019
SCALE	DATE ISSUED
AS NOTED	10-01-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
Proposed Remedial Investigation Sample Locations - Groundwater Monitoring Wells

Project No.
5529S-18

FIGURE 8B

Legend

Proposed Test Locations

Test Boring

N

TB-108

TB-101

TB-102

TB-103

TB-107

TB-104

TB-105

NIAGARA RIVER

Allen Street

Chandler Street

MAIN PLANT 87,000 SQ. FT. (APPROX.)

PARKING AREA 16670 SQ. FT.

128'

131'

0 25 50 100 Feet

NOTES:

The locations of test borings and groundwater monitoirng wells were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

DESIGNED BY	DATE
CAH	04-2019
DRAWN BY	DATE DRAWN
CAH	04-2019
SCALE	DATE ISSUED
AS NOTED	10-01-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
Proposed Remedial Investigation Sample Locations - Test Borings

Project No.
5529S-18

FIGURE 8C

Last Date Saved: 01 Oct 2019 Document Path: E:\GIS Mapping\Weber-Knapp\5635S-19\Weber\RI-AA Workplan\5635S-03 RI workplan - Proposed Test Locations-TB.mxd

Legend

Proposed Test Locations

- Surface Soil Sample
- River Sediment Sample

N

SED-3

SED-2

SS-1

SS-2

SS-3

SS-4

SS-5

SS-6

SED-1

Chandler Street

Allen Street

MAIN PLANT 87,000 SQ. FT. (APPROX.)

PARKING AREA 16000 SQ. FT.

128'

131'

0 25 50 100 Feet

NOTES:

The locations of test borings and groundwater monitoirng wells were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

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DESIGNED BY	DATE
CAH	04-2019
DRAWN BY	DATE DRAWN
CAH	04-2019
SCALE	DATE ISSUED
AS NOTED	10-01-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
Proposed Remedial Investigation Sample Locations - Surface Soil and Sediment Samples

Project No.
5529S-18

FIGURE 8D

Legend

Proposed Test Locations

- Soil Vapor Point
- Paired Soil Vapor/Indoor Air Point (SVI Evaluation)

N

SSV/IA-9
VP-1
SSV/IA-8
SSV/IA-4
SSV/IA-2
SSV/IA-7
VP-2
SSV/IA-5
SSV/IA-6
SSV/IA-1
SSV/IA-3
VP-3
VP-5
VP-4

Allen Street
Chandler Street
Niagara River

MAIN PLANT 37,000 SQ. FT. (APPROX.)
PARKING AREA 16670 SQ. FT.
128'
131'

0 25 50 100 Feet

NOTES:

The locations of test borings and groundwater monitoirng wells were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Last Date Saved: 01 Oct 2019 Document Path: E:\GIS Mapping\Weber-Knapp\5635S-19\Weber\RI-AA Workplan\5635S-05 RI workplan - Proposed Test Locations-SV&IA.mxd

DESIGNED BY	DATE
CAH	04-2019
DRAWN BY	DATE DRAWN
CAH	04-2019
SCALE	DATE ISSUED
AS NOTED	10-01-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

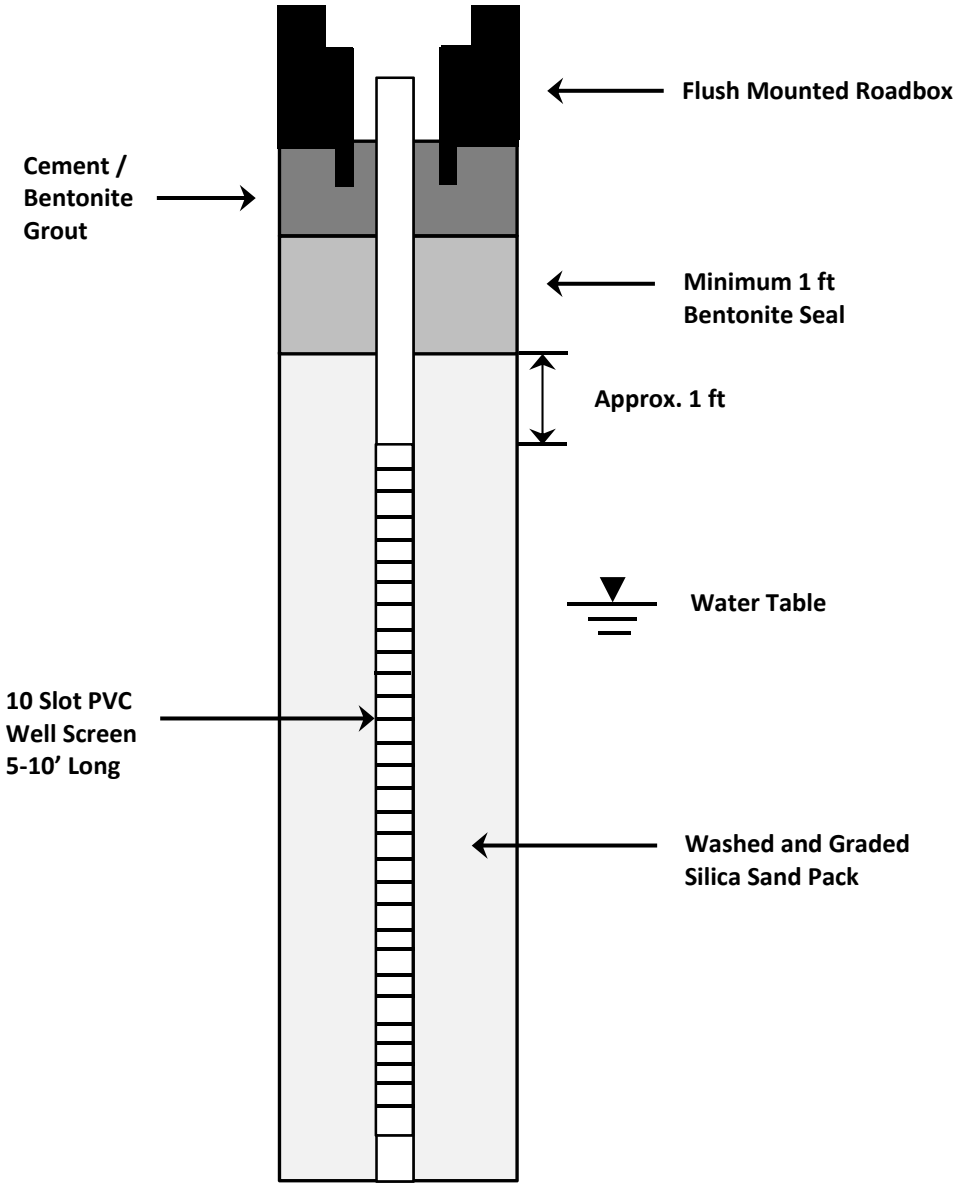
Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK

REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
Proposed Remedial Investigation Sample Locations - Soil Vapor Points and SVI Evaluation Samples

Project No.
5529S-18

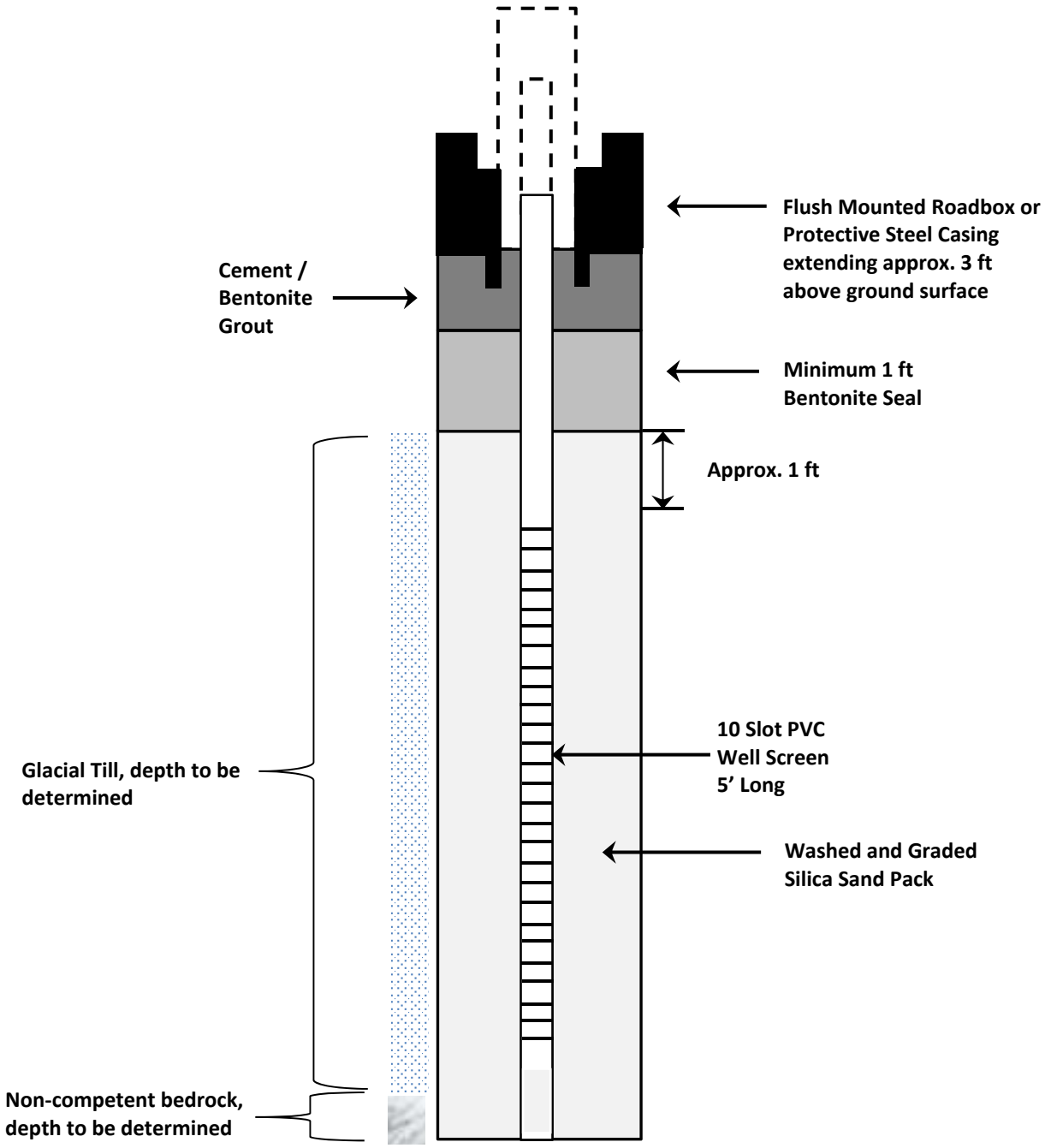
FIGURE 8E



NOT TO SCALE

F:\Clients - Major\Weber-Knapp\5529S-18\2019-04 RI-AA Work Plan\figures

DATE 04-12-2019 DRAWN BY CAH SCALE Not to Scale	day DAY ENVIRONMENTAL, INC. Environmental Consultants Rochester, New York 14606 New York, New York 10170	PROJECT TITLE 441 CHANDLER STREET JAMESTOWN, NEW YORK REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN DRAWING TITLE Schematic of LNAPL Well Construction	PROJECT NO. 5529S-18 FIGURE 9



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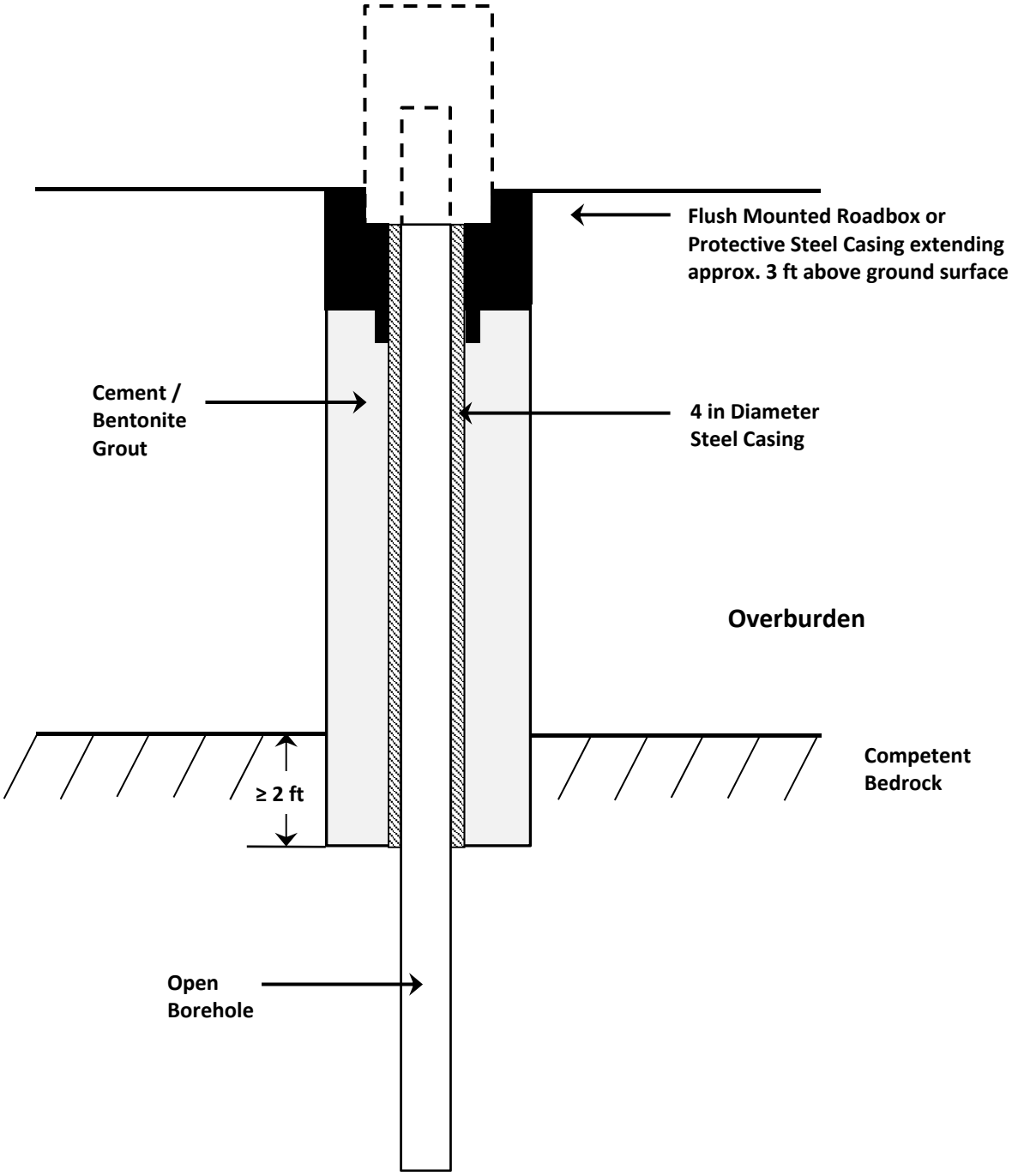
F:\Clients - Major\Weber-Knapp\5529S-18\2019-04 RI-AA Work Plan\figures

DATE 04-12-2019 DRAWN BY CAH SCALE Not to Scale	day DAY ENVIRONMENTAL, INC. Environmental Consultants Rochester, New York 14606 New York, New York 10170	PROJECT TITLE 441 CHANDLER STREET JAMESTOWN, NEW YORK REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN DRAWING TITLE Schematic of Glacial Till Zone Monitoring Well Construction	PROJECT NO. 5529S-18 FIGURE 10



NOT TO SCALE

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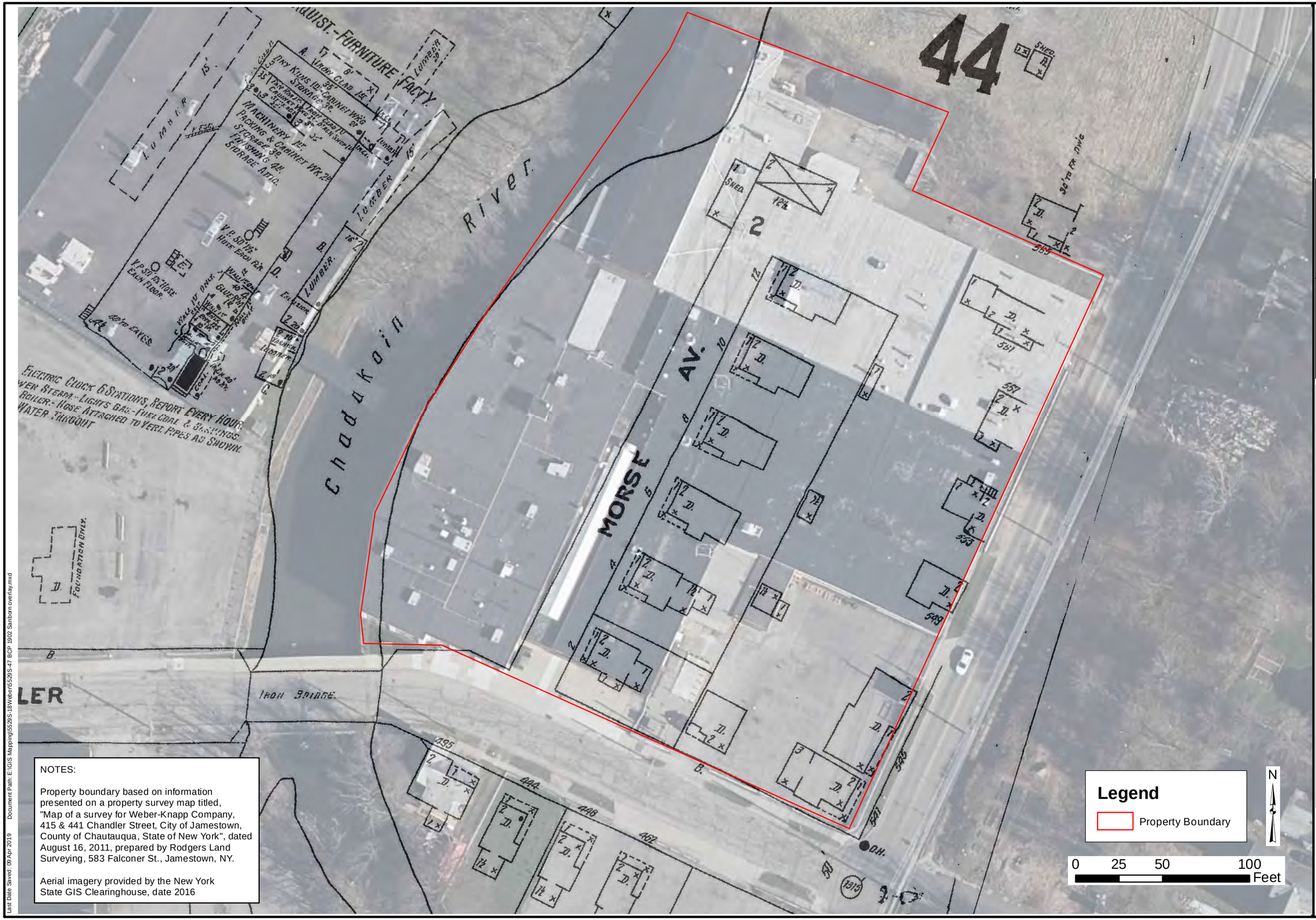
DATE 04-12-2019 DRAWN BY CAH SCALE Not to Scale	day DAY ENVIRONMENTAL, INC. Environmental Consultants Rochester, New York 14606 New York, New York 10170	PROJECT TITLE 441 CHANDLER STREET JAMESTOWN, NEW YORK REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN DRAWING TITLE Schematic of Bedrock Monitoring Well Construction	PROJECT NO. 5529S-18 FIGURE 11

APPENDICES

APPENDIX A



DESIGNED BY	DATE
CAH	04-2019
DRAWN BY	DATE DRAWN
CAH	04-2019
SCALE	DATE ISSUED
AS NOTED	04-09-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
1902 Sanborn Fire Insurace Map Overlay

Project No.
5529S-18

APPENDIX A

Last Date Saved: 09 Apr 2019 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-47 BCP 1902 Sanborn overlay.mxd

NOTES:

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Legend

Property Boundary

N

0 25 50 100 Feet

DESIGNED BY	DATE
CAH	04-2019
DRAWN BY	DATE DRAWN
CAH	04-2019
SCALE	DATE ISSUED
AS NOTED	04-09-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
1930 Sanborn Fire Insurace Map Overlay

Project No.
5529S-18

APPENDIX A

Last Date Saved: 09 Apr 2019 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-48 BCP 1930 Sanborn overlay.mxd

NOTES:

Property boundary based on information presented on a property survey map titled, "Map of a survey for Weber-Knapp Company, 415 & 441 Chandler Street, City of Jamestown, County of Chautauqua, State of New York", dated August 16, 2011, prepared by Rodgers Land Surveying, 583 Falconer St., Jamestown, NY.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Legend

Property Boundary

0 25 50 100 Feet

N

DESIGNED BY	DATE
CAH	04-2019
DRAWN BY	DATE DRAWN
CAH	04-2019
SCALE	DATE ISSUED
AS NOTED	04-09-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

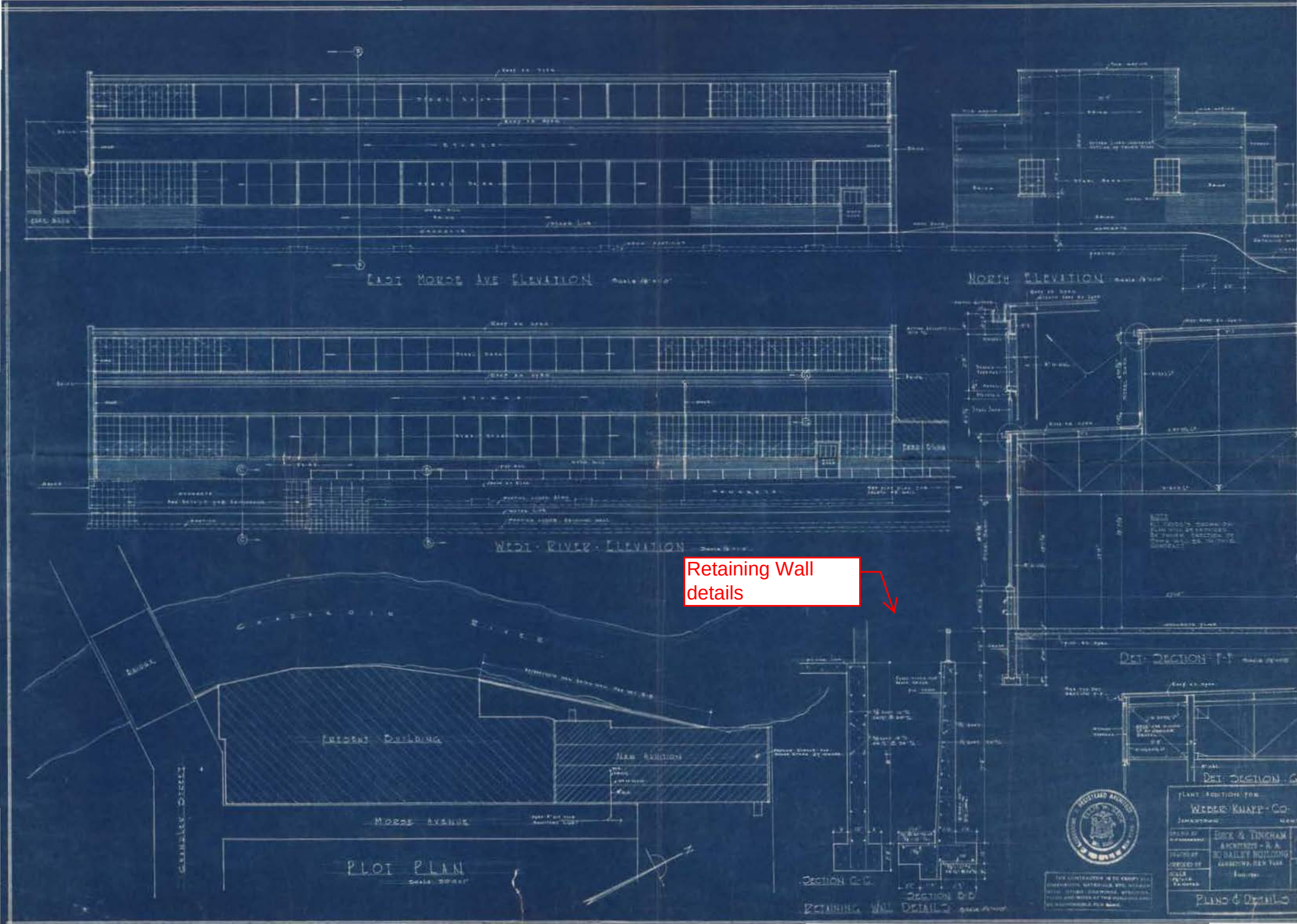
Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
1949 Sanborn Fire Insurace Map Overlay

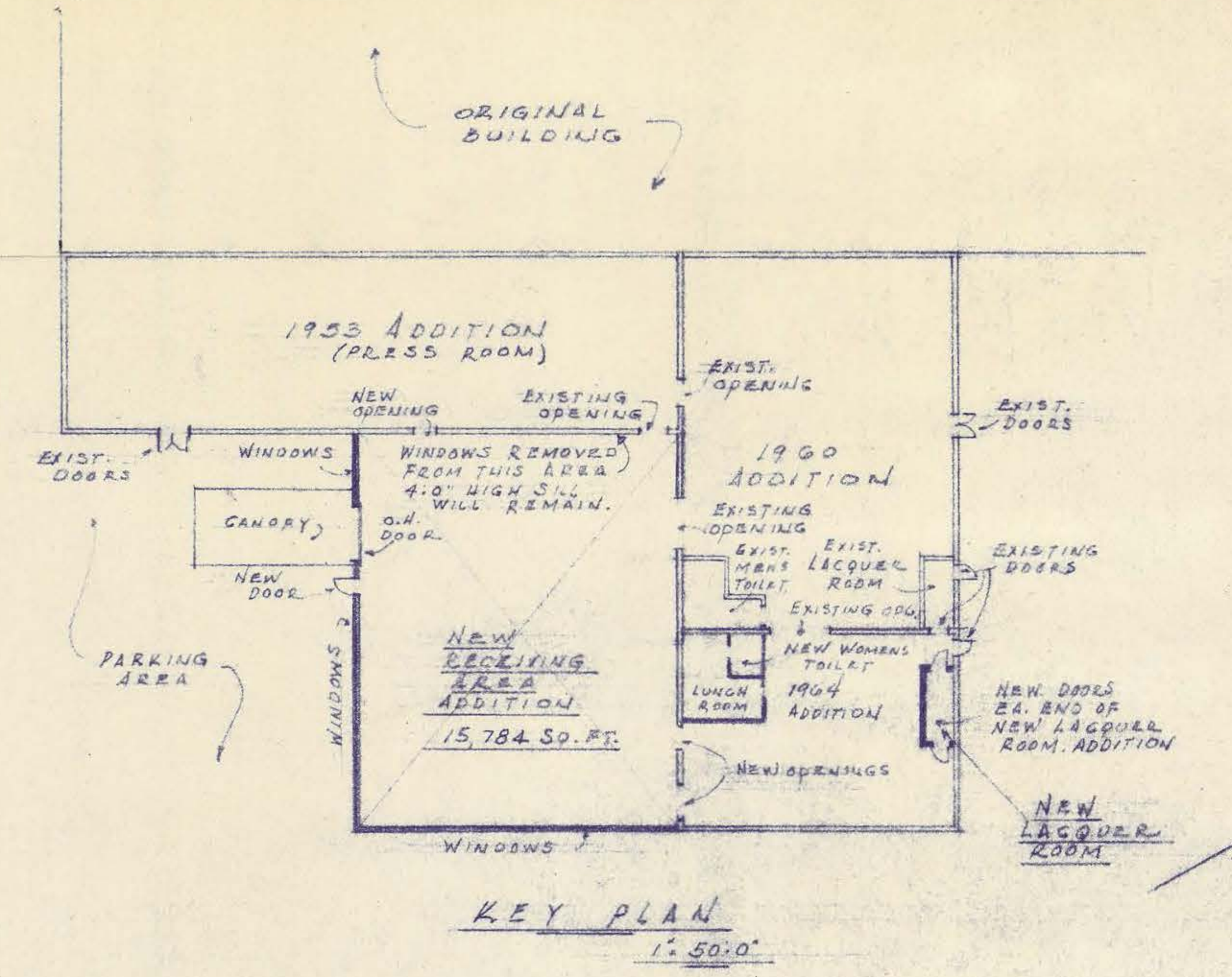
Project No.
5529S-18

APPENDIX A

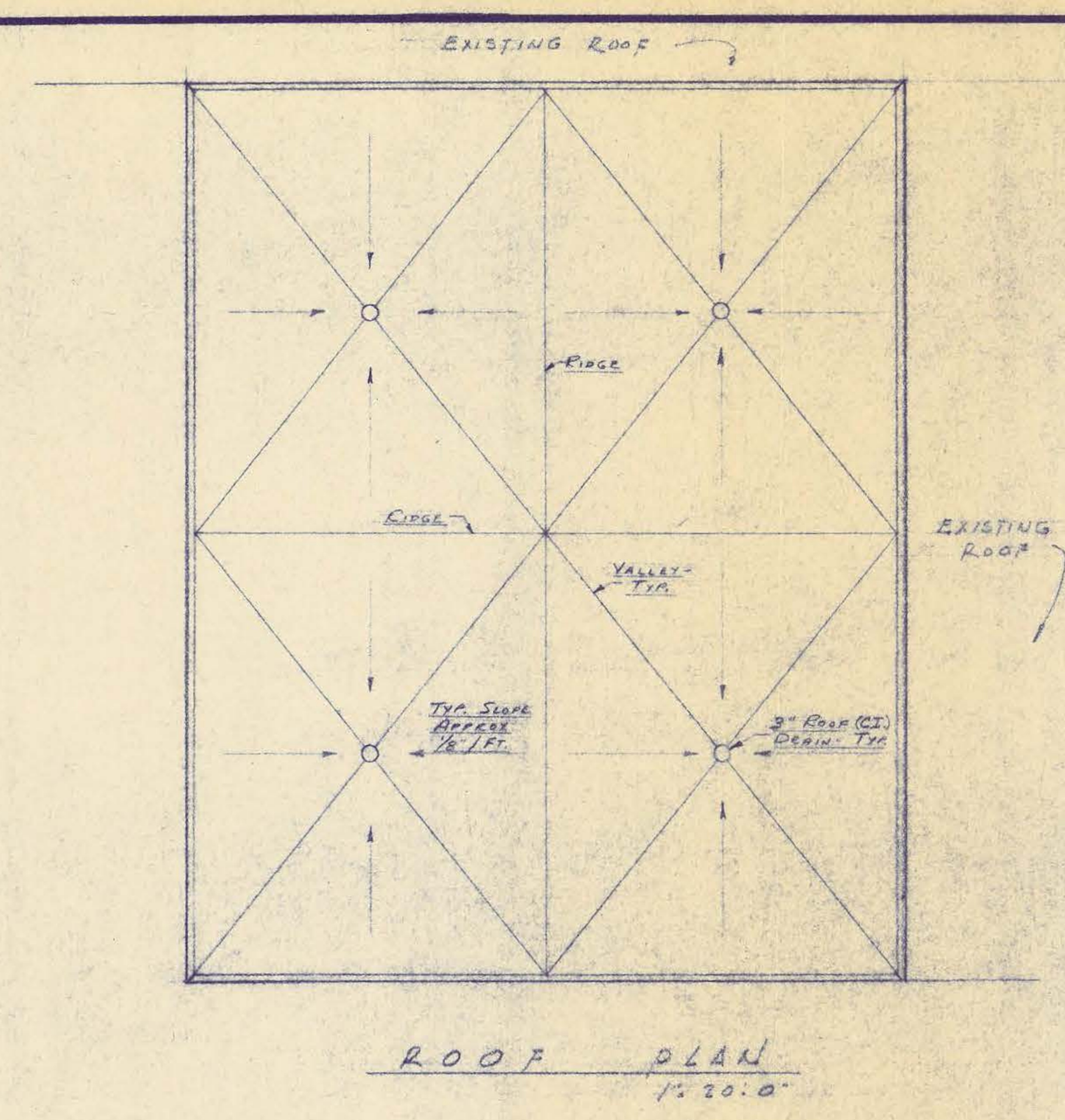
Last Date Saved: 09 Apr 2019 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-49 BCP 1949 Sanborn overlay.mxd


East Morse Ave Elevation
North Elevation
West River Elevation
Retaining Wall details
Det. Section 1-1
Det. Section C
Present Building
New Additions
Morse Avenue
Plot Plan
Section C-C
Section D-D
Retaining Wall Details
Plans & Details
Weber-Knapp Co.
Dick & Tingham
Architects - N.A.
Jamestown, New York

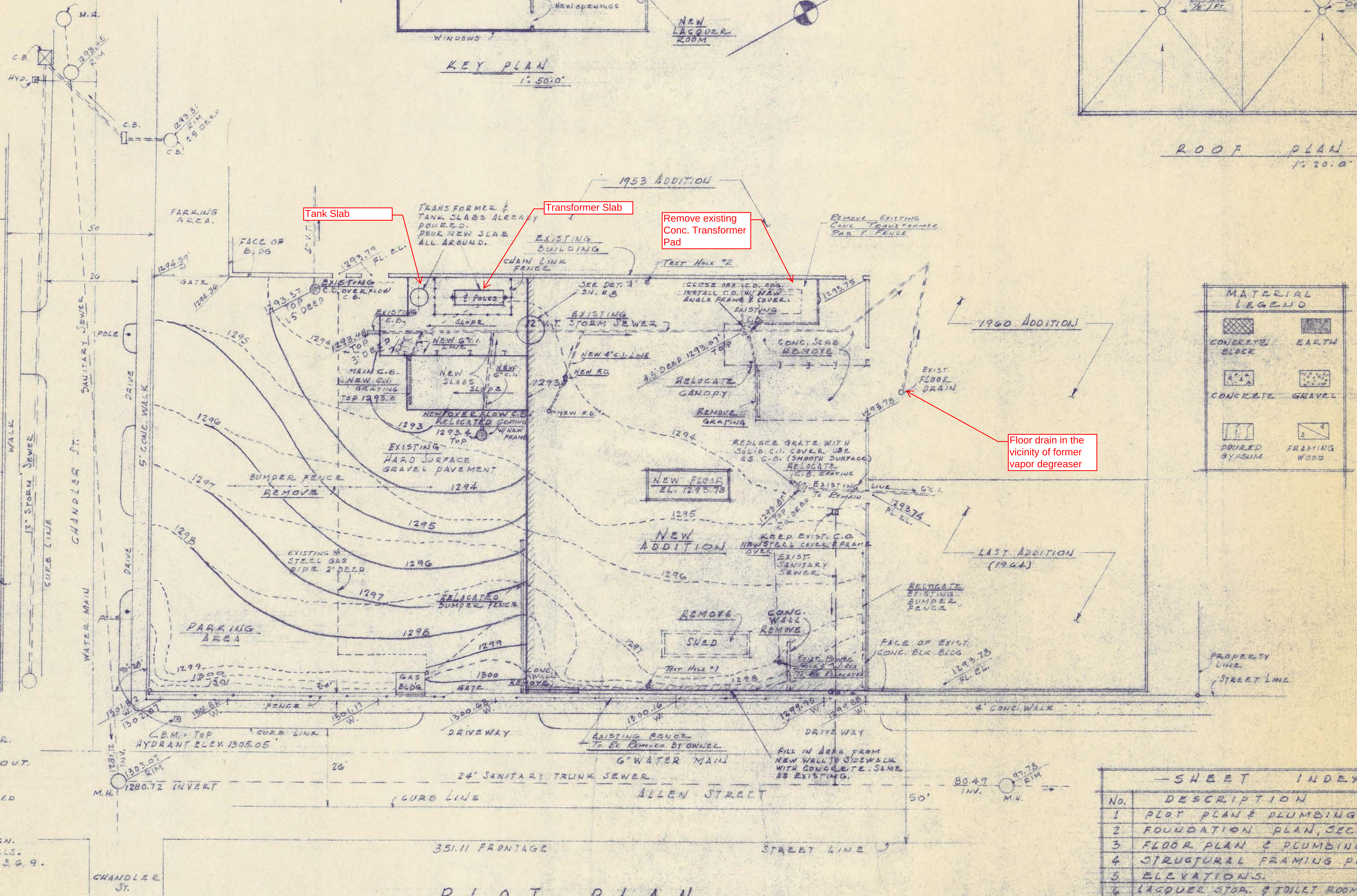
CHADAKOIN RIVER
NORTH
EXISTING BUILDING
PROTO TOOL CO.
IRON STAKE
CHANDLER STREET
5' CONCRETE WALK
"New Transformer Pad
Transformer & pole removed
NEW TRANSFORMER PAD & ENCLOSURE
BUMPER FENCE (REMOVE BY OWNER)
EXIST. C.B.
TRANSFORMER & POLE ENCLOSURE (REMOVE BY OTHERS)
CANOPY
CHAIN FENCE
GATE
BLOWER (REMOVE BY OWNER)
SAN. SEWER EXTEND (BY PLMB)
CLOSE CATCH BASINS (BY PLMB.)
FIRE HYDRANT EXTEND LINE (BY PLMB)
REMOVE EXIST. FIRE SHED
NEW ADDITION
FIN. FLOOR 100.00
EXIST. BUILDINGS TO BE REMOVED
REMOVE EXIST. GUTTER
VALVE M.H.
POLE
GARAGE
IRON STAKE
WOVEN WIRE FENCE
GAS LINE LOCATED BY GAS CO. DEC 9,'65
BUMPER FENCE
PARKING
TOP OF GUTTER
GRATE
SEE DET. THIS SHT.
PENDLETON TOOL IND. INC.
PROPERTY LINE
STREET LINE
EXIST. GAS VALVE BLDG.
4' CONCRETE WALK
ALLEN STREET
GUTTER ELEV. SCALE 1/8"=1'-0"
SITE PLAN SCALE 1"=40'
EXIST. ROOF
LOW POINT OF ROOF
ROOF PLAN SCALE 1/16"=1'-0"
EXIST. GRADES
NEW GRADES
FIN. FL. 100-0
1/2" ϕ ROD
14"x24" GRATE
INVERT LOCATION BY PLUMBER
6x6 10/10 W/W MESH
SECTION @ CATCH BASIN
1/2" ϕ ROD VARIES
GRAVEL FILL
SECTION @ GUTTER
GUTTER DETAILS SCALE 1 1/2"=1'-0"
ADDITION TO ... WEBER - KNAPP COMPANY ... JAMESTOWN, NEW YORK
JOB NO. 609
SITE PLAN & ROOF PLAN
DATE AUG. 1960
REVISED
BECK & TINKHAM
Associated Architects & Engineers
100 EAST FOURTH STREET JAMESTOWN, NEW YORK
230 LIBERTY STREET WARREN, PENNSYLVANIA
REGISTERED NEW YORK PENNSYLVANIA
CONTRACTOR SHALL VERIFY ALL DIMENSIONS, MATERIALS, ETC. SHOWN HEREON WITH OTHER DRAWINGS, SPECIFICATIONS AND WORK AT THE BUILDING AND BE RESPONSIBLE FOR SAME.
SCALE AS NOTED
SHEET NO. 1



KEY PLAN
1" = 50'-0"



ROOF PLAN
1" = 20'-0"



PLOT PLAN
1" = 20'-0"

NOTES:

1. OWNER WILL TAKE CARE OF RELOCATING ALL PERIMETER CHAIN LINK FENCE.
2. CHAIN LINK FENCE AROUND TRANSFORMERS WILL BE FURNISHED BY OWNER. G.C. TO FURNISH & INSTALL FENCE PIPE SLEEVES AT TIME OF POURING THE SLAB. SIZE & LOCATION OF SLEEVES TO BE DETERMINED BY OWNER. FENCE WILL BE INSTALLED BY OWNER.
3. - - - - - - - INDICATES EXISTING CONTOUR LINES.
   ———————— INDICATES NEW CONTOUR LINES.
4. AFTER FINAL CONTOURING OF PARKING AREA G.C. TO LAY "CARPET COAT" SURFACE ON NEW BASE GRAVEL TO RESTORE AREA TO ITS ORIGINAL CONDITION.
5. OWNER WILL DO ALL INTERIOR AND EXTERIOR PAINTING.
6. TEST HOLE DATA ON FILE IN ARCHITECTS OFFICE.
7. ALL ELECTRICAL WORK TO BE DONE BY OWNER.
8. ALL SPRINKLER SYSTEM WORK BY OWNER. NEW ADDITION TO BE SPRINKLED THROUGHOUT.
9. G.C. TO VERIFY ALL EXISTING DIM. & EXISTING BUILDING DETAILS.
10. SURVEY BY HAROLD N. PETERSON, REGISTERED SURVEYOR, ON DECEMBER 14, 1965
11. OWNER TO PROVIDE NECESSARY EXIT SIGNS AND FIRE EXTINQUISHERS.
12. OWNER WILL RELOCATE EXISTING 'WEBER-KNAPP' SIGN.
13. NEW FLOOR LEVEL EL. TO MATCH EXISTING LEVELS.
14. FOR ADDITIONAL PLUMBING ITEMS SEE SHEETS 3, 6, 9.

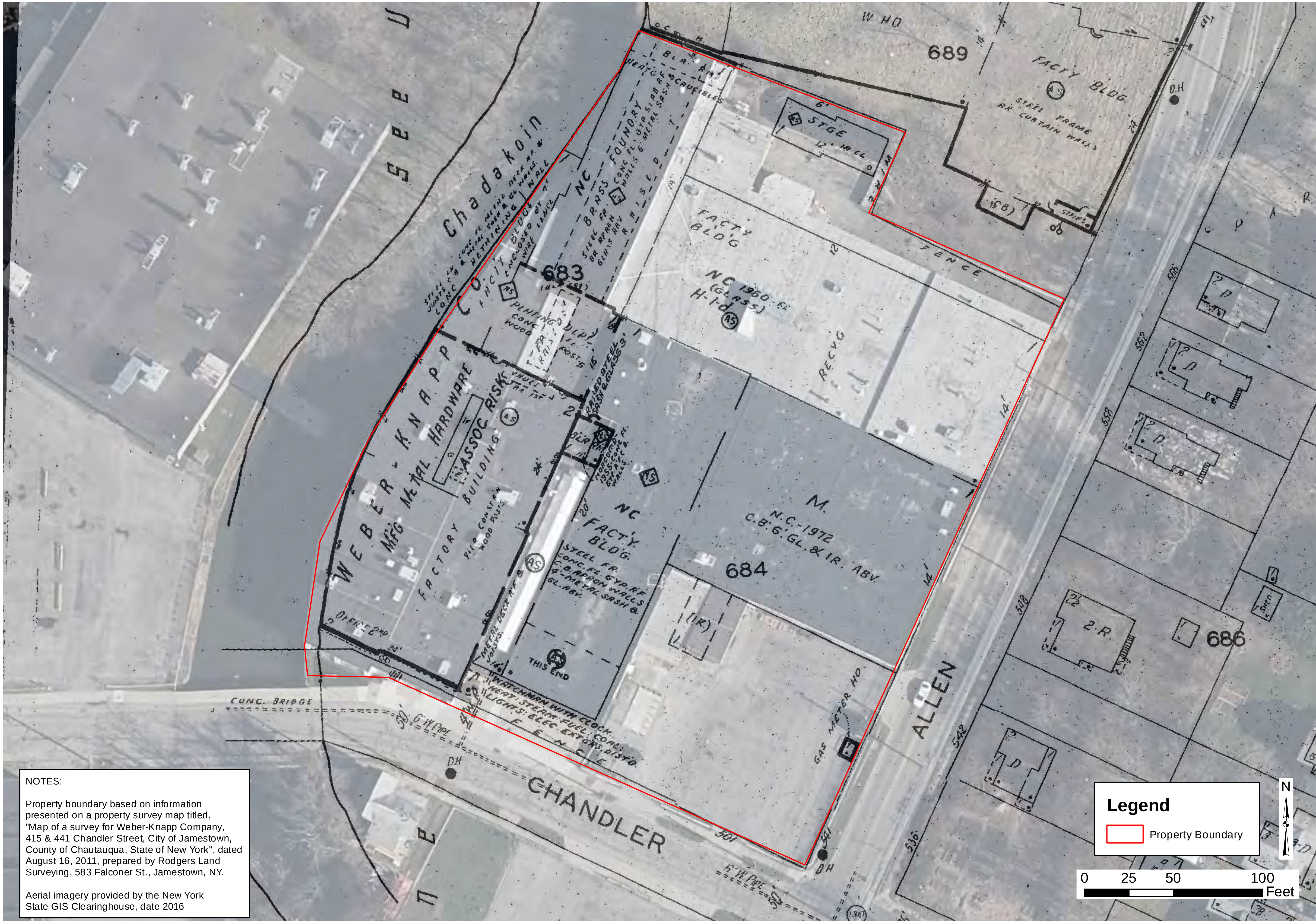
— SHEET INDEX —

NO.	DESCRIPTION
1	PLOT PLAN & PLUMBING
2	FOUNDATION PLAN, SECTIONS & DET.
3	FLOOR PLAN & PLUMBING
4	STRUCTURAL FRAMING PLAN
5	ELEVATIONS.
6	LACQUER STOR. & TOILET ROOM ADDITIONS
7	SECTIONS & DETAILS
8	SECTIONS & DETAILS
9	SECTIONS & DETAILS - CANOPY
H-1	HEATING - PLOT PLAN
H-2	HEATING - FLOOR PLAN & DETAILS

ADDITION AND ALTERATIONS TO:
WEBER-KNAPP CO.
JAMESTOWN, NEW YORK

JULIAN NAETZKER & ASSOCIATES · ARCHITECTS & ENGINEERS
412 LAFAYETTE ST. JAMESTOWN, N. Y.

DESCRIPTION: PLOT PLAN AND PLUMBING
DATE: JAN. 27, 1966
REVISED:
JOB: 338
DRAWN BY: S.C.O.
SCALE: AS NOTED
SHEET: 1



NOTES:

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Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Last Date Saved: 09 Apr 2019 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-50 BCP 1980 Sanborn overlay.mxd

DESIGNED BY	DATE
CAH	04-2019
DRAWN BY	DATE DRAWN
CAH	04-2019
SCALE	DATE ISSUED
AS NOTED	04-09-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
REMEDIAL INVESTIGATION / REMEDIAL ALTERNATIVES ANALYSIS WORK PLAN

Drawing Title
1980 Sanborn Fire Insurance Map Overlay

Project No.
5529S-18

APPENDIX A

APPENDIX B

ENVIRONMENTAL EVALUATION

415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK

NYSDEC SPILL FILE No. 1808886

Prepared for: Weber Knapp Company
441 Chandler Street
Jamestown, New York 14702

Prepared by: Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

Project No. 5529S-18

Date: February 8, 2019

Table of Contents

Figures

Tables

Appendices

1.0 INTRODUCTION

Day Environmental, Inc. (DAY) prepared this report that summarizes the findings of environmental studies completed at the above-referenced property (Site) between September 5, 2018 and January 2, 2019 (collectively referred to as the environmental evaluation or studies). These studies were completed in accordance with proposals dated August 31, 2018, October 29, 2018 and October 12, 2018 (Revised December 10, 2018). A project locus map identifying the location of the Site is included as Figure 1.

1.1 Background

Currently the 7-acre Site is developed with two buildings including an approximate 105,000 square foot building (the 'Main Building', located on the tax parcel addressed 441 Chandler St.) constructed in about 1910 (with subsequent additions), and an approximate 39,000 square foot building (the 'Plating Building', located on the tax parcel addressed 415 Chandler St.) constructed in about 1975. The Site is bisected by the Chadakoin River and the Main Building is located on the east side of the river and the Plating Building is located on the west side of the river. The buildings are connected by a covered bridge/pathway.

A Site Plan showing the current layout of the Weber Knapp Co. facility overlain on an aerial photograph circa 2016 is included as Figure 2. Copies of historic Sanborn Fire Insurance maps, which depict former operations in the vicinity of the Site for the years 1891, 1902, 1930, 1949, and 1982 are overlain on the current layout of the Weber Knapp facility and included in Appendix A.
The Main Building is currently used for manufacturing, warehousing and office operations. In the 1930s, a brass foundry was located in the area that is now the northwestern portion of the Main Building. The original footprint of the building was expanded to the north and east over the Morse Avenue Right-of-Way (ROW) and former residential properties between the 1940's and the 1960's. Between about 1969 and 1993, degreasing operations using trichloroethene (TCE) based solvent was conducted in the central portion of the Main Building.

On February 9, 1989, cutting oil was released (spilled) at the Site when a delivery line broke while transferring product. This spill reportedly occurred "on the sidewalk at the back corner of the building" (i.e., the northeast corner of the Main Building) and it was "… immediately contained to an area approximately 10 feet (ft.) by 30 ft. by forming a dike of absorbent clay and snow". The release was reported to the NYSDEC and spill file No.8808794 was opened. The NYSDEC spill file report indicates that approximately 15 gallons of cutting oil was spilled and that the spill was cleaned up by the material supplier (i.e., American Lubricants) and, subsequent to an inspection of the spill area by the NYSDEC, spill file No. 8808794 was closed on April 3, 1989. Until November 2018, when apparent floating product was detected during the studies described in this report and NYSDEC Spill No. 1808886 was opened, no other spills were identified at the Site.

The Plating Building contains several metals plating lines in the eastern portion of the building and a wastewater treatment plant in the western portion of the building. A chrome plating line and black chromate treated zinc line that utilized hexavalent chromium formerly operated in the northeastern portion of the Plating Building. The chrome plating operation ran from the mid-1970's until 1995, and the black chromate finish operation ran from mid-1970's until 2004.

As depicted on the 1891, 1902, 1930 and 1949 Sanborn Fire Insurance Maps included in Appendix

A, former structures, used for apparent commercial and manufacturing purposes on the 415 Chandler St. property (i.e., the parcel where the Plating Building is currently located) include:

- The A.C. Norquist furniture factory from at least 1891 until it was demolished sometime in the 1970s prior to the construction of the Plating Building contained drying kilns, painting, furniture manufacturing and warehousing operations.

- The 1930 Sanborn Fire Insurance Map depicts Jamestown Metal Products, Inc. (manufactures of metal cabinets), Quality Lumber Inc. (lumber and builders supplies), Johnson Daniels Co. (lumber dealers) and a portion of the Allied Furniture Company located on the western edge of the Site (i.e., along River St.). These businesses are not depicted on the 1949 Sanborn Fire Insurance Map, and have been replaced by the Pearl City Mills (Grain and Feed), a private garage and auto freight stations, and several small structures labeled Norquist Products, Inc.

- A railroad spur line, operated by the Eire Railroad and servicing the A.C. Norquist facility, was formerly located on the west side of the river. The 1930 and 1949 Sanborn Fire Insurance Maps depict the railroad spur line beginning north of Chandler St. and trending to the northwest, roughly parallel with the river.

The DC Rollforms property, which is located adjacent to the Site to the north on the east side of the Chadakoin River, is a New York State (NYS) listed superfund site [New York State Department of Environmental Conservation (NYSDEC) Site No. 907019]. The primary contaminants of concern at the DC Rollforms site are TCE and associated breakdown products.

A release of hydraulic oil at the TRW Bearing Division property, which is located adjacent to the Site to the south on the west side of the Chadakoin River, was reported to the NYSDEC in July 1986 and spill file No.189702 was opened. Information included in NYSDEC spill file No. 189702 indicates that remediation efforts have been ongoing at the TRW Bearing Division property since 1988 and was ongoing as of December 31, 2017. As part of the remediation efforts conducted at this site, it is reported that between August 1 and December 31, 2017, the average rate of groundwater extraction by the pumping system installed at the TRW Bearing Division property was approximately 11.5 gallons per minute (gpm).

1.2 Previous Environmental Studies

To date, the following environmental studies were completed at the Site and copies of these reports were provided to DAY:

Babcock Industries, Inc. Environmental Assessment, Weber-Knapp Division, 441 Chandler Street, Jamestown, NY, dated February 14, 1989-Prepared by Dames & Moore (the Dames & Moore Environmental Assessment); and

Environmental Site Assessment Report, Weber-Knapp Company, 415, 441, 448 and an Unaddressed Parcel on Chandler Street, Jamestown, New York, dated July 5, 2011-Prepared by LCS, Inc. (the LCS Phase I ESA).

In conjunction with the Dames & Moore Environmental Assessment, ten soil gas and five groundwater samples were collected and screened using a portable Gas Chromatograph. TCE was detected in two of the soil vapor samples tested (i.e., a location north of the Main Building in proximity of the DC Rollforms site and a location southeast of the Main Building). TCE was detected in groundwater samples collected from north of the Main Building (in proximity of the location where TCE was detected in the soil gas) and east of the Plating Building.

The LCS Phase I ESA included the following "known or suspect" recognized environmental conditions (RECs):

- *"The subject property was historically utilized for the manufacturing of furniture from at least 1891 through 1966 and has been utilized as a manufacturer of metal hardware since at least 1930.*
- *Three UTSs were filled-in-place north of the main building in 1987; no post-closure soil or groundwater sampling was apparently conducted.*
- *Hazardous/regulated materials located on-site included general cleaning supplies, Caustics, Alkalines, Mineral Acids, cyanide components, waste-water treatment chemicals, paints, waxes, dyes and oils/lubes.*
- *Solid/hazardous/regulated wastes generated on-site included waste oil, waste-water treatment sludge, scrap metal and gas cylinders. No releases or spills were noted in the vicinity of these wastes.*
- *Dry machine pits (no outlets) were noted throughout the shop area of the main building. Pits were also noted in the plating building; material collected in these pits is processed in the on-site waste water treatment plant. In addition, a containment pit was noted in the vicinity of the scrap metal dumpsters. Such reportedly collects any access oils from the waste scrap metal and is pumped out when full.*
- *A previous study also identified concerns associated with an historic vapor degreaser and documented VOCs and TCE in soil, groundwater and/or soil gas.*
- *According to the First Search report, the subject property was listed as a RCRA TSD-Facility with all violations resolved; RCRA CORRACTS facility with a low priority for corrective action; RCRA large quantity generator of hazardous waste with all violations resolved; FINDS database due to NPDES, NEI, FIS and RCRA, FRS, TRIS and AIRS listings; TRIS site with a status of "open"*
- *According to the FirstSearch report, the subject property was listed as a UST/AST facility with the following tanks identified on-site:*
    - *One 15,000-gallon #6 fuel oil AST installed in 1977 and currently in service.*
    - *One 275-gallon #2 fuel oil AST installed in 1974 and currently in service*
    - *One 2,000-gallon #2 fuel oil UST installed in 1948 and closed prior to micro-conversion in 1991.*
    - *One 10,000-gallon #2 fuel oil UST installed in 1973 and closed prior to micro-conversion in 1991.*
    - *The subject property was listed as a CBS AST facility with the following ASTs identified on-site:*
    - *One 1,500-gallon AST and one 2,000-gallon AST of trichloroethene installed in 1989 and closed/removed in 1994.*
    - *One 5,700-gallon Sodium Hydroxide AST installed in 1977 and currently in service.*

- *South adjacent properties were identified as MRC Bearings and Dahl-Strom Sheet Metal.*
- *A west adjacent property was identified as Star Refrigeration.*
- *A north adjacent property was fallow land with a remediation shed.*
- *According to the FirstSearch report, a south adjacent property at 402 Chandler Street, was identified as a RCRA generator with no unresolved violations; ERNS site due to release of oil/water mixture; TRIS listings; UST site; and, spill listings. One (Spill No. 8602953) involved a UST failure and is classified as active.*
- *A north adjacent property at 583 Allen Street, was identified as a RCRA TSD facility with all violations resolved; RCRA CORRACTS listed facility with a medium priority for corrective action; RCRA Large-Quantity Generator with no violations listed; and, a NYSDEC listed state hazardous waste site."*

1.3 Spill Report

During the performance of the work described in this report, evidence of a historic petroleum release at the Site became apparent. As a result, on November 21, 2018 a DAY representative called the NYSDEC Region 9 Spills Division on behalf of the Weber Knapp Co. to report this historic release (i.e., the presence of light non-aqueous phase liquid encountered in monitoring well MW-A). The NYSDEC opened spill file 1808886 at that time and subsequently requested a copy of a report describing the findings of work completed to assess environmental conditions at the Site.

1.4 Sampling Rationale

The purpose of the work described herein was to conduct intrusive studies, to obtain site-specific information about current environmental conditions at the Site. The primary rationale for selecting the test locations that were completed during this study are provided on Table 1, and the approximate test locations are depicted on Figure 2. Information obtained from a review of the Sanborn Fire Insurance Maps was also used to assist in the selection of test locations for these studies (refer to Appendix A).

1.5 Limitations

The findings and conclusions presented in this report are based upon an evaluation of the data and samples collected/tested during the studies described herein; and DAY's interpretation of this information. Conditions between test and sample locations may vary. As such, the findings and conclusions presented herein should be considered as a professional opinion based solely on the scope of work completed. If additional data becomes available in the future, it may be necessary to re-evaluate the findings and conclusions provided in this report.

2.0 FIELDWORK AND ANALYTICAL LABORATORY TESTING

2.1 Screening Level Studies

2.1.1 Soil Vapor Screening

On September 5, 2018, DAY collected six sub-slab soil vapor samples (designated SSV-1 through SSV-6) from below the concrete floor slabs of the Main Building and the Plating Building. The approximate locations of the soil vapor samples collected on September 5, 2018 are depicted on Figure 2. These soil vapor samples were collected in proximity to the former vapor degreaser (i.e., SSV-1 and SSV-2), the adjacent NYSDEC Superfund Site No. 907019 (SSV-3 through SSV-5), closed in-place underground storage tanks (USTs) located outside the northeast portion of the Main Building (SSV-3 and SSV-4), and the location where TCE was detected in groundwater samples collected east of the Plating Building during the 1989 environmental assessment (i.e., SSV-6).

Samples SSV-1 through SSV-6 were collected in general accordance with the provisions outlined in the New York State Department of Health (NYSDOH) Guidance Document titled, *"Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October* 2006 (NYSDOH Guidance Document).

A DAY representative installed each sub-slab vapor sampling point by advancing a 0.375-inch diameter drill bit through the concrete floor slab, and into the underlying soil using a hammer drill. Upon reaching the targeted depth (i.e., approximately two inches below the bottom of the floor slab), a slotted portion of 0.375-inch outer diameter low density polyethylene tubing was placed in the drill hole to approximately two inches below the bottom of the slab. The drill hole was then sealed with hydrated bentonite.

Prior to sampling, each soil vapor point was purged of three to four volumes of air at a flow rate that did not exceed 0.2 liters per minute. Subsequent to purging, samples were collected using a batch certified six-liter Summa canister equipped with a two-hour regulator provided by the analytical laboratory. The vacuum readings were recorded at the start of the test and monitored throughout the test. Following sampling, each sub-slab vapor probe was removed, the floor slabs were patched with concrete, and the Summa canisters were transported under chain-of-custody control to the analytical laboratory and tested for volatile organic compounds (VOCs). Sampling logs, documenting the collection of soil vapor samples SSV-1 through SSV-6, are provided in Appendix B.

2.1.2 Concrete Floor Slab Testing

On September 5, 2018, DAY collected core samples (designated CFS-A through CFS-F) from the concrete floor slabs at six locations in the Main Building and the Plating Building using a frame-mounted electric core drill. Each sample was located within a current or former plating line area (i.e., CFS-A though CFS-D and CFS-F, respectively) or from a sump pit in the wastewater treatment area (i.e., CFS-E). The approximate locations of the concrete core samples collected on September 5, 2018 are depicted on Figure 2.

At each location, a DAY representative advanced a 1.5-inch diameter core bit through the concrete floor slab to collect samples for observation and testing. [Note: drilling at location CFS-E (i.e., in the sump located within the wastewater treatment plant in the Plating Building) was terminated prior to reaching the bottom of the concrete floor slab in order to prevent the intrusion of groundwater into the sump from the subsurface below.] Each concrete core sample, to the extent recovered, was observed for competency, photographed, and a 'surficial' (i.e., 0-2 inch) and a 'deep' sample (greater than 2 inches below the surface) from each sample was retained for subsequent testing by an analytical laboratory for USEPA Resource Conservation and Recovery Act (RCRA)-List metals and total cyanide. Sampling logs, documenting the collection and condition of concrete core samples CFS-A through CFS-F, are provided in Appendix C.

2.2 Subsurface Evaluations

2.2.1 November 6 and 8, 2018

Between November 6 and 8, 2018, DAY completed a subsurface study in the vicinity of the former TCE degreaser, in areas presumed to be potentially hydraulically downgradient of the former vapor degreaser, and in the northwestern portion of the Main Building.

On November 6, 2018, four test borings (designated MW-A through MW-D) were advanced to equipment refusal encountered at depths of between 9.5 feet (ft.) below ground surface (bgs) and thirteen ft. bgs using a track-mounted drill-rig utilizing direct-push drilling methodologies. The locations of test borings MW-A through MW-D are presented on Figure 2.

Soil samples collected during the advancement of the test borings were observed to evaluate stratigraphic conditions, and for evidence of potential environmental impact (e.g., staining, unusual odors, etc.). In addition, a PID was used to scan the air space above the samples collected. Logs, describing the conditions (i.e., materials encountered, PID readings, evidence of impact, etc.) of the samples collected during the advancement of test borings are included in Appendix D. Select soil samples were retained and transported under chain-of-custody control to the analytical laboratory and tested for halocarbons.

Upon completion of drilling, each test boring was converted into a groundwater monitoring well. Each well was constructed using a one-inch diameter polyvinyl chloride (PVC) screen attached to a threaded solid PVC riser with a PVC cap that extended to just below the ground surface. To the extent possible, the annulus around, and above the screen was backfilled with a sand pack, and the remaining annulus above the sand pack was backfilled with bentonite grout. A flush-mounted protective casing was installed above each monitoring well. Construction diagrams for monitoring wells MW-A through MW-D are included in Appendix D.

On November 8, 2018, a DAY representative returned to the Site, evaluated each of the newly installed groundwater monitoring wells for the presence of light non-aqueous phase liquid (LNAPL) and dense non-aqueous phase liquid (DNAPL), and developed groundwater monitoring wells MW-A through MW-D by removing between approximately 6.5 and 11.5 well volumes of water and sediment from each location, until stabilized in-situ readings of pH, specific conductivity, oxidation-reduction potential (ORP) and temperature were observed. Following development, groundwater samples were collected from monitoring well MW-A through MW-D and submitted to an analytical laboratory for testing of halocarbons. In addition,

a sample of LNAPL encountered in monitoring well MW-A, and a sample of the sediment that was removed from the bottom of monitoring well MW-A during well development, were also retained and submitted for testing of halocarbons. The monitoring well development and groundwater sampling activities are documented on the logs included in Appendix E and Appendix F, respectively.

On November 8, 2018, DAY measured monitoring point elevations and top of floor surface adjacent to the groundwater monitoring wells relative to an arbitrary datum using a Topcon™ model RL-H4C long-range self-leveling construction laser.

2.2.2 December 17, 2018 to January 2, 2019

Between December 17, 2018 and January 2, 2019, DAY completed additional studies to characterize subsurface conditions at the Site and assess the need for and extent of remediation that may be required to address potential environmental impacts attributable to current and historic uses.

Between December 17 and 20, 2018, twenty-two test borings (designated TB-01 through TB-22) were advanced to depths of between ten ft. bgs and sixteen ft. bgs using a track-mounted drill-rig utilizing direct-push drilling methodologies. [Note: At test boring locations TB-01 and TB-02, 3.25-inch ID hollow stem augers (HSA) were used to advance the test borings to equipment refusal to allow the installation of 2-inch diameter monitoring wells.] The locations of test borings TB-01 through TB-22 are presented on Figure 2. Soil samples collected during the advancement of the test borings were evaluated as described above, and logs describing the conditions of the samples collected during the advancement of test borings TB-01 through TB-22 are included in Appendix D. Select soil samples collected from the test borings were retained and transported under chain-of-custody control to the analytical laboratory and tested for VOCs, semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs) and/or halocarbons.

Upon completion of drilling, test borings TB-01, TB-02, and TB-06 through TB-21 were converted into groundwater monitoring wells (designated MW-E through MW-T, TB-11 and TB-18). Monitoring wells MW-G, MW-H, MW-I, MW-J, MW-N, MW-R, MW-S, and MW-T were constructed using one-inch diameter PVC, as described above. Monitoring wells MW-K, MW-L, MW-M, MW-O, MW-P, MW-Q, TB-11 and TB-18 were also constructed using one-inch diameter PVC, as described above, but these wells were not completed with a flush-mounted protective casing at the surface, rather the PVC risers extend unprotected, approximately 2-3.5 ft. above the ground surface. Following the advancement of test borings TB-01 and TB-02 to equipment refusal depths of approximately 12.6 ft. bgs and 12.8 ft. bgs, respectively using HSA, 2-inch diameter PVC monitoring wells [i.e., designated MW-E (TB-01) and MW-F (TB-02)] were installed and completed with a flush-mounted protective cover. Monitoring wells MW-E and MW-F contain a two-foot-long well screen that is sealed within the glacial till/fractured bedrock interface. Construction diagrams for monitoring wells MW-E through MW-T, TB-11 and TB-18 are included in Appendix D.

On December 20, 2018, a one-inch diameter PVC screen attached to a threaded solid PVC riser was installed vertically into the east bank of the Chadakoin River bed, for the purpose of gauging the water elevation in the river bed in relation to the groundwater elevation at the Site. The PVC

screen extended from approximately one foot into the river bed sediment to approximately three feet above the top of the water surface, and the vertical PVC riser extended approximately 8.4 ft. above the top of the water surface, on that date. The PVC riser was secured to a chain-link fence that is constructed above the retaining wall located along the east bank of the river. This structure is here-in referred to as the river gauge. The approximate location of the river gauge is depicted on Figure 2.

Between December 19 and 21, 2018, groundwater monitoring wells MW-E though MW-T, TB-11 and TB-18 were evaluated for the presence of LNAPL, DNAPL and developed in preparation for sampling. The monitoring well development activities are documented on the logs included in Appendix E.

Between December 26 and 27, 2018, DAY representatives collected groundwater samples from monitoring wells MW-A through MW-L, MW-N through MW-T, TB-11 and TB-18 utilizing low-flow purging and sampling methods. The sampling was conducted in accordance with procedures described in ASTM D6771-02, Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Ground-Water Quality and Investigations. The groundwater sampling activities are documented on the logs included in Appendix F. The groundwater samples collected between December 26 and 27, 2018 were transported under chain-of-custody control to the analytical laboratory and tested for VOCs, SVOCs, PCBs, RCRA metals, total cyanide and/or halocarbons (see below for additional discussion of the analytical laboratory testing completed).

The top of PVC riser elevations, and top of floor surface and/or ground surface adjacent to groundwater monitoring well MW-E through MW-T, TB-11 and TB-18, were measured on December 27, 2018 by DAY using a Topcon™ model RL-H4C long-range self-leveling construction laser. The top of PVC riser elevation of the river gauge was also measured at that time. These measurements were conducted using the same benchmark that was used to survey the elevations of MW-A through MW-D on November 8, 2018

A DAY representative returned to the site on January 2, 2019 to collect groundwater samples from select monitoring wells to assess 1,4-dioxane and perfluorinated compounds (PFCs). Specifically, monitoring wells MW-C, MW-H and MW-P, MW-Q and MW-R were purged and sampled by low-flow methods using materials approved by NYSDEC guidance to ensure that the water collected for testing is representative of the groundwater quality [e.g., disposable high density polyethylene (HDPE) tubing was used to collect samples into pre-cleaned sample bottles with closures provided by the analytical laboratory]. Prior to sample collection, the groundwater purged from each well was monitored for pH, ORP, specific conductance, and temperature. An additional quantity of groundwater was collected from monitoring well MW-Q for use by the analytical laboratory as a site specific matrix spike / matrix spike duplicate (MS/MSD), and an additional groundwater sample was collected from monitoring well MW-Q and submitted as a duplicate sample. In addition, one equipment rinsate sample (i.e., collected by pouring “PFC-free” water over the static water level tape which was used in each of the groundwater monitoring wells during sample collection, and retaining a sample for testing) was collected on January 2, 2019. The groundwater sampling activities are documented on the logs included in Appendix F.

2.3 Analytical Laboratory Testing

Select concrete core samples, soil samples and groundwater samples collected from the test borings/monitoring wells advanced/installed during these studies were submitted to Eurofins Spectrum Analytical (Eurofins), which is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified analytical laboratory. The soil vapor samples that were collected on September 5, 2018 were submitted to ALS Environmental (ALS), which is also a NYSDOH ELAP certified analytical laboratory. The samples submitted to ALS and Eurofins for testing, and the test parameters, are summarized on Table 2: 415 and 441 Chandler Street, Jamestown, New York - Environmental Evaluation Analytical Laboratory Testing Program. Copies of the analytical laboratory reports prepared by ALS and Eurofins, and executed chain-of-custody documentation, are included in Appendix G.

The constituents detected in the samples submitted for analytical laboratory testing as part of this study are summarized on the following tables:

Table 3	Summary of Detected VOCs: Soil Vapor Samples
Table 4	Summary of RCRA Metals and Total Cyanide: Concrete Samples
Table 5	Summary of Detected VOCs: Soil Samples
Table 6	Summary of Detected SVOCs: Soil Samples
Table 7	Summary of Detected VOCs: Groundwater Samples
Table 8	Summary of Detected SVOCs: Groundwater Samples
Table 9	Summary of RCRA Metals and Total Cyanide: Groundwater Samples
Table 10	Summary of Detected Perfluorinated Compounds and 1,4-Dioxane: Groundwater Samples

[Note: Polychlorinated biphenyls (PCBs) were 'Not detected' above the detection limits utilized by the analytical laboratory in the samples tested as part of this study. As such, no summary table for PCBs was prepared.]

Table 5 and Table 6 include soil cleanup objectives (SCOs) identified in NYCRR Part 375 for the "Unrestricted Use" and for the "Restricted Industrial Use" criteria. [Note: The "Unrestricted Use" criteria indicate the concentration below which remediation of the soil is not required, and that the use of the soil on the Site is not restricted for the protection of public health, groundwater and/or ecological resources. "Restricted Industrial Use" falls under the "Restricted Use" criteria, which indicates that impacted soil may remain at the Site, though restrictions to the Site, such as environmental easements, clean fill cover placement, the development of a site management plan (SMP), etc., are imposed, and the uses of the Site are limited to minimize human and ecological exposure to the impacted material. Although the Site is not currently enrolled in a cleanup program administered by the NYSDEC, the Restricted Industrial Use SCO may be the most applicable of the "Restricted Use" SCO for the current use of the Site (i.e., a manufacturing facility).]

Table 7, Table 8 and Table 9 include the applicable Class GA (i.e., potable drinking water from a groundwater source) standards or guidance values for the detected parameters as presented in NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 document titled, Ambient Water Quality Standards and Guidance Effluent Limitations dated June 1998 as amended April 2000 (TOGS 1.1.1).

3.0 FINDINGS

3.1 Concrete Floor Core Samples

A visual examination of the concrete core samples collected on September 5, 2018 did not identify degradation of the concrete below the floor surface at the locations sampled. Staining was observed on the surface of one concrete core sample (i.e., CFS-B) and this staining extended approximately 0.01 ft. below the floor surface or approximately 1% of the concrete slab thickness at this location. One or more horizontal fractures were noted in each concrete core sample collected, except for sample CFS-F. However, no staining or evidence of deterioration along the plane of fracture (i.e., weathering from liquid migration along the fracture) was observed in the samples collected. Refer to the logs/photographs included in Appendix C.

3.2 Soil Vapor Samples

One or more VOC compound was detected in each of the soil vapor samples collected on September 5, 2018 from beneath the floor slabs in the Main Building and the Plating Building. Further, one or more halocarbon (primarily TCE and break-down products) were detected in each sample tested. The highest concentration of TCE (i.e., 110,000 µg/m^3) was measured in SSV-1, the sub-slab sample that was collected in proximity of the former vapor degreaser that utilized TCE. However, elevated TCE concentrations were also detected in the sub-slab samples collected nearest to the DC Rollforms site (i.e., the TCE concentrations in SSV-4 and SSV-5 were 13,000 µg/m^3 and 44,000 µg/m^3, respectively). In addition, although petroleum-related constituents (e.g., benzene, toluene, ethylbenzene, and xylene-BTEX) were detected in the soil vapor samples, the concentrations measured were relatively low and consistent throughout the Site (i.e., the BTEX concentrations measured in proximity to closed in place petroleum tank areas were not higher than other locations).

3.3 Subsurface Conditions

3.3.1 Main Building

Fill/reworked soil was encountered in each test boring advanced within, and around the perimeter of, the Main Building (i.e., MW-A through MW-F, TB-01 through TB-14 and TB-22) beginning below the concrete floor/pavement surface. The fill material encountered generally consists of sand and gravel, extending to depths ranging between approximately 2.5 ft. bgs (i.e., TB-08) and 9.5 ft. bgs (i.e., MW-D). In some locations, the fill material is with lesser amounts of concrete fragments (i.e., MW-A, TB-07, TB-09 and TB-10), brick (i.e., MW-B, TB-09 and TB-22), ash (i.e., MW-C, MW-D and TB-01), coal fragments (i.e., MW-C, TB-01 and TB-05), glass shards (i.e., MW-D, TB-04, TB-13 and TB-22), metal fragments (i.e., MW-D), cinders (i.e., TB-01, TB-02, TB-06, TB-08, TB-11 and TB-12), crushed rock (i.e., TB-08) and/or wood/plant fibers (i.e., TB-13). Indigenous soil was encountered below the fill in each test boring. The indigenous soil generally consists of a silt layer containing plant fibers/peat material that extends to depths between 6 ft. bgs (i.e., TB-03) and 11.5 ft. bgs (i.e., TB-13); underlain by a layer of fine-to-coarse sand and gravel extending to depths between 9 ft. bgs (i.e., TB-03) and 11.5 ft. bgs (i.e., MW-A); underlain in some locations by glacial till that extends to the bottom of the test boring. Equipment refusal on apparent bedrock, identified as weathered shale, was

encountered at 14 of the 19 test borings advanced in the vicinity of the main building, at depths ranging between approximately 9.0 ft. bgs (i.e., TB-03) and 13.0 ft. bgs (i.e., TB-22). [Note: Test borings TB-07, TB-12, TB-13 and TB-14 were terminated at depths of 12 ft. bgs, prior to encountering equipment refusal on apparent bedrock.]

The top of the apparent bedrock was observed to increase in the borings advanced nearest to the eastern edge of the Site. Specifically, the elevation of the top of the bedrock in test boings TB-03, TB-08, and TB-11 was approximately 3.8 ft., 2.6 ft., and 2.8 ft. (respectively) higher that the elevation of the top of the bedrock encountered in the vicinity of test borings MW-A, TB-01and TB-02. In addition, glacial till was not encountered above the top of apparent bedrock in test borings TB-03, TB-08, and TB-11.

Refer to the test boring logs in Appendix D and the monitoring well development logs in Appendix E for documentation of field evidence of impacts to soil and groundwater, observed in soil and groundwater samples collected from subsurface locations within, and surrounding, the Main Building. Field evidence of apparent impacts is discussed below:

- Evidence of a potential source area of contamination was observed during the advancement of test boring MW-A. Specifically, PID readings ranging between 42.3 ppm and greater than 15,000 ppm were measured above the soil samples collected from test boring MW-A. The elevated PID readings started at approximately 1.5 ft. bgs, and extended to the bottom of the test boring at approximately 13 ft. bgs. A chemical-type odor was noted in the soil sample collected from between approximately 7 ft. and 8 ft. bgs. Free product exhibiting a solvent-type odor was observed in the soil sample collected from between 8 ft. and 12 ft. bgs. Approximately 0.36 ft. of LNAPL [i.e., apparent petroleum (potentially cutting oil removed during the degreasing process), exhibiting a solvent-type odor] was measured in MW-A during well development on November 8, 2018 and approximately 0.10 ft. of LNAPL was measured in MW-A prior to sampling on December 27, 2018. [Note: Although elevated PID readings (i.e., ranging between 18.1 ppm and 714 ppm) were measured in samples collected from test boring MW-B starting at approximately 1 ft. bgs and extending to the bottom of the test boring at approximately 11 ft. bgs, the analytical laboratory test results for soil and groundwater samples collected from MW-B do not corroborate the elevated PID readings. The cause of the elevated PID readings measured during the advancement of test boring MW-B may be attributed to carry-over from test boring MW-A, which was advanced directly before test boring MW-B on November 6, 2018.]

- Evidence of impact (i.e., odor, sheen, elevated PID readings) was observed during the advancement of test boring TB-22 on December 20, 2018 (i.e., located approximately 20 feet to the west-northwest of test boring MW-A), starting at approximately 6 ft. bgs (i.e., the apparent top of the saturated soil). Free product (i.e., apparent petroleum) exhibiting a solvent-type odor was also observed in the soil sample collected from between approximately 8.5 ft. and 10 ft. bgs.

- Evidence of impact (i.e., elevated PID readings and/or solvent type-odors) was also observed in the other test borings advanced in the vicinity of MW-A (i.e., TB-01, TB-02, TB-04 and TB-05, advanced on December 19 and 20, 2018). The impact in these

locations was generally observed at, or directly above, the top of the till layer (i.e., at depths around 11 ft. bgs) extending to the bottom of the test borings (i.e., at depths ranging between 12.5 ft. and 12.9 ft. bgs).

- LNAPL (i.e., apparent petroleum product with characteristics similar to a lubricant or cutting oil) was encountered in monitoring wells MW-G and MW-N at the time of well development and sampling. Specifically, trace LNAPL (i.e., detected by, but not at a thickness great enough to be measured by, the oil/water interface meter used) was observed in monitoring well MW-G during development on December 21, 2018, and approximately 0.05 ft. of LNAPL was measured in the well during sampling on December 27, 2018. Approximately 0.05 ft. of LNAPL was observed in monitoring well MW-N during development on December 20, 2018, and 0.06 ft. of LNAPL was measured in the well during sampling on December 27, 2018. [Note: Evidence of free product was not observed in the soil samples retained at these locations during drilling on December 18 and 19, 2018. Further, VOCs were not detected in the groundwater sample collected on December 26, 2018 from monitoring well MW-N. Only the SVOC, phenanthrene (i.e., a concentration of 0.58 µ/l compared to the NYSDEC standard or guidance value of 50 µ/l) was detected in the groundwater sample collected on December 26, 2018 from MW-N. The groundwater sample collected on December 27, 2018 from monitoring well MW-G was not tested for petroleum compounds)

- Elevated PID readings, ranging between 281 ppm and 620 ppm, were measured over the fill samples that were retained from MW-C during drilling on November 6, 2018. The fill materials observed included an approximate 0.5 ft. layer of ash, underlain by an approximate 0.5 ft. layer of sand containing ash and cinders, underlain by an approximate 2.0 ft. layer of sand and gravel containing coal fragments. A petroleum-type sheen and oil globules were noted on the surface of the purge water during the development of monitoring well MW-C on November 8, 2018 and PID readings of greater than 15,000 ppm and 11,690 ppm were measured in the standpipe of monitoring well MW-C, prior to and subsequent to completing development activities (respectively). [Note: A PID reading of 2.5 ppm was measured in the standpipe of monitoring well MW-C prior to groundwater sampling on December 27, 2018. Except for a relatively low concentration of TCE (i.e., 0.8 µ/l, which is below the NYSDEC Standard or Guidance value of 5 µ/l), VOCs were not detected in the groundwater sample collected on December 27, 2018 from monitoring well MW-C. Several polyaromatic hydrocarbon SVOCs were detected in the groundwater sample collected on December 27, 2018 at concentrations above NYSDEC standards or guidance values (refer to Table 5). However, concentrations of VOCs and SVOC detected in the groundwater samples tested do not correlate the high PID readings measured during drilling and well development.]

- Elevated PID readings, ranging between 2.0 ppm and 404 ppm, were measured over the fill samples that were retained from MW-D during drilling on November 6, 2018. The fill materials observed included an approximate 2.0 ft. layer of sand and gravel containing ash and cinders, underlain by an approximate 2.0 ft. layer of sand and gravel containing glass and metal fragments, underlain by an approximate 3.0 ft. layer of apparent re-worked soil, underlain by an approximate 3.0 ft. layer of sand and gravel containing metal fragments and exhibiting a chemical-type odor. PID readings of 451 ppm and

184.9 ppm were measured in the standpipe of monitoring well MW-D, prior to and subsequent to completing development activities (respectively) on November 8, 2018. [Note: A PID reading of 35.5 ppm was measured in the standpipe of monitoring well MW-D prior to groundwater sampling on December 27, 2018. Petroleum related VOCs (i.e., a total concentration of 11.9 µ/l), halocarbons (i.e., a total concentration of 7.5 µ/l) and non-target VOC tentatively identified compounds (i.e., a total concentration of 160 µ/l) were detected in the groundwater sample collected on December 27, 2018 from monitoring well MW-D. With the exception of vinyl chloride (i.e., detected at a concentration of 6 µ/l none of the detected VOCs were measured at concentrations that exceeded NYSDEC standards or guidance values). Detectable concentrations of polyaromatic hydrocarbon SVOCs (i.e., a total SVOC concentration of 2.86 µ/l) were also measured in the groundwater sample collected from MW-D on December 27, 2018, but the detected concentrations were below NYSDEC standards or guidance values.]

3.3.2 Plating Building, Perimeter and Parking Lot

Fill/reworked soil was encountered in each test boring advanced around the perimeter, and within the parking lot located to the south, of the Plating Building (i.e., TB-15 though TB-21) beginning below the ground/pavement surface. The fill material encountered generally consists of sand and gravel, extending to depths ranging between approximately 4.5 ft. bgs (i.e., TB-20 and TB-21) and 10.5 ft. bgs (i.e., TB-15). The fill material was intermixed in some locations with lesser amounts of cinders (i.e., TB-15, TB-17 and TB-18), brick (i.e., TB-17), crushed rock (i.e., TB-18) and/or wood/plant fibers (i.e., TB-19). Indigenous soil was encountered below the fill in each test boring. The indigenous soil generally consists of a silt layer, that contains plant fibers/peat material and extends to depths between 6 ft. bgs (i.e., TB-21) and 11 ft. bgs (i.e., TB-18); underlain by a layer of fine-to-coarse sand and gravel extending to depths between 7 ft. bgs (i.e., TB-20) and 14.5 ft. bgs (i.e., TB-16); underlain in some locations by glacial till that extends to the bottom of the test boring. Equipment refusal was encountered at 1 of the 7 test borings advanced in the vicinity of the Plating Building (i.e., TB-15) at a depth of approximately 15 ft. bgs. [Note: Test boring TB-16 was terminated at a depth of 16 ft. bgs and test borings TB-17 through TB-21 were terminated at depths of 12 ft. bgs, prior to encountering equipment refusal.]

Refer to the test boring logs in Appendix D and the monitoring well development logs in Appendix E for documentation of field evidence of impacts to soil and groundwater, observed in soil and groundwater samples collected from subsurface locations surrounding the Plating Building and the adjacent parking lot to the south. Field evidence of apparent impacts is discussed below:

- Starting at approximately 6 ft. bgs (i.e., in proximity of saturated soil) and extending to approximately 10.5 ft. bgs, PID readings, ranging between 0.6 ppm and 4.6 ppm, were measured over soil samples that were retained from TB-19 during drilling on December 17, 2018. Field evidence of apparent impact was not observed above approximately 6.0 ft. bgs in samples collected from TB-19. PID readings of 74.4 ppm and 2.5 ppm were measured in the standpipe of monitoring well MW-R, prior to and subsequent to completing development activities (respectively) on December 19, 2018.

- Petroleum-type sheen was observed on the soil sample, collected from depths between approximately 8.5 ft. and 10 ft. bgs., retained from TB-21 during drilling on December 17, 2018. Petroleum-type sheen was also observed on the surface of the purge water during the development of monitoring well MW-T on December 20, 2018. [Note: Polyaromatic hydrocarbon SVOCs were detected in the soil sample collected from depths between 5 ft. and 6 ft. bgs on December 17, 2018, but none of the concentrations measured exceeded the applicable Unrestricted Use SCO. Petroleum related VOCs were not detected in the groundwater sample collected from monitoring well MW-T on December 26, 2018.]

3.4 Groundwater

Depth to groundwater in the vicinity of the Plating Building on December 27, 2018 ranged between approximately 3.7 ft. bgs (i.e., MW-S) and 4.7 ft. bgs (MW-Q). Based on the depth to groundwater measurements made on December 27, 2018 and the calculated groundwater elevations, shallow groundwater flow across the Plating Building and adjacent parking lot portion of the Site is toward the Chadakoin River (i.e., generally toward the east-southeast).

Depth to groundwater in the vicinity of the Main Building on December 27, 2018 ranged between approximately 2.0 ft. bgs (i.e., MW-K) and 6.4 ft. bgs (MW-J). Based on the depth to groundwater measurements made on December 27, 2018 and the calculated groundwater elevations, groundwater flow across the Main Building portion of the Site varies based on location. Specifically, shallow groundwater in the northern portion generally flows from north to south (i.e., from the DC Rollforms property onto the Site); shallow groundwater in the eastern portion appears to flow toward the west, away from Allen Street; and shallow groundwater on the western portion appears to flow toward the east-southeast, away from the Chadakoin River. The shallow groundwater from the eastern and western portions merge in the central portion (i.e., an area of the Site that was previously occupied by Morse Avenue, which was subsequently abandoned and covered by a portion of the Main Building), and thereafter groundwater in the Main Building portion of the Site generally appears to flow toward the south.

A potentiometric contour map depicting groundwater elevations at the Site measured on December 27, 2018 is provided as Figure 3.

3.5 Analytical Laboratory Results

The analytical laboratory reports for soil vapor, concrete, soil and groundwater samples are included in Appendix G. As shown in the analytical laboratory reports, PCBs were not detected at concentrations above the limits reported by the laboratory in the three soil samples and two groundwater samples that were tested. VOC results for soil vapor samples, soil samples and groundwater samples are summarized in Table 3, Table 5, and Table 7, respectively. SVOC results for soil samples and groundwater samples are summarized in Table 6 and Table 8, respectively. Metal and Cyanide results for concrete samples and groundwater samples are summarized in Table 4 and Table 9, respectively. Perfluorinated compounds and 1,4-Dioxane results for groundwater samples are summarized in Table 10. The concentrations of select VOCs [i.e., TCE, cis-1,2-dichloroethene (cis1,2-DCE) vinyl chloride (VC), and benzene, toluene, ethylbenzene, and xylenes (BTEX)], that were detected in the soil vapor samples collected on September 5, 2018 are presented on Figure 4. The concentrations of select VOCs (i.e., TCE, cis

1,2-DCE and VC) that were detected in the groundwater collected on November 8, 2018 and December 26 and 27, 2018 are presented on Figure 5.

4.0 CONCLUSIONS

The following conclusions are based upon the findings of the work completed to date.

- The concrete core samples collected on September 5, 2018 in proximity to current and former plating operations in the Main Building and the Plating Building, and the waste water treatment area within the Plating Building, did not indicate degradation in the quality of the concrete. The metal and total cyanide concentrations measured in the concrete samples are generally relatively low (i.e., when compared to available soil cleanup guidance, since there are no applicable standards/guidance for metal concentrations within concrete). Based on the finding that the concentration of the metals and cyanide detected in the surficial concrete core samples were generally higher than, or comparable to, the concentrations detected in the deeper samples, migration through the concrete is not occurring.

- With the exception of the concentrations of arsenic in the groundwater samples collected on December 26 and 27, 2018 from monitoring wells MW-D (i.e., 134 micrograms per liter or µg/l), MW-Q (i.e., 72.1 µg/l) and MW-T (i.e., 37.1 µg/l) that exceeded the Class GA groundwater standard of 25 µg/l for arsenic, impacts to groundwater from metals and cyanide were not observed in the locations tested for this environmental evaluation. The elevated concentration of arsenic detected in the groundwater sample from MW-D may be attributable to the presence of fill materials (e.g., ash and coal fragments) observed at this location during drilling. The elevated concentrations of arsenic detected in the groundwater samples from MW-Q and MW-T may be attributable to historic operations and/or the former presence of a railroad spur that was located along the west side of the river (refer to the 1930 and 1949 Sanborn Fire Insurance Map overlays in Appendix A)

- Soil and groundwater samples collected from location MW-A (i.e., the location of the former vapor degreaser that utilized TCE) indicated that a release of TCE likely occurred in this area (i.e., presumably associated with the former vapor degreaser operation) and that a release of apparent petroleum had also occurred in this vicinity (i.e., possibly cutting oil that was removed from the degreased parts). Similar material was also observed during the advancement of test boring TB-22. The concentrations of TCE detected in the soil and/or groundwater samples collected from locations in the vicinity of MW-A (i.e., TB-01/MW-E, TB-02/MW-F, TB-04, TB-05 and TB-22) indicate that the highest concentrations of TCE are present beginning at depths approximately 11 ft. bgs. The concentrations of TCE detected in the soil and/or groundwater samples collected from locations TB-03, TB-11, MW-B, MW-C and MW-D, MW-G, and MW-H did not appear to indicate that the TCE source area in the vicinity of monitoring well MW-A is migrating toward these locations (i.e. in the direction of the river or to locations north, east, or southeast of MW-A).

- Based on measurements collected on December 27, 2018 the direction of shallow groundwater flow across the Main Building portion of the Site was calculated to generally flow toward the south (i.e., roughly parallel to the river). This groundwater flow pattern may be influenced by the presence of the former Morse Avenue Right-of-Way, which is located below the current footprint of the Main Building and trending

approximately from the location of MW-K to the location of MW-J (refer to the 1902 and 1930 Sanborn Fire Insurance Map overlays in Appendix A). [Note: The direction of groundwater flow across the Main Building portion of the Site may be further influenced by the concrete retaining wall that forms the foundation for the west side of the Main Building, starting at Chandler Street bridge to the south and extending north along the river to the northern property boundary of the Site. This retaining wall also appears to provide a barrier that precludes migration of contamination from beneath the Main Building into the river.]

- Elevated TCE concentrations detected in soil vapor samples SSV-1 and SSV-2 correlate to the potential source area and TCE impacts identified in the vicinity of MW-A. However, the elevated TCE concentrations detected in soil vapor samples SSV-4 and SSV-5 do not correlate with the relatively low concentrations of TCE identified in the soil and/or groundwater samples collected from nearby test locations of MW-B and TB12/MW-L (i.e., SSV-4) and MW-D and TB-10/MW-K (i.e., SSV-5). Thus, the data suggests that the elevated TCE concentrations detected in soil vapor samples SSV-4 and SSV-5, originated on the DC Rollforms property (i.e., located to the north of the Main Building) and migrated via the soil vapor onto the Weber Knapp property.

- Elevated PID readings measured on November 6 and 8, 2018 at test locations MW-C and MW-D during drilling and well development do not correlate with the relatively low concentrations of VOCs and SVOCs detected in the soil and/or groundwater samples collected from these locations. The elevated PID readings may be the result of VOC impacts to soil vapor.

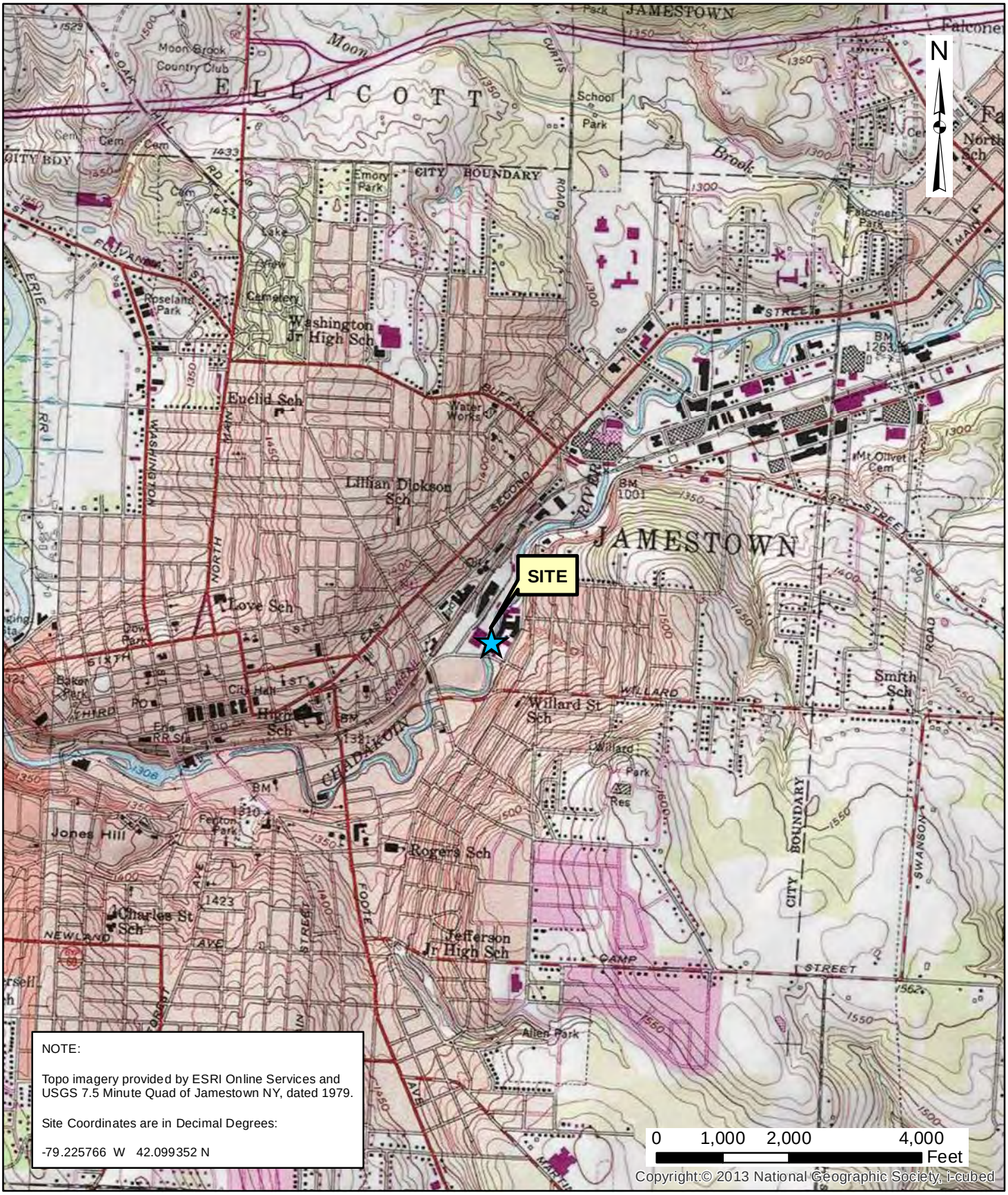
- Evidence of apparent petroleum release was observed during the advancement of test borings and/or development and sampling of monitoring wells at locations TB-06/MW-G, TB-14/MW-N and TB-21/MW-T. Specifically, LNAPL was encountered during the development and sampling of monitoring wells MW-G and MW-N. Petroleum type sheen was observed on a soil sample retained from test boring TB-21 during drilling and on the surface of the purge water during the development of monitoring well MW-T. Samples of the apparent petroleum observed at locations TB-06/MW-G, TB-14/MW-N was similar in appearance to that observed in MW-A and TB-22 (i.e., possibly cutting oil). However, the apparent petroleum observed at locations TB-06/MW-G and TB-14/MW-N did not exhibit a solvent-type odor.

- Based on the absence of apparent petroleum impact in TB-11, TB-12/MW-L and soil vapor points SSV-3 and SSV-4, the closed-in-place USTs do not represent an environmental concern.

- Elevated concentrations of TCE were measured in groundwater samples collected on December 26 and 27, 2018 from monitoring wells MW-I (i.e., 61 µg/l) and MW-R (i.e., 1,100 µg/l). The sources of the TCE impact at these locations are unknown. However, based on the location of these wells in relation to each other, and to the apparent source area in the vicinity of MW-A, the source of TCE impacting these locations is not the former degreaser.

- One or more perfluorinated compound was detected in each groundwater sample collected from the Site on January 2, 2019. Further, the compounds perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) were detected in each groundwater sample tested. The concentrations of PFOS detected in the groundwater samples collected on January 2, 2019 ranged between 2.6 nanograms per liter (ng/l) or parts per trillion (ppt) (i.e., MW-R) and 300 ng/l (i.e., MW-P). The concentrations of PFOA detected in the groundwater samples collected on January 2, 2019 ranged between 0.60 ng/l (i.e., MW-Q) and 8.0 ng/l (i.e., MW-C). The NYSDEC does not have a groundwater standard or guidance values for PFOA or PFOS. However, in 2016 the USEPA issued a health advisory level of 70 ng/l for the combined concentration of PFOA and PFOS in drinking water sources. The combined concentration of PFOA and PFOS in the groundwater samples collected on January 2, 2019 from monitoring wells MW-C and MW-P exceed this USEPA health advisory level.

FIGURES



NOTE:

Topo imagery provided by ESRI Online Services and USGS 7.5 Minute Quad of Jamestown NY, dated 1979.

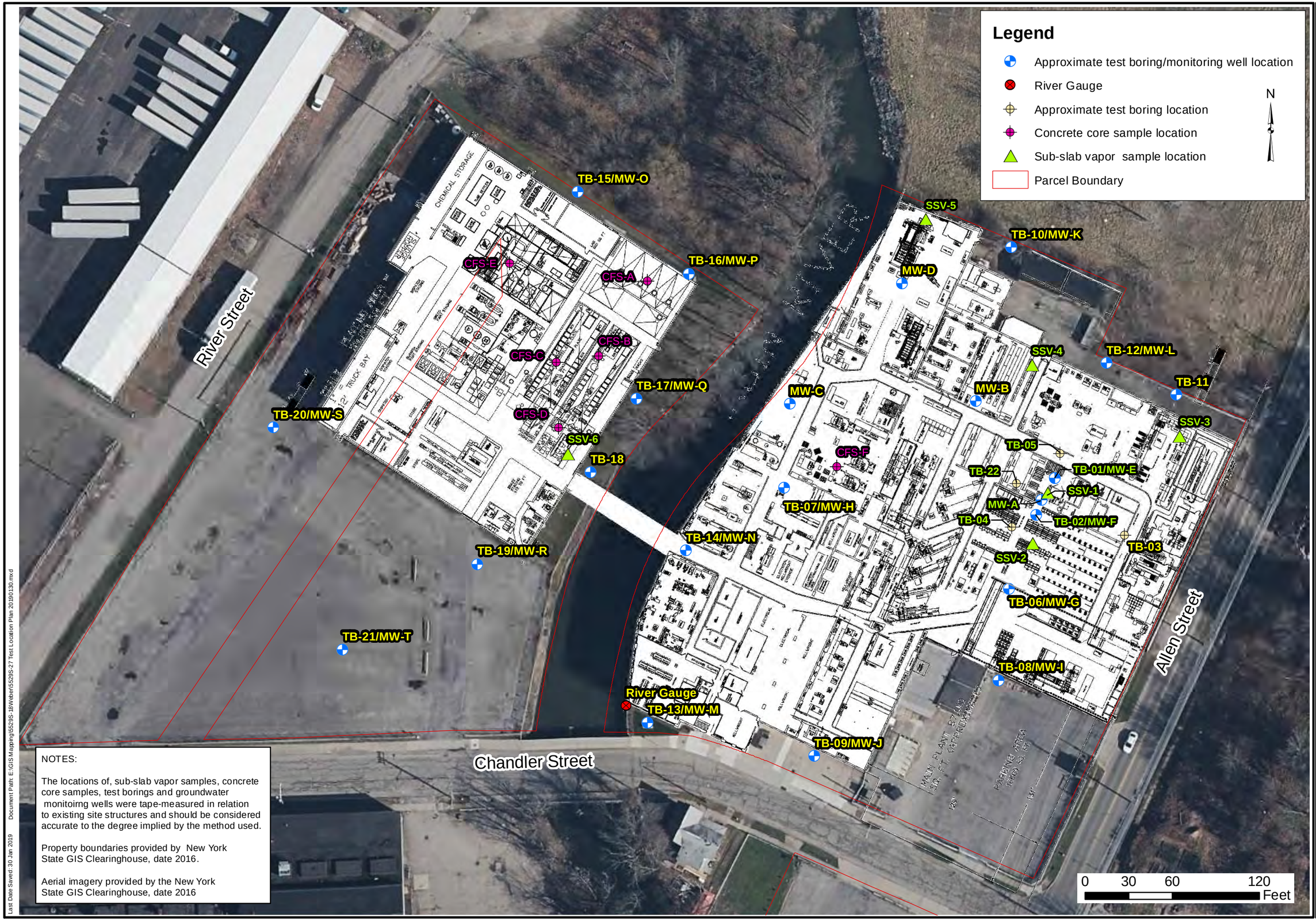
Site Coordinates are in Decimal Degrees:

-79.225766 W 42.099352 N

Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-26 Locus_415 and 441 Chandler St 20190130.mxd

Last Date Saved: 30 Jan 2019

Date: 1-30-2019	day **DAY ENVIRONMENTAL, INC.** **Environmental Consultants** **Rochester, New York 14606** **New York, New York 10170**	Project Title: 415 AND 441 CHANDLER STREET JAMESTOWN, NEW YORK SUBSURFACE EVALUATION	Project No.: 5529S-19
Drawn By: CAH		Drawing Title: Project Locus Map	FIGURE 1
Scale: AS NOTED			



NOTES:

The locations of, sub-slab vapor samples, concrete core samples, test borings and groundwater monitoirng wells were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundaries provided by New York State GIS Clearinghouse, date 2016.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Last Date Saved: 30 Jan 2019 Document Path: E:\GIS Mapping\5529S- 18\Weber\5529S-27 Test Location Plan 20190130.mxd

DESIGNED BY	DATE
CAH	01-2019
DRAWN BY	DATE DRAWN
CAH	01-2019
SCALE	DATE ISSUED
AS NOTED	01-30-2019

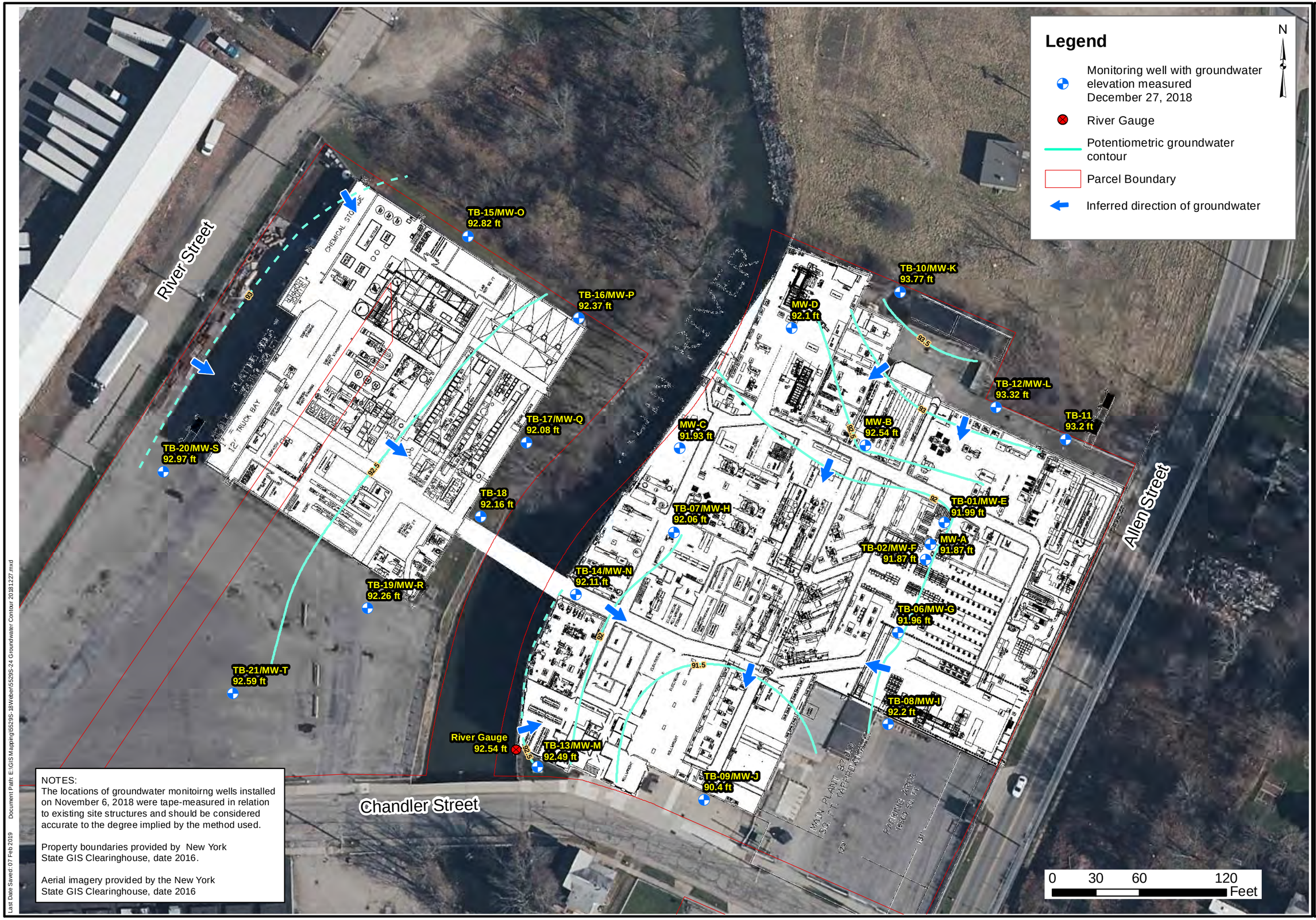
day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUBSURFACE EVALUATION

Drawing Title
Site Plan with Test Locations

Project No.
5529S-18

FIGURE 2



NOTES:
The locations of groundwater monitoirng wells installed on November 6, 2018 were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundaries provided by New York State GIS Clearinghouse, date 2016.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Last Date Saved: 07 Feb 2019 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-24 Groundwater Contour 20181227.mxd

DESIGNED BY	DATE	DRAWN BY	DATE DRAWN	SCALE	DATE ISSUED
CAH	01-2019	CAH/CPS	01-2019	AS NOTED	02-07-2019

day
DAY ENVIRONMENTAL, INC.
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New York, New York 10170

Project Title
415, 441 AND 448 CHANDLER STREET
JAMESTOWN, NEW YORK

Drawing Title
Potentiometric Groundwater Contour Map Measured December 27, 2018

Project No.
5529S-18

FIGURE 3

Legend

Parcel Boundary

Sub-slab vapor sample collected September 5, 2018

Sample Designation

VOC with concentration in ug/m3 or ppb

SSV-4

Toluene - 140 ug/m3
Xylenes (Total) - ND (4.7ug/m3)

Notes:
ug/m3 - micrograms per cubic meter or parts per billion (ppb)
ND - not detected at a concentration greater than indicated in parenthesis
Total Xylenes - sum of the concentrations of o-xylene and m,p-xylene

SSV-5

Trichloroethene - 44,000 ug/m3
cis-1,2-Dichloroethene - 5,600 ug/m3
Vinyl Chloride - ND (300 ug/m3)

Benzene - ND (44 ug/m3)
Toluene - ND (37 ug/m3)
Ethylbenzene - ND (43 ug/m3)
Xylenes (Total) - ND (79 ug/m3)

SSV-4

Trichloroethene - 13,000 ug/m3
cis-1,2-Dichloroethene - 22 ug/m3
Vinyl Chloride - ND (18 ug/m3)

Benzene - ND (2.6 ug/m3)
Toluene - 140 ug/m3
Ethylbenzene - ND (2.5 ug/m3)
Xylenes (Total) - ND (4.7 ug/m3)

SSV-3

Trichloroethene - 33 ug/m3
cis-1,2-Dichloroethene - ND (0.14 ug/m3)
Vinyl Chloride - ND (0.95 ug/m3)

Benzene - ND (0.14 ug/m3)
Toluene - 84 ug/m3
Ethylbenzene - 3.9 ug/m3
Xylenes (Total) - 22.8 ug/m3

SSV-1

Trichloroethene - 110,000 ug/m3
cis-1,2-Dichloroethene - 3,600 ug/m3
Vinyl Chloride - ND (600 ug/m3)

Benzene - ND (87 ug/m3)
Toluene - ND (74 ug/m3)
Ethylbenzene - ND (85 ug/m3)
Xylenes (Total) - ND (160 ug/m3)

SSV-2

Trichloroethene - 5,800 ug/m3
cis-1,2-Dichloroethene - ND (1.3 ug/m3)
Vinyl Chloride - ND (8.9 ug/m3)

Benzene - 13 ug/m3
Toluene - 130 ug/m3
Ethylbenzene - ND (1.3 ug/m3)
Xylenes (Total) - 24 ug/m3

SSV-6

Trichloroethene - 320 ug/m3
cis-1,2-Dichloroethene - 2.0 ug/m3
Vinyl Chloride - ND (0.92 ug/m3)

Benzene - 10 ug/m3
Toluene - 120 ug/m3
Ethylbenzene - 7.7 ug/m3
Xylenes (Total) - 46 ug/m3

NOTES:
The locations of samples collected September 5, 2018 were tape-measured in relation to existing site structures and should be considered accurate to the degree implied by the method used.

Property boundaries provided by New York State GIS Clearinghouse, date 2016.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Chandler Street

Allen Street

MAIN PLANT 87,000 SQ. FT. (APPROXIMATELY)

PARKING AREA 16800 SQ FT

129'

131'

N

0 40 80 160 Feet

Last Date Saved: 30 Jan 2019 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-28 Sub-Slab Vapor Results (report).mxd

DESIGNED BY	CAH
DATE	09-2018
DRAWN BY	CAH
DATE DRAWN	09-2018
SCALE	AS NOTED
DATE ISSUED	01-30-2019

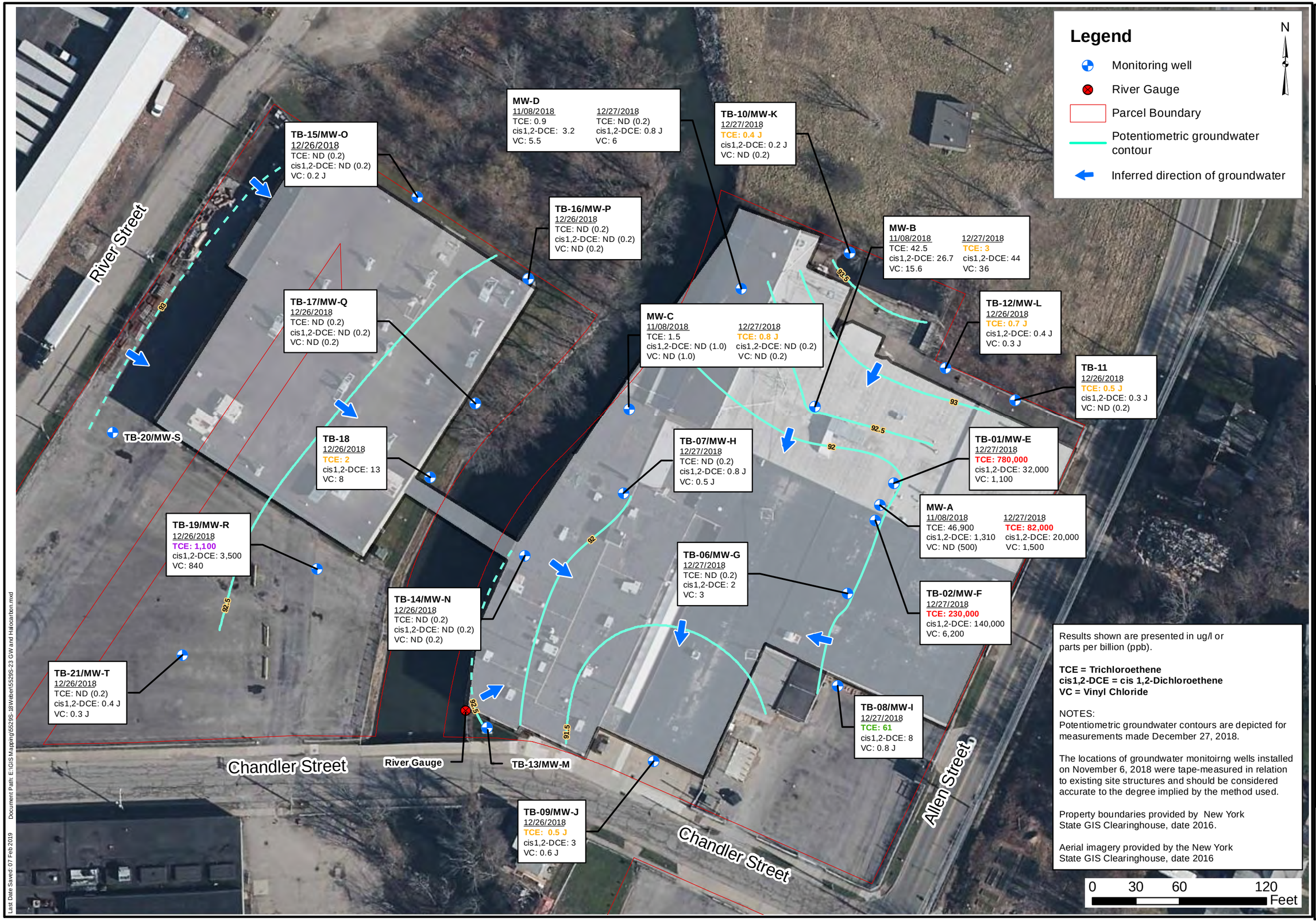
day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUBSURFACE EVALUATION

Drawing Title
Select Volatile Organic Compounds Measured in Sub-Slab Vapor Samples Collected September 5, 2018

Project No.
5529S-18

FIGURE 4



Last Date Saved: 07 Feb 2019 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-23 GW and Halocarbon.mxd

DESIGNED BY	DRAWN BY	SCALE	DATE
CAH	CPS	AS NOTED	01-2019

DATE DRAWN	DATE ISSUED
01-2019	02-07-2019

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUBSURFACE EVALUATION

Drawing Title
Select Halocarbon Concentrations Measured in Groundwater Samples
Collected November 8, 2018 and December 26 & 27, 2018

Project No.
5529S-18

FIGURE 5

TABLES

TABLE 1
415 and 441 CHANDLER STREET
JAMESTOWN, NEW YORK
RATIONALE FOR ENVIRONMENTAL EVALUATION TEST LOCATONS

Test ID	Date Installed	Primary Rationale for Completion
SSV-1	9/5/2018	Screen for TCE impacts to soil vapor in the vicinity of the former vapor degreaser
SSV-2	9/5/2018	
SSV-3	9/5/2018	Screen for TCE impacts to soil vapor in proximity to NYSDEC Superfund Site (SSF) # 907019 and petroleum impacts in area of closed-in-place USTs.
SSV-4	9/5/2018	
SSV-5	9/5/2018	Screen for TCE impacts to soil vapor in proximity to NYSDEC Superfund Site (SSF) # 907019
SSV-6	9/5/2018	Screen for TCE impacts to soil vapor in proximity to the location where TCE was detected in a groundwater sample collected east of the Plating Building during the 1989 Phase I ESA
CFS-A	9/5/2018	Evaluate the integrity of the concrete floor slab and the potential for migration of metals and cyanide in the former chrome plating line and black chromate treated zinc line plating operations area
CFS-B	9/5/2018	Evaluate the integrity of the concrete floor slab and the potential for migration of metals and cyanide in the current plating operations area
CFS-C	9/5/2018	
CFS-D	9/5/2018	
CFS-E	9/5/2018	Evaluate the integrity of the concrete floor slab and the potential for migration of metals and cyanide from the wastewater treatment operations area
CFS-F	9/5/2018	Evaluate the integrity of the concrete floor slab and the potential for migration of metals and cyanide in the area of historic plating operations
MW-A	11/6/2018	Evaluate TCE concentrations identified in Soil Vapor Sample SSV-1; (re-sampled in 2018-12 to confirm TCE concentrations)
MW-B	11/6/2018	Evaluation of TCE impact; (re-sampled in 2018-12 to confirm TCE concentrations)
MW-C	11/6/2018	Evaluation of TCE impact; (re-sampled in 2018-12 and/or 2019-01 to assess groundwater in the vicinity of historic foundry operations and former plating operations and confirm TCE concentrations)
MW-D	11/6/2018	
TB-01/MW-E	12/19/2018	Assess the vertical extent of TCE impact in the area of former vapor degreaser
TB-02/MW-F	12/19/2018	
TB-03	12/20/2018	Delineate extent of TCE impact in the area of former vapor degreaser
TB-04	12/20/2018	
TB-05	12/19/2018	
TB-06/MW-G	12/19/2018	
TB-07/MW-H	12/18/2018	
TB-08/MW-I	12/18/2018	
TB-09/MW-J	12/18/2018	
TB-10/MW-K	12/18/2018	Assess subsurface soil/groundwater at the closest position on the Weber Knapp Co. property to the DC Rollforms remedial well field (NYSDEC SSF Site # 907019)
TB-11	12/18/2018	Assess subsurface conditions in the vicinity of closed-in-place USTs and to assess possible impacts from the DC Rollforms Site (NYSDEC SSF Site # 907019)
TB-12/MW-L	12/18/2018	
TB-13/MW-M	12/17/2018	Evaluate groundwater flow in proximity to Chadakoin River
TB-14/MW-N	12/18/2018	
TB-15/MW-O	12/17/2018	Assess subsurface soil/groundwater in the vicinity of wastewater treatment plant
TB-16/MW-P	12/17/2018	Assess subsurface soil/groundwater in the vicinity of current plating lines and wastewater treatment plant, and in proximity of the former black chromate treated zinc line area
TB-17/MW-Q	12/17/2018	Assess subsurface soil/groundwater in the vicinity of current plating lines
TB-18	12/17/2018	Assess subsurface soil/groundwater in the vicinity of sub-slab soil vapor point SSV-6
TB-19/MW-R	12/17/2018	Assess subsurface soil/groundwater in the vicinity of Plating Building, and in the vicinity of the former Erie Railroad spur
TB-20/MW-S	12/17/2018	Assess subsurface soil/groundwater in the vicinity of Plating Building
TB-21/MW-T	12/17/2018	Assess subsurface soil/groundwater in the area of the former Norquist Products Inc. Building (1949 Sanborn map)
TB-22	12/20/2018	Delineate extent of TCE impact in the area of former vapor degreaser

TABLE 2
415 and 441 CHANDLER STREET
JAMESTOWN, NEW YORK
ENVIRONMENTAL EVALUATION ANALYTICAL LABORATORY TESTING PROGRAM

Sample Designation	Matrix	Date	Test Parameters
SSV-1	Soil Vapor	9/5/2018	TO-15 VOCs
SSV-2	Soil Vapor	9/5/2018	TO-15 VOCs
SSV-3	Soil Vapor	9/5/2018	TO-15 VOCs
SSV-4	Soil Vapor	9/5/2018	TO-15 VOCs
SSV-5	Soil Vapor	9/5/2018	TO-15 VOCs
SSV-6	Soil Vapor	9/5/2018	TO-15 VOCs
CFS-A (0-2'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-A (2-6'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-B (0-1.75'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-B (5.5-9'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-C (0-2'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-C (7.5-10'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-D (0-2'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-D (4-5.5'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-E (0-2'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-E (2-3.5'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-F (0-2'')	Concrete	9/5/2018	RCRA Metals, Cyanide
CFS-F (2-4.5'')	Concrete	9/5/2018	RCRA Metals, Cyanide
MW-A (4')	Soil	11/6/2018	Halocarbons
MW-A (8')	Soil	11/6/2018	Halocarbons
MW-A (11')	Soil	11/6/2018	Halocarbons
MW-A (13')	Soil	11/6/2018	Halocarbons
MW-B (9.5')	Soil	11/6/2018	Halocarbons
MW-B (11')	Soil	11/6/2018	Halocarbons
MW-D (9')	Soil	11/6/2018	Halocarbons
TB-01 (11')	Soil	12/19/2018	Halocarbons
TB-01 (12.5')	Soil	12/19/2018	Halocarbons
TB-02 (11.5')	Soil	12/19/2018	Halocarbons
TB-03 (9')	Soil	12/20/2018	Halocarbons
TB-04 (11.5')	Soil	12/20/2018	Halocarbons
TB-04 (12.9')	Soil	12/20/2018	Halocarbons
TB-05 (12.5')	Soil	12/19/2018	Halocarbons
TB-10 (4')	Soil	12/18/2018	TCL VOCs
TB-10 (4'-5')	Soil	12/18/2018	PCBs
TB-19 (7'-8')	Soil	12/17/2018	PCBs, TCL SVOCs
TB-21 (5'-6')	Soil	12/17/2018	PCBs, TCL SVOCs
TB-22 (13')	Soil	12/20/2018	Halocarbons

Sample Designation	Matrix	Date	Test Parameters
MW-A Sediment	Sediment	11/8/2018	Halocarbons
MW-A LNAPL	LNAPL	11/8/2018	Halocarbons
MW-A	Groundwater	11/8/2018	Halocarbons
MW-A	Groundwater	12/27/2018	Halocarbons
MW-B	Groundwater	11/8/2018	Halocarbons
MW-B	Groundwater	12/27/2018	Halocarbons
MW-C	Groundwater	11/8/2018	Halocarbons
MW-C	Groundwater	12/27/2018	TCL VOCs, TCL SVOCs, PCBs, RCRA Metals, Cyanide
MW-C	Groundwater	1/2/2019	PFAs, 1,4-Dioxane
MW-D	Groundwater	11/8/2018	Halocarbons
MW-D	Groundwater	12/27/2018	TCL VOCs, TCL SVOCs, PCBs, RCRA Metals, Cyanide
MW-E (TB-01)	Groundwater	12/27/2018	Halocarbons
MW-F (TB-02)	Groundwater	12/27/2018	Halocarbons
MW-G (TB-06)	Groundwater	12/27/2018	Halocarbons
MW-H (TB-07)	Groundwater	12/27/2018	Halocarbons, RCRA Metals
MW-H (TB-07)	Groundwater	1/2/2019	PFAs, 1,4-Dioxane
MW-I (TB-08)	Groundwater	12/27/2018	Halocarbons
MW-J (TB-09)	Groundwater	12/26/2018	Halocarbons
MW-K (TB-10)	Groundwater	12/27/2018	TCL VOCs, TCL SVOCs,RCRA Metals
TB-11	Groundwater	12/26/2018	TCL VOCs, CP-51 SVOCs
MW-L (TB-12)	Groundwater	12/26/2018	TCL VOCs, CP-51 SVOCs
MW-N (TB-14)	Groundwater	12/26/2018	TCL VOCs, CP-51 SVOCs
MW-O (TB-15)	Groundwater	12/26/2018	TCL VOCs, RCRA Metals, Cyanide
MW-P (TB-16)	Groundwater	12/26/2018	TCL VOCs, RCRA Metals, Cyanide
MW-P (TB-16)	Groundwater	1/2/2019	PFAs, 1,4-Dioxane
MW-Q (TB-17)	Groundwater	12/26/2018	TCL VOCs, RCRA Metals, Cyanide
MW-Q (TB-17)	Groundwater	1/2/2019	PFAs, 1,4-Dioxane
TB-18	Groundwater	12/26/2018	TCL VOCs
MW-R (TB-19)	Groundwater	12/26/2018	TCL VOCs, RCRA Metals, Cyanide
MW-R (TB-19)	Groundwater	1/2/2019	PFAs, 1,4-Dioxane
MW-S (TB-20)	Groundwater	12/26/2018	RCRA Metals, Cyanide
MW-T (TB-21)	Groundwater	12/26/2018	TCL VOCs, RCRA Metals, Cyanide

NOTES

TO-15 VOCs = Volatile Organic Compounds by USEPA Method Toxic Organics (TO)-15

Halocarbons = Haloganated Volatile Organic Compounds by USEPA Method 8260

PCBs = Polychlorinated biphenyls by United States Environmental Protection Agency (USEPA) Method 8082A

TCL VOCs = NYSCEC Target Compound List and Commissioner Policy List Volatile Organic Compounds by USEPA Method 8260

TCL SVOCs = NYSCEC Target Compound List and Commissioner Policy List Semi-Volatile Organic Compounds by USEPA Method 8270

CP-51 List SVOCs = NYSDEC Commissioner Policy List Semi-Volatile Organic Compounds by USEPA Method 8270C

RCRA Metals = USEPA Resource Conservation and Recovery Act Metals by various USEPA Methods

Cyanide = Total Cyanide by USEPA Method 9012B

PFAs = per- and polyfluoroalkyl substances by USEPA Method 537

TABLE 3
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) - SOIL VAPOR SAMPLES

Detected Constituent	Sample Designation and Date					
	SSV-1 9/5/2018	SSV-2 9/5/2018	SSV-3 9/5/2018	SSV-4 9/5/2018	SSV-5 9/5/2018	SSV-6 9/5/2018
Propene	ND	14.0	3.1	ND	ND	2.9
Dichlorodifluoromethane (CFC 12)	ND	ND	2.3	ND	ND	5.2
Acetonitrile	ND	ND	2.2	ND	ND	ND
Acetone	ND	110	27.0	ND	ND	26.0
Trichlorofluoromethane	ND	ND	1.7	ND	ND	1.4
Carbon Disulfide	ND	ND	ND	ND	ND	8.0
Vinyl Acetate	ND	ND	11.0	ND	ND	ND
2-Butanone (MEK)	ND	46.0	32.0	ND	ND	33.0
cis-1,2-Dichloroethene	3,600	ND	ND	22.0	5,600	2.0
n-Hexane	ND	41.0	ND	ND	1,900	32.0
Benzene	ND	13.0	ND	ND	ND	10.0
Chloroform	620	ND	8.4	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	ND	11.0
Trichloroethene	110,000	5,800	33.0	13,000	44,000	320
n-Heptane	ND	56.0	ND	ND	960.0	21.0
4-Methyl-2-pentanone (MIBK)	ND	9.2	20.0	ND	ND	1.2
1,1,1-Trichloroethane	ND	ND	2.5	19.0	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1.1
Toluene	ND	130.0	84.0	140	ND	120.0
2-Hexanone (MBK)	ND	10.0	1.5	ND	ND	ND
n-Octane	ND	54.0	ND	ND	320	16.0
Tetrachloroethene	800	15.0	35.0	42.0	ND	6.2
Ethylbenzene	ND	ND	3.9	ND	ND	7.7
m,p-Xylenes	ND	24.0	17.0	ND	ND	35.0
Styrene	ND	ND	2.3	ND	ND	3.2
o-Xylene	ND	ND	5.8	ND	ND	11.0
n-Nonane	ND	34.0	ND	ND	ND	11.0
alpha-Pinene	ND	ND	1.7	ND	ND	2.3
n-Propylbenzene	ND	ND	1.3	ND	ND	1.9
4-Ethyltoluene	ND	ND	1.9	ND	ND	2.7
1,3,5-Trimethylbenzene	ND	ND	1.8	ND	ND	3.1
1,2,4-Trimethylbenzene	ND	ND	6.5	ND	ND	8.4
d-Limonene	ND	ND	2.1	ND	ND	2.2
Naphthalene	ND	ND	2.0	ND	ND	1.5

NOTES

Volatile organic compound (VOC) concentrations are presented in micrograms per cubic meter ($\mu g/m^3$).

No NYSDOH criteria is available for soil vapor samples

ND = Not detected at concentration above analytical laboratory reporting limit. Refer to the analytical laboratory report for the associated reporting limit.

TABLE 4
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUMMARY OF RCRA METALS AND TOTAL CYANIDE TEST RESULTS - CONCRETE SAMPLES

Analyte	Sample Designation and Date											
	CFS-A (0-2'')	CFS-A (2-6'')	CFS-B (0-1.75'')	CFS-B (5.5-9'')	CFS-C (0-2'')	CFS-C (7.5-10'')	CFS-D (0-2'')	CFS-D (4-5.5'')	CFS-E (0-2'')	CFS-E (2-3.5'')	CFS-F (0-2'')	CFS-F (2-4.5'')
	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018
Arsenic	5.82	6.64	3.78	3.93	5.48	4.01	4.67	4.46	5.68	5.50	7.64	6.7
Barium	43.2	37.0	36.6	39.9	44.6	39.4	68.2	43.1	860	46.6	51.1	35.5
Cadmium	0.656	0.909	0.514 J	0.522	0.603	0.478 J	0.557	0.552	0.579	0.668	0.641	0.755
Chromium	79.1	25.6	10.3	11.7	12.2	10.2	10.5	11.4	23.3	13.4	14.4	15.1
Lead	8.74	6.53	6.26	6.39	7.42	5.75	4.87	5.61	72.5	5.36	6.57	6.57
Mercury	0.0098 J	ND (0.0086)	ND (0.0083)	ND (0.0087)	ND (0.0086)	ND (0.0078)	ND (0.0082)	ND (0.0076)	ND (0.0089)	ND (0.0086)	ND (0.0085)	ND (0.0085)
Selenium	ND (0.281)	ND (0.290)	ND (0.299)	ND (0.292)	ND (0.275)	ND (0.293)	ND (0.290)	ND (0.278)	ND (0.305)	ND (0.282)	ND (0.288)	ND (0.291)
Silver	1.7	ND (0.164)	ND (0.169)	ND (0.165)	ND (0.156)	ND (0.166)	ND (0.164)	ND (0.157)	ND (0.173)	ND (0.160)	ND (0.163)	ND (0.165)
Total cyanide	1.49	ND (0.278)	0.445	14.9	ND (0.224)	ND (0.297)	0.351	1.79	ND (0.30)	ND (0.316)	ND (0.223)	ND (0.272)

NOTES

Results are in micrograms per liter (mg/kg) or parts per million (ppm)

J = Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration.

ND = Not Detected at a concentration greater than the detection limit shown in parenthesis

TABLE 5
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) - SOIL SAMPLES

Compound	Unrestricted Use SCO[1]	Restricted Industrial Use SCO[2]	Sample Designation and Date							
			MW-A (4')	MW-A (8')	MW-A (11')	MW-A (13')	MW-B (9.5')	MW-B (11')	MW-D (9')	TB-01 (11')
			11/8/2018	11/8/2018	11/8/2018	11/8/2018	11/8/2018	11/8/2018	11/8/2018	12/19/2018
1,1-Dichloroethene*	0.33	1,000	ND (0.0048)	ND (0.0562)	0.121 J	ND (0.205)	ND (0.0101)	ND (0.0042)	ND (0.0405)	ND (46)
trans-1,2-Dichloroethene*	0.19	1,000	ND (0.0048)	ND (0.0562)	ND (0.185)	ND (0.205)	ND (0.0101)	ND (0.0042)	ND (0.0405)	ND (46)
cis-1,2-Dichloroethene*	0.25	1,000	0.0074	ND (0.0562)	**12**	**12.6**	ND (0.0101)	0.0018 J	ND (0.0405)	**34.0 J**
Tetrachloroethene*	1.3	300	ND (0.0048)	ND (0.0562)	ND (0.185)	ND (0.205)	ND (0.0101)	ND (0.0042)	ND (0.0405)	ND (46)
Trichloroethene (TCE)*	0.47	400	**24.5**	0.0382 J	**32.4**	**198**	0.0104	0.0048	0.108	**4,400**
Vinyl chloride*	0.02	27	ND (0.0048)	ND (0.0562)	**0.48**	**0.193 J**	ND (0.0101)	0.004 J	ND (0.0405)	ND (46)
n-Butylbenzene	12	1,000	NT	NT	NT	NT	NT	NT	NT	NT
sec-Butylbenzene	11	1,000	NT	NT	NT	NT	NT	NT	NT	NT

Compound	Unrestricted Use SCO[1]	Restricted Industrial Use SCO[2]	Sample Designation and Date							
			TB-01 (12.5')	TB-02 (11.5')	TB-03 (9')	TB-04 (11.5')	TB-04 (12.9')	TB-05 (12.5')	TB-10 (4')	TB-22 (13')
			12/19/2018	12/19/2018	12/20/2018	12/20/2018	12/20/2018	12/19/2018	12/18/2018	12/20/2018
1,1-Dichloroethene*	0.33	1,000	ND (0.160)	0.11 J	ND (0.0025)	0.070 J	ND (0.210)	ND (0.20)	ND (0.290)	0.0019 J
trans-1,2-Dichloroethene*	0.19	1,000	ND (0.160)	0.049 J	ND (0.0025)	0.050 J	ND (0.210)	0.022 J	ND (0.290)	0.0013 J
cis-1,2-Dichloroethene*	0.25	1,000	**0.26 J**	**17**	0.00037 J	**22**	**3.6**	**2.9**	ND (0.290)	**2.9**
Tetrachloroethene*	1.3	300	ND (0.160)	ND (0.240)	ND (0.0025)	ND (0.190)	ND (0.210)	0.067 J	ND (0.290)	ND (0.0024)
Trichloroethene (TCE)*	0.47	400	**10**	**81**	0.00087 J	**29**	**1.5**	**100**	ND (0.290)	**1.4**
Vinyl chloride*	0.02	27	ND (0.160)	**1.5**	ND (0.0025)	**1.70**	**0.42**	**0.021 J**	ND (0.290)	**0.025 J**
n-Butylbenzene	12	1,000	NT	NT	NT	NT	NT	NT	0.25	NT
sec-Butylbenzene	11	1,000	NT	NT	NT	NT	NT	NT	0.16	NT

NOTES

Results and SCOs are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).

(1) = Soil Cleanup Objective (SCO) for Unrestricted Use as referenced in 6 NYCRR Part 375 dated 12/14/06.

(2) = Soil Cleanup Objective (SCO) for Restricted Industrial Use as referenced in 6 NYCRR Part 375 dated 12/14/06.

NT = Not Tested

ND = Not Detected at a concentration greater than the reporting limit shown in parenthesis

Asterix (*) indicates compound is a halocarbon

J = Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration.

Highlighted value exceeds the Unrestricted Use SCO

Highlighted value exceeds the Restricted Industrial Use SCO

TABLE 6
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) - SOIL SAMPLES

Compound	Unrestricted Use SCO[(1)]	Restricted Industrial Use SCO[(2)]	Sample Designation and Date	
			TB-19 (7'-8')	TB-21 (5'-6')
			12/17/2018	12/17/2018
Benz(a)anthracene	1	11	ND (0.270)	0.360
Chrysene	1	110	ND (0.270)	0.540
Pyrene	100	1,000	ND (0.270)	0.20 J

NOTES

Results and SCOs are presented in milligrams per kilogram (mg/kg) or parts per million (ppm).

(1) = Soil Cleanup Objective (SCO) for Unrestricted Use as referenced in 6 NYCRR Part 375 dated 12/14/06.

(2) = Soil Cleanup Objective (SCO) for Restricted Industrial Use as referenced in 6 NYCRR Part 375 dated 12/14/06.

J = Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration.

ND = Not Detected at a concentration greater than the reporting limit shown in parenthesis

Highlighted value exceeds the Unrestricted Use SCO

Highlighted value exceeds the Restricted Industrial Use SCO

TABLE 7
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) - MONITORING WELL SAMPLES

Compound	NYSDEC Standard (1)	Sample Designation and Date												
		MW-A				MW-B		MW-C		MW-D		MW-E	MW-F	MW-G
		11/8/2018			12/27/2018	11/8/2018	12/27/2018	11/8/2018	12/27/2018	11/8/2018	12/27/2018	12/27/2018	12/27/2018	12/27/2018
		groundwater	*sediment*	*LNAPL*										
Acetone	50	NT	NT	NT	NT	NT	NT	NT	ND (0.7)	NT	ND (0.7)	NT	NT	NT
Benzene	1	NT	NT	NT	NT	NT	NT	NT	ND (0.2)	NT	0.7 J	NT	NT	NT
Bromomethane*	5	ND (223)	ND (376)	ND (4,250)	ND (30)	ND (0.4)	ND (0.3)	ND (0.4)	ND (0.3)	ND (0.4)	ND (0.2)	ND (300)	ND (150)	ND (0.3)
n-Butylbenzene	5	NT	NT	NT	NT	NT	NT	NT	ND (0.2)	NT	0.9 J	NT	NT	NT
sec-Butylbenzene	5	NT	NT	NT	NT	NT	NT	NT	ND (0.2)	NT	2 J	NT	NT	NT
Chloroethane*	5	ND (202)	ND (231)	ND (2,610)	ND (20)	ND (0.4)	ND (0.2)	ND (0.4)	ND (0.2)	ND (0.4)	ND (0.2)	340 J	**150 J**	ND (0.2)
Cyclohexane	-	NT	NT	NT	NT	NT	NT	NT	ND (0.2)	NT	3 J	NT	NT	NT
1,1-Dichloroethane*	5	ND (90.5)	ND (109)	ND (1,230)	ND (20)	0.8 J	0.7 J	ND (0.3)	ND (0.2)	ND (0.3)	ND (0.2)	ND (200)	ND (100)	ND (0.2)
1,1-Dichloroethene*	5	ND (157)	**1,740**	ND (2,640)	**230**	0.6 J	0.3 J	ND (0.3)	ND (0.2)	ND (0.3)	0.2	ND (200)	**500 J**	ND (0.2)
cis-1,2-Dichloroethene*	5	**1,310**	**163,000**	**17,800**	**20,000**	**26.7**	**44**	ND (0.4)	ND (0.2)	3.2	0.8 J	32,000	**140,000**	2
trans-1,2-Dichloroethene*	5	ND (190)	587	ND (2,500)	52 J	0.6 J	0.3 J	ND (0.4)	ND (0.2)	ND (0.4)	0.3 J	ND (200)	**240 J**	ND (0.2)
Isopropylbenzene	5	NT	NT	NT	NT	NT	NT	NT	ND (0.2)	NT	1 J	NT	NT	NT
Methylcyclohexane	-	NT	NT	NT	NT	NT	NT	NT	ND (0.2)	NT	4 J	NT	NT	NT
n-Propylbenzene	5	NT	NT	NT	NT	NT	NT	NT	ND (0.2)	NT	0.3 J	NT	NT	NT
Tetrachloroethene*	5	ND (156)	1,090	ND (1,610)	ND (20)	ND (0.3)	0.2	ND (0.3)	ND (0.2)	ND (0.3)	ND (0.2)	ND (200)	ND (100)	ND (0.2)
1,1,2-Trichloroethane*	1	ND (154)	ND (302)	ND (3,410)	ND (20)	ND (0.3)	ND (0.2)	ND (0.3)	ND (0.2)	ND (0.3)	ND (0.2)	ND (200)	ND (100)	ND (0.2)
Trichloroethene*	5	**46,900**	**10,300,000**	**1,170,000**	**82,000**	**42.5**	3	1.5	0.8 J	0.9 J	0.2	**780,000**	**230,000**	ND (0.2)
Vinyl Chloride*	5	ND (201)	**2,320**	ND (1,590)	**1,500**	**15.6**	**36**	ND (0.4)	ND (0.2)	**5.5**	**6**	**1,100**	**6,200**	3
Total TICs	-	NT	NT	NT	NT	NT	NT	NT	ND	NT	160 J	NT	NT	NT

NOTES

Results and groundwater standards are in micrograms per liter (µg/l) or parts per billion (ppb)

(1) = Groundwater standard or guidance value as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended in January 1999, April 2000,and June 2004.

Asterix (*) indicates compound is a halocarbon

J = Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration.

NT = Not Tested

ND = Not Detected at a concentration greater than the detection limit shown in parenthesis

Highlighted value exceeds the groundwater standard

TABLE 7
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) - MONITORING WELL SAMPLES

Compound	NYSDEC Standard (1)	Sample Designation and Date												
		MW-H	MW-I	MW-J	MW-K	TB-11 (GW)	MW-L	MW-N	MW-O	MW-P	MW-Q	TB-18 (GW)	MW-R	MW-T
		12/27/2018	12/27/2018	12/26/2018	12/27/2018	12/26/2018	12/26/2018	12/26/2018	12/26/2018	12/26/2018	12/26/2018	12/26/2018	12/26/2018	12/26/2018
Acetone	50	NT	NT	NT	ND (0.7)	ND (0.7)	1 J	ND (0.7)	ND (0.7)	1 J	ND (0.7)	ND (0.7)	ND (4)	2 J
Benzene	1	NT	NT	NT	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (1)	ND (0.2)
Bromomethane*	5	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.2)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (2)	ND (0.3)
n-Butylbenzene	5	NT	NT	NT	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (1)	ND (0.2)
sec-Butylbenzene	5	NT	NT	NT	0.2 J	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (1)	ND (0.2)
Chloroethane*	5	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (1)	ND (0.2)
Cyclohexane	-	NT	NT	NT	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (1)	ND (0.2)
1,1-Dichloroethane*	5	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	0.2 J	0.6 J	ND (1)	ND (0.2)
1,1-Dichloroethene*	5	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	**38**	ND (0.2)
cis-1,2-Dichloroethene*	5	0.8 J	**8**	3	0.2 J	0.3 J	0.4 J	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	**13**	**3,500**	0.4 J
trans-1,2-Dichloroethene*	5	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	0.4 J	**12**	ND (0.2)
Isopropylbenzene	5	NT	NT	NT	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (1)	ND (0.2)
Methylcyclohexane	-	NT	NT	NT	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	1 J	ND (0.2)
n-Propylbenzene	5	NT	NT	NT	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (1)	ND (0.2)
Tetrachloroethene*	5	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (1)	ND (0.2)
1,1,2-Trichloroethane*	1	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	**2 J**	ND (0.2)
Trichloroethene*	5	ND (0.2)	**61**	0.5 J	0.4 J	0.5 J	0.7 J	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	2	**1,100**	ND (0.2)
Vinyl Chloride*	5	0.5 J	0.8 J	0.6 J	ND (0.2)	ND (0.2)	0.3 J	ND (0.2)	0.2 J	ND (0.2)	ND (0.2)	**8**	**840**	0.3 J
Total TICs	-	NT	NT	NT	56 J	ND	ND	ND	ND	ND	ND	ND	ND	ND

NOTES

Results and groundwater standards are in micrograms per liter (µg/l) or parts per billion (ppb)

(1) = Groundwater standard or guidance value as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended in January 1999, April 2000,and June 2004.

Asterix (*) indicates compound is a halocarbon

J = Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration.

NT = Not Tested

ND = Not Detected at a concentration greater than the detection limit shown in parenthesis

Highlighted value exceeds the groundwater standard

TABLE 8
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUMMARY OF DETECTED SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCs) - GROUNDWATER SAMPLES

Compound	NYSDEC Standard or Guidance Value[(1)]	Sample Designation and Date					
		MW-C	MW-D	MW-K	TB-11 (GW)	MW-L	MW-N
		12/27/2018	12/27/2018	12/27/2018	12/26/2018	12/26/2018	12/26/2018
Acenaphthene	20	1.0	1.30	1.00	ND (0.48)	ND (0.47)	ND (0.49)
Anthracene	50	0.70	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.47)	ND (0.49)
Benz(a)anthracene	0.002	**0.28**	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Benzo(a)pyrene	ND	**0.18**	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Benzo(b)fluoranthene	0.002	**0.16**	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Benzo(k)fluoranthene	0.002	**0.16**	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Chrysene	0.002	**0.30**	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Diethyl phthalate	50	ND (1.5)	ND (1.5)	2.2 J	NT	NT	NT
Fluoranthene	50	1.4	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.47)	ND (0.49)
Fluorene	50	1.9	0.76	0.82	ND (0.48)	ND (0.47)	ND (0.49)
Indeno(1,2,3-cd)pyrene	0.002	**0.14**	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Phenanthrene	50	2.8	0.80	0.58	ND (0.48)	ND (0.47)	0.58
Pyrene	50	0.94	ND (0.48)	ND (0.48)	ND (0.48)	ND (0.47)	ND (0.49)

NOTES

Results and groundwater standards are in micrograms per liter (µg/l) or parts per billion (ppb)

(1) = Groundwater standard or guidance value as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended in January 1999, April 2000,and June 2004.

J = Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration.

NT = Not Tested

ND = Not Detected at a concentration greater than the detection limit shown in parenthesis

Highlighted value exceeds the groundwater standard or guidance value

TABLE 9
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUMMARY OF RCRA METALS AND TOTAL CYANIDE TEST RESULTS - GROUNDWATER SAMPLES

Analyte	NYSDEC Standard (1)	Sample Designation and Date									
		MW-C	MW-D	MW-H	MW-K	MW-O	MW-P	MW-Q	MW-R	MW-S	MW-T
		12/27/2018	12/27/2018	12/27/2018	12/27/2018	12/26/2018	12/26/2018	12/26/2018	12/26/2018	12/26/2018	12/26/2018
Arsenic	25	ND (16)	**134**	18.0 J	ND (16)	ND (16)	22.5 J	**72.1**	ND (16)	ND (16)	**37.1 J**
Barium	1,000	312	217	549	151	274	157	309	268	142	256
Cadmium	5	ND (1.0)	1.3 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Chromium	50	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)
Lead	25	7.4 J	ND (7.1)	ND (7.1)	ND (7.1)	ND (7.1)	ND (7.1)	ND (7.1)	ND (7.1)	ND (7.1)	9.2 J
Mercury	0.7	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Selenium	10	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)	ND (21)
Silver	50	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Total cyanide	200	ND (5.0)	ND (5.0)	NT	NT	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)

NOTES

Results and groundwater standards are in micrograms per liter (µg/l) or parts per billion (ppb)

(1) Groundwater standard or guidance value as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended in January 1999, April 2000 and June 2004.

J = Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration.

ND = Not Detected at a concentration greater than the detection limit shown in parenthesis

Highlighted value exceeds the groundwater standard

TABLE 10
415 AND 441 CHANDLER STREET
JAMESTOWN, NEW YORK
SUMMARY OF DETECTED PERFLUORINATED COMPOUNDS AND 1,4-DIOXANE: GROUNDWATER SAMPLES

Compound	Test Location and Sample Date						
	MW-C	MW-H	MW-P	MW-Q	MW-Q DUP	MW-R	Field Blank
	1/2/19	1/2/19	1/2/19	1/2/19	1/2/19	1/2/19	1/2/19
Perfluorooctanoic acid (PFOA)	8.0	2.7	2.0	0.64 J	0.60 J	5.4	ND (0.87)
Perfluorooctanesulfonic acid (PFOS)	130	23	300	11	9.7	2.6	ND (1.7)
Perfluoroheptanoic acid (PFHpA)	2.7	1.0	0.55 J	ND (0.95)	ND (0.95)	1.1	ND (0.87)
Perfluorononanoic acid (PFNA)	0.54 J	ND (1.9)	0.79 J	ND (1.9)	ND (1.9)	ND (1.7)	ND (1.7)
Perfluorohexanesulfonic acid (PFHxS)	21	1.6 J	4.5	1.5 J	1.2 J	0.44 J	ND (1.7)
Perfluoroheptanesulfonic acid (PFHpS)	5.7	0.55 J	1.6 J	ND (1.9)	0.44 J	ND (1.7)	ND (1.7)
Perfluorooctane Sulfonamide (FOSA)	0.68 J	ND (2.8)	ND (2.6)	ND (2.8)	ND (2.9)	ND (2.6)	ND (2.6)
Perfluorobutanoic acid (PFBA)	ND (5.2)	6.7	3.0 J	3.8 J	4.9 J	12	ND (5.2)
Perfluorohexanoic acid (PFHxA)	ND (1.7)	2.3	0.68 J	0.39 J	ND (1.9)	1.8	ND (1.7)
Perfluorobutanesulfonic acid (PFBS)	10	3.1	1.6	0.63 J	0.63 J	2.2	ND (0.87)
6:2 Fluorotelomersulfonate (6:2 FTS)	ND (1.7)	1.8 J	ND (1.7)	ND (1.9)	ND (1.9)	ND (1.7)	12
PFOA & PFOS	138	25.7	302	11.64	10.3	8	ND
PFAS (not incl. PFOA/PFOS)	39.4	13.1	6.1	6.32	7.17	17.1	12
Total PFAS (incl. PFOA/PFOS)	177.4	38.8	308.1	17.96	17.47	25.1	12

1,4-Dioxane	4	0.2 J	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)

Notes:

PFAS results are in nanograms per liter (ng/L) or parts per trillion (ppt)

1,4-Dioxane results are in micrograms per liter (µg/L) or parts per billion (ppb)

ND = Not Detected at a concentration greater than the reporting limit shown in parenthesis

J = Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration.

The NYSDEC does not have a groundwater standard or guidance values for perfluorooctanoic acid (PFOA) or prefluorooctanesulfonic acid (PFOS); however, in 2016 the United States Environmental Protection Agency (USEPA) issued a health advisory level of 70 nanograms per liter (ng/l) or parts per trillion (ppt) for the combined concentration of PFOA and PFOS in drinking water sources.

APPENDIX A
SANBORN FIRE INSURANCE MAP OVERLAYS

A. C. NORQUIST FURNITURE FRC.

142

143

69

Creek

Outlet

CHANDLER ST. EXTENSION

N

0 40 80 160 Feet

NOTES:

Property boundaries provided by New York State GIS Clearinghouse, date 2016.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Last Date Saved: 01 Feb 2019 Document Path: E:\GIS Mapping\5529S-18\Rebel\5529S-0 1891 Sanborn overlay.mxd

DESIGNED BY	DATE
CAH	09-2018
DRAWN BY	DATE DRAWN
CAH	09-2018
SCALE	DATE ISSUED
AS NOTED	09-04-2018

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
415, 441 AND 448 CHANDLER STREET
JAMESTOWN, NEW YORK
ENVIRONMENTAL SERVICES

Drawing Title
1891 Sanborn Fire Insurace Map Overlay

Project No.
5529S-18

Attachment A-1

NOTES:

Property boundaries provided by New York State GIS Clearinghouse, date 2016.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

0 40 80 160 Feet

DESIGNED BY	DATE
CAH	09-2018
DRAWN BY	DATE DRAWN
CAH	09-2018
SCALE	DATE ISSUED
AS NOTED	09-04-2018

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
415, 441 AND 448 CHANDLER STREET
JAMESTOWN, NEW YORK
ENVIRONMENTAL SERVICES

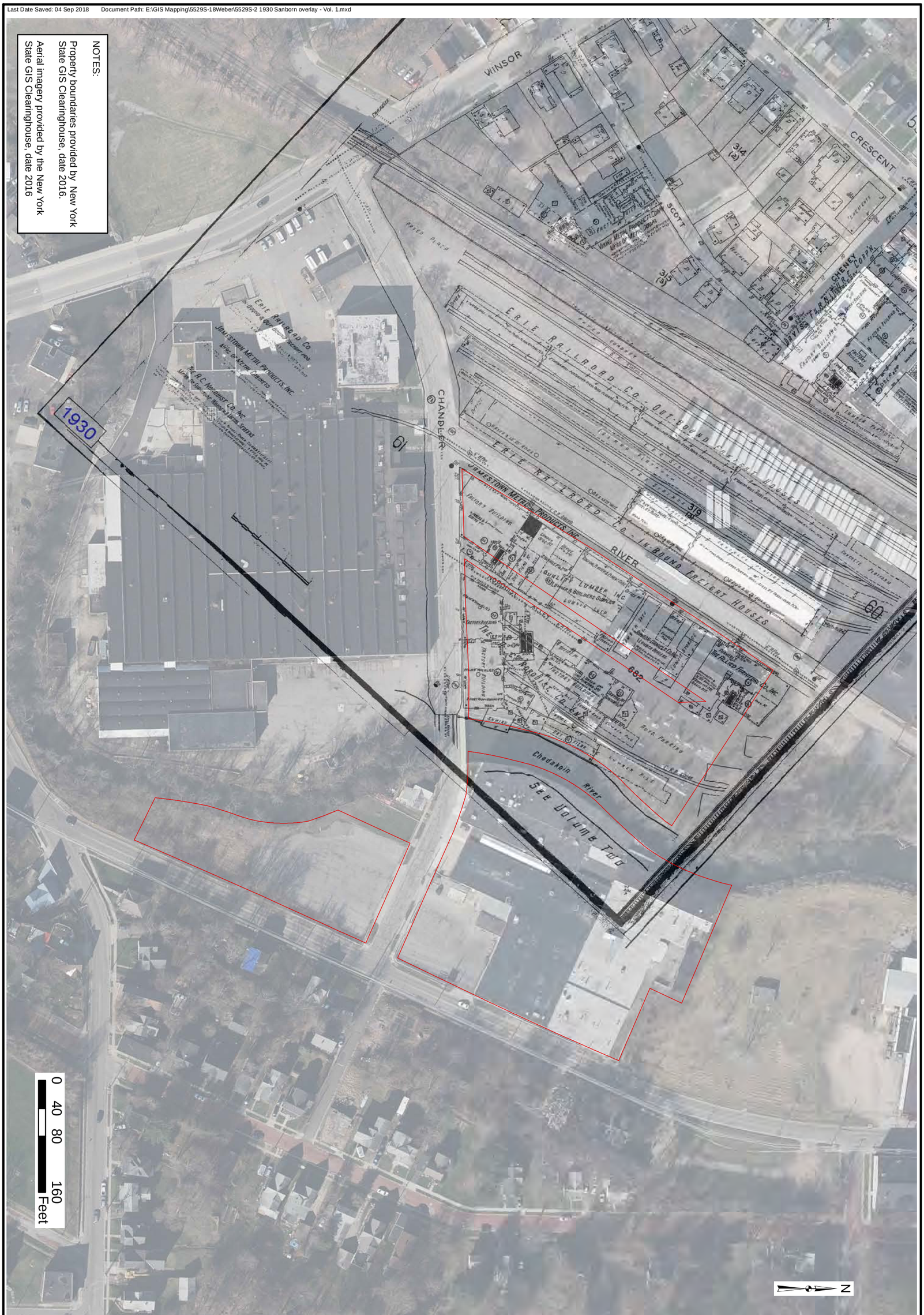
Drawing Title
1902 Sanborn Fire Insurace Map Overlay

Project No.
5529S-18

Attachment A-2

Last Date Saved: 04 Sep 2018 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-1 Sanborn overlay.mxd

Last Date Saved: 04 Sep 2018 Document Path: E:\GIS Mapping\5529S-18Weber\5529S-2 1930 Sanborn overlay - Vol. 1.mxd



Project No.
5529S-18

Attachment A-3

Project Title
415, 441 AND 448 CHANDLER STREET
JAMESTOWN, NEW YORK

ENVIRONMENTAL SERVICES

Drawing Title
1930 Sanborn Fire Insurace Map Overlay - Volume 1

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

DESIGNED BY	DATE
CAH	09-2018
DRAWN BY	DATE DRAWN
CAH	09-2018
SCALE	DATE ISSUED
AS NOTED	09-04-2018

Last Date Saved: 04 Sep 2018 Document Path: E:\GIS Mapping\5529S-18Weber\5529S-3 1930 Sanborn overlay - Vol. 2.mxd

NOTES:

Property boundaries provided by New York State GIS Clearinghouse, date 2016.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Project No.
5529S-18

Attachment A-4

Project Title
415, 441 AND 448 CHANDLER STREET
JAMESTOWN, NEW YORK

ENVIRONMENTAL SERVICES

Drawing Title
1930 Sanborn Fire Insurace Map Overlay - Volume 2

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

DESIGNED BY	DATE
CAH	09-2018
DRAWN BY	DATE DRAWN
CAH	09-2018
SCALE	DATE ISSUED
AS NOTED	09-04-2018

Last Date Saved: 04 Sep 2018 Document Path: E:\GIS Mapping\5529S-18Weber\5529S-4 1949 Sanborn overlay - Vol. 1.mxd

Attachment A-5

Project No. 5529S-18

Project Title
415, 441 AND 448 CHANDLER STREET
JAMESTOWN, NEW YORK

ENVIRONMENTAL SERVICES

Drawing Title
1949 Sanborn Fire Insurace Map Overlay - Volume 1

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

DESIGNED BY	DATE
CAH	09-2018
DRAWN BY	DATE DRAWN
CAH	09-2018
SCALE	DATE ISSUED
AS NOTED	09-04-2018

NOTES:

Property boundaries provided by New York State GIS Clearinghouse, date 2016.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

Last Date Saved: 04 Sep 2018 Document Path: E:\GIS Mapping\5529S-18Weber\5529S-4 1949 Sanborn overlay - Vol. 2.mxd

	DATE
DESIGNED BY	09-2018
CAH	
DRAWN BY	DATE DRAWN
CAH	09-2018
SCALE	DATE ISSUED
AS NOTED	09-04-2018

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
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Project Title
415, 441 AND 448 CHANDLER STREET
JAMESTOWN, NEW YORK
ENVIRONMENTAL SERVICES

Drawing Title
1949 Sanborn Fire Insurace Map Overlay - Volume 2

Project No.
5529S-18

Attachment A-6

Last Date Saved: 04 Sep 2018 Document Path: E:\GIS Mapping\5529S-18Weber\5529S-6 1980 Sanborn overlay - Vol. 1.mxd

Attachment A-7

Project No. 5529S-18

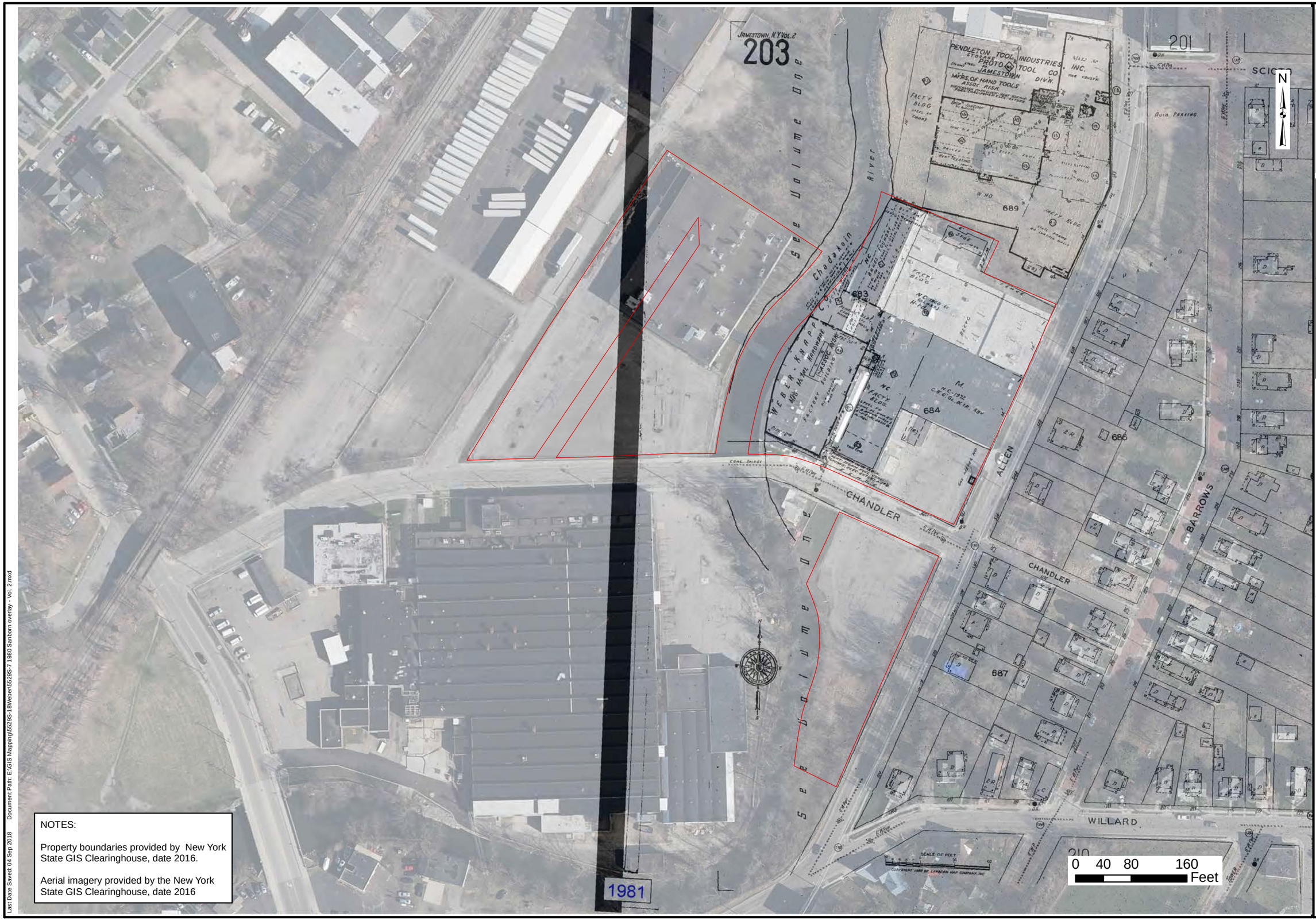
Project Title
415, 441 AND 448 CHANDLER STREET
JAMESTOWN, NEW YORK

ENVIRONMENTAL SERVICES

Drawing Title
1980 Sanborn Fire Insurace Map Overlay - Volume 1

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

DESIGNED BY	DATE
CAH	09-2018
DRAWN BY	DATE DRAWN
CAH	09-2018
SCALE	DATE ISSUED
AS NOTED	09-04-2018



NOTES:

Property boundaries provided by New York State GIS Clearinghouse, date 2016.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2016

DESIGNED BY	DATE
CAH	09-2018
DRAWN BY	DATE DRAWN
CAH	09-2018
SCALE	DATE ISSUED
AS NOTED	09-04-2018

day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
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Project Title
415, 441 AND 448 CHANDLER STREET
JAMESTOWN, NEW YORK
ENVIRONMENTAL SERVICES

Drawing Title
1980 Sanborn Fire Insurace Map Overlay - Volume 2

Project No.
5529S-18

Attachment A-8

Last Date Saved: 04 Sep 2018 Document Path: E:\GIS Mapping\5529S-18\Welsh\5529S-7 1980 Sanborn overlay - Vol. 2.mxd

APPENDIX B
SOIL VAPOR SAMPLING LOGS

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
AN AFFILIATE OF DAY ENGINEERING, P.C.

Soil Vapor Sampling Log

Project #: **5529S-18**

Project Address: **415 and 441 Chandler Street**

Jamestown, New York

Sample Type: **Summa Canister**

Date: **9/5/2018**

DAY Representatives: **CAH/TER/CCD**

Canister #: **SC02170**

Slab Thickness: **~8"**

Sample Location: **Former Vapor Degreaser**

Regulator #: **OA01429**

Probe Depth: **~10"**

Purge Time: **~ 3 min.**

Sample Designation: **SSV- 1**

Start: **12:25**

Backfill Material: **Sand**

Purge Method: **Syringe**

Test Duration: **2 hrs. 0 min.**

End: **14:25**

Surface Seal: **Bentonite**

Time	Vacuum Gage Reading (inches of Hg)	Background VOC Reading (ppm)	Notes
12:25	-30	0.0	START
12:45	-26	0.0	
13:32	-15	0.0	
13:58	-10.5	0.0	
14:25	-7	0.0	STOP

Notes: 1) PID readings are referenced to an isobutylene standard measured using a MiniRae 2000 or PPB RAE equipped with a 10.6 eV lamp.

Soil Vapor Sampling Log

1563 LYELL AVENUE
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FAX (585) 454-0825
www.dayenvironmental.com
420 LEXINGTON AVENUE, SUITE 300
NEW YORK, NEW YORK 10170
(212) 986-8645
FAX (212) 986-8657

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
AN AFFILIATE OF DAY ENGINEERING, P.C.

Soil Vapor Sampling Log

Project #: **5529S-18**

Project Address: **415 and 441 Chandler Street**

Jamestown, New York

Sample Type: **Summa Canister**

Date: **9/5/2018**

DAY Representatives: **CAH/TER/CCD**

Canister #: **SC01873**

Slab Thickness: **~8"**

Sample Location: **Sheet Metal Spool Caddy**

Regulator #: **OA01035**

Probe Depth: **~10"**

Purge Time: **~ 3 min.**

Sample Designation: **SSV- 2**

Start: **12:22**

Backfill Material: **Sand**

Purge Method: **Syringe**

Test Duration: **2 hrs. 2 min.**

End: **14:24**

Surface Seal: **Bentonite**

Time	Vacuum Gage Reading (inches of Hg)	Background VOC Reading (ppm)	Notes
12:22	-28.5	0.0	START
12:43	-24	0.0	
13:32	-13	0.0	
13:57	-9	0.0	
14:24	-5.5	0.0	STOP

Notes: 1) PID readings are referenced to an isobutylene standard measured using a MiniRae 2000 or PPB RAE equipped with a 10.6 eV lamp.

Soil Vapor Sampling Log

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ENVIRONMENTAL CONSULTANTS
AN AFFILIATE OF DAY ENGINEERING, P.C.

Soil Vapor Sampling Log

Project #: **5529S-18**

Project Address: **415 and 441 Chandler Street**

Sample Type: **Summa Canister**

Jamestown, New York

Date: **9/5/2018**

DAY Representatives: **CAH/TER/CCD**

Canister #: **SC00286**

Slab Thickness: **~8"**

Sample Location: **Five Stage Washer**

Regulator #: **OA01413**

Probe Depth: **~10"**

Purge Time: **~ 3 min.**

Sample Designation: **SSV- 3**

Start: **12:26**

Backfill Material: **Sand**

Purge Method: **Syringe**

Test Duration: **2 hrs. 0 min.**

End: **14:26**

Surface Seal: **Bentonite**

Time	Vacuum Gage Reading (inches of Hg)	Background VOC Reading (ppm)	Notes
12:26	-28.5	0.0	START
12:46	-25	0.0	
13:33	-15	0.0	
13:59	-11	0.0	
14:26	-7	0.0	STOP

Notes: 1) PID readings are referenced to an isobutylene standard measured using a MiniRae 2000 or PPB RAE equipped with a 10.6 eV lamp.

Soil Vapor Sampling Log

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Soil Vapor Sampling Log

Project #: **5529S-18**

Project Address: **415 and 441 Chandler Street**

Jamestown, New York

Sample Type: **Summa Canister**

Date: **9/5/2018**

DAY Representatives: **CAH/TER/CCD**

Canister #: **SC02197**

Slab Thickness: **~10"**

Sample Location: **Die Unit Shelving**

Regulator #: **OA00322**

Probe Depth: **~12"**

Purge Time: **~ 3 min.**

Sample Designation: **SSV- 4**

Start: **12:28**

Backfill Material: **Sand**

Purge Method: **Syringe**

Test Duration: **2 hrs. 1 min.**

End: **14:29**

Surface Seal: **Bentonite**

Time	Vacuum Gage Reading (inches of Hg)	Background VOC Reading (ppm)	Notes
12:28	-28.5	0.0	START
12:47	-25	0.0	
13:34	-15	0.0	
13:59	-10	0.0	
14:29	-6	0.0	STOP

Notes: 1) PID readings are referenced to an isobutylene standard measured using a MiniRae 2000 or PPB RAE equipped with a 10.6 eV lamp.

Soil Vapor Sampling Log

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Soil Vapor Sampling Log

Project #: **5529S-18**

Project Address: **415 and 441 Chandler Street**

Jamestown, New York

Sample Type: **Summa Canister**

Date: **9/5/2018**

DAY Representatives: **CAH/TER/CCD**

Canister #: **SC01756**

Slab Thickness: **~8"**

Sample Location: **Laser Cutting Area**

Regulator #: **OA02032**

Probe Depth: **~10"**

Purge Time: **~ 3 min.**

Sample Designation: **SSV- 5**

Start: **12:30**

Backfill Material: **Sand**

Purge Method: **Syringe**

Test Duration: **2 hrs. 0 min.**

End: **14:30**

Surface Seal: **Bentonite**

Time	Vacuum Gage Reading (inches of Hg)	Background VOC Reading (ppm)	Notes
12:30	-30	0.0	START
12:49	-25.5	0.0	
13:35	-16	0.0	
14:00	-10.5	0.0	
14:30	-6.5	0.0	STOP

Notes: 1) PID readings are referenced to an isobutylene standard measured using a MiniRae 2000 or PPB RAE equipped with a 10.6 eV lamp.

Soil Vapor Sampling Log

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Soil Vapor Sampling Log

Project #: **5529S-18**

Project Address: **415 and 441 Chandler Street** Sample Type: **Summa Canister**

Jamestown, New York Date: **9/5/2018**

DAY Representatives: **CAH/TER/CCD** Canister #: **SC01745** Slab Thickness: **~12"**

Sample Location: **Plating Building (SE)** Regulator #: **OA02061** Probe Depth: **~14"** Purge Time: **~ 3 min.**

Sample Designation: **SSV-6** Start: **12:31** Backfill Material: **Sand** Purge Method: **Syringe**

Test Duration: **2 hrs. 4 min.** End: **14:35** Surface Seal: **Bentonite**

Time	Vacuum Gage Reading (inches of Hg)	Background VOC Reading (ppm)	Notes
12:31	-29.5	0.0	START
12:52	-27	0.0	
13:10	-23	0.0	
13:36	-18.5	0.0	
14:02	-13	0.0	
14:35	-7	0.0	STOP

Notes: 1) PID readings are referenced to an isobutylene standard measured using a MiniRae 2000 or PPB RAE equipped with a 10.6 eV lamp.

Soil Vapor Sampling Log

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APPENDIX C
CONCRETE FLOOR SAMPLING LOGS

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Project #:	5529S-18		
Project Address:	415 and 441 Chandler St.		
	Jamestown, NY		
		Date Sampled:	9/5/2018
DAY Representative:	CAH/TER/CCD	Borehole Depth:	8.5"
Sampling Method:	Electric Core Drill	Borehole Diameter:	1 1/2"
		Completion Method:	Backfilled with Concrete

CORE SAMPLE CFS-A

Depth (in)	Sample Description	Notes	Photograph
1	Floor Coating		
	Concrete contains voids		
2	Competent concrete	Fracture @~1.2"	
3		Fracture @~2.5"	
4			
5			
6			
7	No recovery 6"-8.5"		
8			
9	Bottom of Concrete Slab @ ~8.5"		
10			
11			
12			
13			
14			
15			
16			

CORE SAMPLE CFS-A

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Project #:	5529S-18		
Project Address:	415 and 441 Chandler St.		
	Jamestown, NY		
		Date Sampled:	9/5/2018
DAY Representative:	CAH/TER/CCD	Borehole Depth:	9.0"
Sampling Method:	Electric Core Drill	Borehole Diameter:	1 1/2"
		Completion Method:	Backfilled with Concrete

CORE SAMPLE CFS-B

Depth (in)	Sample Description	Notes	Photograph
1	Competent concrete	Staining on surface	
2		Fracture @~1.8"	
3			
4			
5			
6		Fracture @~6.0"	
7			
8			
9	Bottom of Concrete Slab @ ~9"		
10			
11			
12			
13			
14			
15			
16			

CORE SAMPLE CFS-B

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Project #:	5529S-18
Project Address:	415 and 441 Chandler St.
	Jamestown, NY
DAY Representative:	CAH/TER/CCD
Sampling Method:	Electric Core Drill
Date Sampled:	9/5/2018
Borehole Depth:	10.1"
Borehole Diameter:	1 1/2"
Completion Method:	Backfilled with Concrete

CORE SAMPLE CFS-C

Depth (in)	Sample Description	Notes
1	Competent concrete	
2		
3		
4		
5		Fracture @~4.7"
6		
7		Fracture @~6.6"
		Fracture @~7.3"
8		
9		
10	Bottom of Concrete Slab @ ~10.1"	
11		
12		
13		
14		
15		
16		

Photograph

CORE SAMPLE CFS-C

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Project #:	5529S-18		
Project Address:	415 and 441 Chandler St.		
	Jamestown, NY		
DAY Representative:	CAH/TER/CCD	Date Sampled:	9/5/2018
Sampling Method:	Electric Core Drill	Borehole Depth:	7.9"
		Borehole Diameter:	1 1/2"
		Completion Method:	Backfilled with Concrete

CORE SAMPLE CFS-D

Depth (in)	Sample Description	Notes	Photograph
1	Competent concrete		
2		Fracture @~2.0"	
3			
4		re-bar in core sample	
5			
6	No recovery 5.5"-7.9"		
7			
8	Bottom of Concrete Slab @ ~7.9"		
9			
10			
11			
12			
13			
14			
15			
16			

CORE SAMPLE CFS-D

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Project #:	5529S-18		
Project Address:	415 and 441 Chandler St.		
	Jamestown, NY		
		Date Sampled:	9/5/2018
DAY Representative:	CAH/TER/CCD	Borehole Depth:	3.5"
Sampling Method:	Electric Core Drill	Borehole Diameter:	1 1/2"
		Completion Method:	Backfilled with Concrete

CORE SAMPLE CFS-E

Depth (in)	Sample Description	Notes	Photograph
1	Asphalt Coating		
2	Competent concrete	Fracture @~2.0"	
3			
4	Drilling terminated @ ~3.5"		
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

CORE SAMPLE CFS-E

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Project #:	5529S-18		
Project Address:	415 and 441 Chandler St.		
	Jamestown, NY		
		Date Sampled:	9/5/2018
DAY Representative:	CAH/TER/CCD	Borehole Depth:	4.5"
Sampling Method:	Electric Core Drill	Borehole Diameter:	1 1/2"
		Completion Method:	Backfilled with Concrete

CORE SAMPLE CFS-F

Depth (in)	Sample Description	Notes	Photograph
1–4	Competent concrete		
5	Bottom of Concrete Slab @ ~4.5"		
6–16			

CORE SAMPLE CFS-F

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APPENDIX D
TEST BORING LOGS
AND
MONITORING WELL CONSTRUCTION DIAGRAMS

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Project #: 5529S-18
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Trec Environmental, Inc.
Sampling Method: Direct Push

Test Boring MW-A

Date Started: 11/6/2018 Date Ended: 11/6/2018
Borehole Depth: 13.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Concrete Floor	
							0.0	Tan/Brown, fine to coarse Sand, little Gravel, little Slag, damp (FILL)	
2		S-1	0.5-4	82			4502	Dark Brown, Silt and fine Sand, moist (FILL)	
3						1392	1899	Cinders, coarse Sand, pieces of Concrete (FILL)	
4							4800	Dark Brown/Gray, Silty CLAY little fine Sand, little Gravel, moist	
5						494	541	Tan/Brown, Clayey fine SAND, some Gravel, moist	
6		S-2	4-8	60			74.2		
7							388	...Gray/Green, Clayey fine to medium SAND, little Gravel	**Slight chemical odor 7 - 8 ft.**
8							42.3	...wet	**Free petroluem product and solvent type odor**
9							0.0	Gray, coarse SAND and GRAVEL, little Clay, wet	**8 - 12 ft.**
10		S-3	8-12	100			480		
11						3565	15000		
12							3325	Gray, Silty fine Sand, little fine to medium Gravel, wet (TILL)	
13		S-4	12-13	100		1810	1500	Gray, Silty fine Sand, little fine to medium Gravel, wet (TILL)	
14								Equipment Refusal @ 13.0'	
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring MW-A

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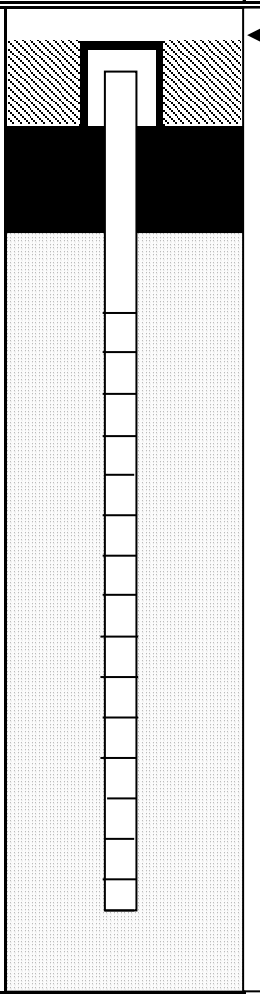
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Trec Environmental

MONITORING WELL MW-A

Date Started: 11/6/2018 Date Ended: 11/6/2018

Refer to Test Boring Log MW-A for Soil Description



Flush Mounted Roadbox
0.19 Depth to Top of Riser Pipe (ft)
0.25 Depth to Top of Bentonite Seal (ft)
5.9 Depth to Bottom of Bentonite Seal (ft)
6.9 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type Sand
1.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10 slot
11.9 Depth to Bottom of Well Screen (ft)
13.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-A

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Project #: 5529S-18
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Trec Environmental, Inc.
Sampling Method: Direct Push

Test Boring MW-B

Date Started: 11/6/2018 Date Ended: 11/6/2018
Borehole Depth: 11 Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							220	Concrete Floor Brown, medium to coarse Sand and fine to medium Gravel, damp (FILL)	
2		S-1	0.5-4	50			201.9	...little Silt	
3								...little Brick	
4						714	422	…coarse Sand and Gravel, little Brick	
5									
6		S-2	4-8	43			156	...wet	
7							385	…medium to coarse Sand and Gravel, trace Silt Gray/Brown, Clayey SILT with Roots, Organics, wet	
8						564	116	Gray, medium to coarse SAND, wet	
9		S-3	8-11	80		535	274 389	Gray, Silty CLAY, coarse Sand, some Gravel, wet ...Peat/Plant fibers, wet	
10							156	Gray, Silty SAND and Gravel, little Clay (TILL)	
11							18.1		
12								Equipment Refusal @ 11.0'	
13									
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring MW-B

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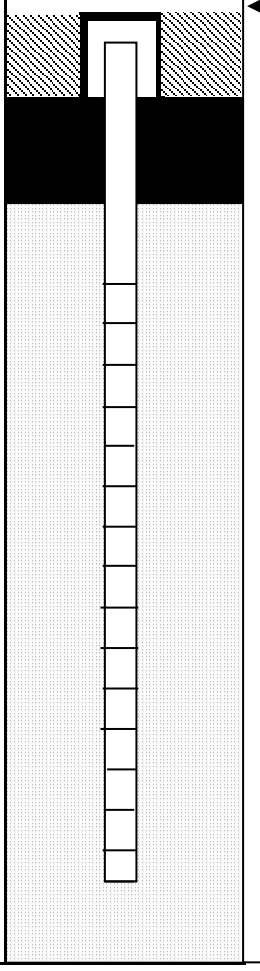
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Trec Environmental

MONITORING WELL MW-B

Date Started: 11/6/2018 Date Ended: 11/6/2018

Refer to Test Boring Log MW-B for Soil Description



Flush Mounted Roadbox
0.31 Depth to Top of Riser Pipe (ft)
0.5 Depth to Top of Bentonite Seal (ft)
5.0 Depth to Bottom of Bentonite Seal (ft)
6.0 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type Sand
1.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10 slot
11.0 Depth to Bottom of Well Screen (ft)
11.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-B

CAH1222 / 5529S-18

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Project #: 5529S-18
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Trec Environmental, Inc.
Sampling Method: Direct Push

Test Boring MW-C

Date Started: 11/6/2018 Date Ended: 11/6/2018
Borehole Depth: 9.5' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							448	Concrete Floor Ash (fill)	
2		S-1	0-4	65			620	Black, fine to medium Sand, Ash, Cinders, damp (FILL) Brown, Silty fine Sand, little Gravel, damp (FILL)	
3							281	...Coal fragments	
4						395	393	Red/Brown, Clayey fine SAND little Gravel, moist	
5							124	...Black	
6		S-2	4-8	80		N/C	61	...Gray, Gravel, wet	
7							50.3	...Dark Gray, Silty fine Sand, Trace Clay	
8							20.2	Black, silty fine SAND and Peat, wet	
9		S-3	8-8.5	100		N/C	79	...coarse Sand	
10								Equipment Refusal @ 9.5'	
11									
12									
13									
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring MW-C

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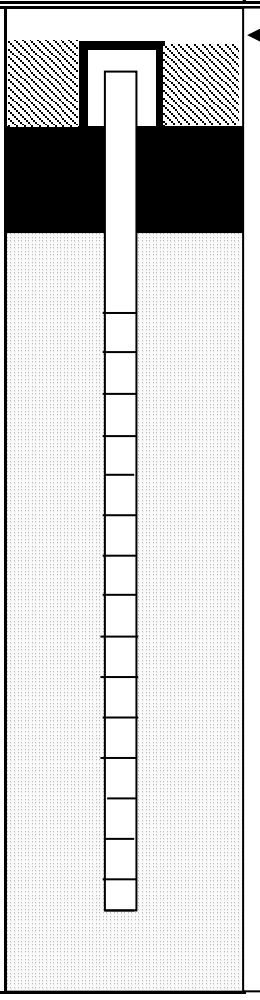
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Trec Environmental

MONITORING WELL MW-C

Date Started: 11/6/2018 Date Ended: 11/6/2018

Refer to Test Boring Log MW-C for Soil Description



Flush Mounted Roadbox
0.31 Depth to Top of Riser Pipe (ft)
0.6 Depth to Top of Bentonite Seal (ft)
3.2 Depth to Bottom of Bentonite Seal (ft)
4.2 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type Sand
1.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10 slot
9.2 Depth to Bottom of Well Screen (ft)
9.5 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-C

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Project #: 5529S-18
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Trec Environmental, Inc.
Sampling Method: Direct Push

Test Boring MW-D

Date Started: 11/6/2018 Date Ended: 11/6/2018
Borehole Depth: 10.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							55.3	Concrete Floor Black, fine Sand, little Gravel intermixed with Ash, Cinders, damp (FILL)	
2		S-1	0.5-4	88		0.7	2.4		
3							9.0	Gray, Clayey fine Sand and Gravel, little Glass, little Metal, damp (FILL)	
4							2.0	Gray, Sandy Silt, little fine Gravel, moist (FILL)	
5									
6		S-2	4-8	25		221	22.2		
7								Black, coarse Sand and fine Gravel, Metal fragments (copper?), moist (FILL)	
8							137		
9		S-3	8-12	100		494	368		**Slight chemical odor 9 - 10 ft.**
10							168	Gray, Silty SAND, some Gravel, wet (TILL)	
11								Equipment Refusal @ 10.0'	
12									
13									
14									
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring MW-D

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AN AFFILIATE OF DAY ENGINEERING, P.C.

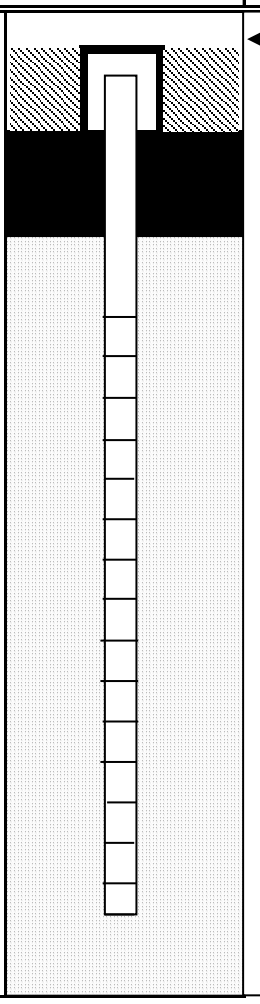
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Trec Environmental

MONITORING WELL MW-D

Date Started: 11/6/2018 Date Ended: 11/6/2018

Refer to Test Boring Log MW-D for Soil Description



Flush Mounted Roadbox
0.28 Depth to Top of Riser Pipe (ft)
0.4 Depth to Top of Bentonite Seal (ft)
2.6 Depth to Bottom of Bentonite Seal (ft)
3.6 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type Sand
1.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10 slot
8.6 Depth to Bottom of Well Screen (ft)
10.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-D

CAH1222 / 5529S-18

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-01/MW-E

Date Started: 12/19/2018 Date Ended: 12/19/2018
Borehole Depth: 12.65' Borehole Diameter: 7 1/2"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1						4.5	10.7	Concrete Floor	Installed MW-E
							7.0	Brown, Clayey fine to coarse Sand and fine to coarse Gravel, damp (FILL)	
2		S-1	0-4	55				Red/Brown, fine Sand, Coal, Cinders, white precipitate (acid?), damp (FILL)	
							2.4		
3								Brown, Clayey fine Sand and fine to coarse Gravel, Coal fragments (FILL)	
							1.3		
4								Tan, Clayey fine to medium SAND and medium to coarse GRAVEL, damp	
							4.5		
5									
							3.9	Brown, Clayey SILT, little fine Sand, little medium to coarse Gravel, moist	
6		S-2	4-8	55		10.6	9.0		
7								...gray, wet	
							2.2		
8									
							5.6		
9									
							5.1		
10		S-3	8-12	90					
							12.2		
							169		
11							15000	Gray, Silty fine SAND, little fine to medium Gravel, wet (TILL)	
						1531	3805		
12									
							62.5	Tan, Clayey fine SAND and Shale fragments, wet	
13								Direct Push Refusal @ 12.5'	
								Augered to refusal @ 12.65' to install monitoring well	
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-01/MW-E

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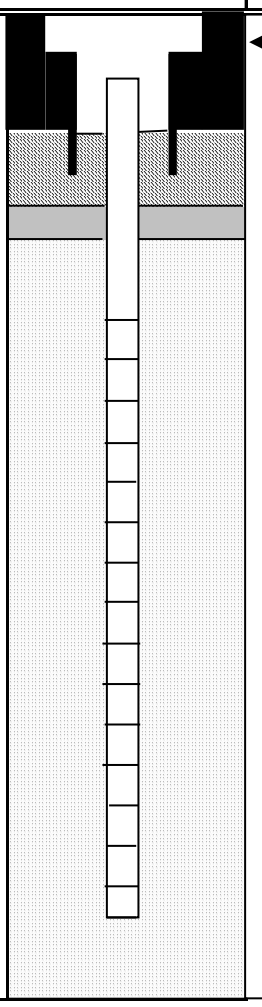
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-E

Date Started: 12/19/2018 Date Ended: 12/19/2018

Refer to Test Boring Log TB-01 for Soil Description



Flush Mounted Roadbox
0.30 Depth to Top of Riser Pipe (ft)
0.5 Depth to Bottom of Cement Surface Patch (ft)
Backfill Type Concrete

9.4 Depth to Top of Bentonite Seal (ft)
10.4 Depth to Bottom of Bentonite Seal (ft)

10.6 Depth to Top of Well Screen (ft)

7.5 Diameter of Borehole (in)

Backfill Type Sand

2.0 Inside Diameter of Well (in)

Type of Pipe PVC
Screen slot size #10

12.6 Depth to Bottom of Well Screen (ft)
12.6 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-E

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-02/MW-F

Date Started: 12/19/2018 Date Ended: 12/19/2018
Borehole Depth: 12.9' Borehole Diameter: 7 1/2"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							6.9	Concrete Floor Tan/Brown, Clayey fine to coarse Sand and fine to coarse Gravel, damp (FILL)	**Installed MW-F**
2		S-1	0-4	73		2.1	1.3	Dark Brown/Black, medium to coarse Sand and Cinders, little Ash, damp (FILL)	
3							0.3		
4							0.0	Dark Brown, Clayey SILT, little fine Sand, little medium to coarse Gravel, moist	
5		S-2	4-8	65			0.4	Gray/Green, Clayey fine SAND, soe Gravel, moist	
6							0.5	…Peat Layer	
7							0.5	Gray/Green, Clayey SILT, trace Sand, trace Gravel, wet	
8						7.0	1.3	Silty fine to medium SAND, little fine to medium Gravel, wet	
9		S-3	8-12	90			2.6	Gray, Clayey fine to coarse SAND, little Gravel, wet	Solvent-type odor ~8' to 11'
10							4.5	…and fine to coarse GRAVEL	
11						515	92 161	Gray, Silty fine to medium SAND and fine to medium GRAVEL, wet (TILL)	
12							160		
13		S-4	12-12.9	55		440	92	…SHALE fragments	
14								Direct Push Refusal @ 12.9' Augered to refusal @ 12.85' to install monitoring well	
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-02/MW-F

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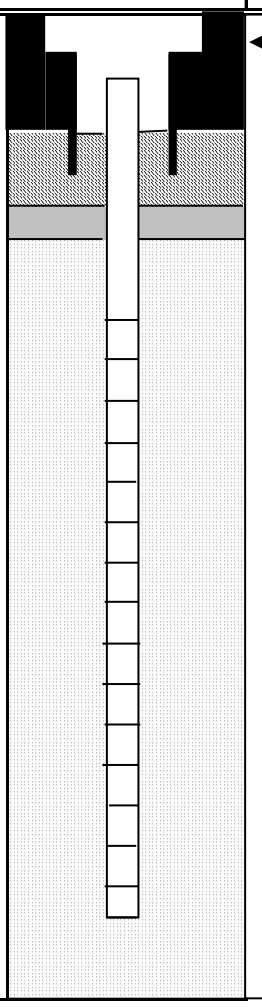
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-F

Date Started: 12/19/2018 Date Ended: 12/19/2018

Refer to Test Boring Log TB-02 for Soil Description



Flush Mounted Roadbox
0.27 Depth to Top of Riser Pipe (ft)
0.5 Depth to Bottom of Cement Surface Patch (ft)
Backfill Type Concrete

9.8 Depth to Top of Bentonite Seal (ft)
10.8 Depth to Bottom of Bentonite Seal (ft)

11.1 Depth to Top of Well Screen (ft)

7.5 Diameter of Borehole (in)

Backfill Type OON - Sand

2.0 Inside Diameter of Well (in)

Type of Pipe PVC
Screen slot size #10

12.8 Depth to Bottom of Well Screen (ft)
12.8 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-F

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-03

Date Started: 12/20/2018 Date Ended: 12/20/2018
Borehole Depth: 9.0' Borehole Diameter: 2 1/4"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.9	Concrete Floor	
2		S-1	0-4	20		3.5		Brown, Clayey fine to coarse Sand and fine to coarse Gravel, little Cobbles, damp (FILL)	
3							0.8		
4							1.3	Brown, Clayey SILT, some fine to medium Gravel, little fine Sand, moist	
5								...cobble fragments	
6		S-2	4-8	45			0.8		
7						5.7	1.0	Tan, Silty fine to medium SAND and fine GRAVEL, trace Shale fragments, moist	
8		S-3	8-9	100		7.3	1.3	Green weathered SHALE, moist	
9									
10								Equipment Refusal @ 9.0'	
11									
12									
13									
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-03

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-04

Date Started: 12/20/2018 Date Ended: 12/20/2018
Borehole Depth: 12.9 Borehole Diameter: 2 1/4"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.5	Concrete Floor Tan, Clayey fine to coarse Sand and fine to coarse Gravel, damp (FILL)	
2		S-1	0-4	38		4.3	0.6	Red/Brown, Silty fine to medium Sand and Cinders, pockets of apparent acid corrosion (FILL)	
3							0.5		
4									
5		S-2	4-8	48			0.9	Dark Brown, Clayey Silt and medium to coarse Gravel, Glass, Shale Fragments (FILL)	
6							1.0	...brick fragments	
7							0.9	Dark Brown, Clayey SILT, little fine Sand, little medium to coarse Gravel, moist	
8						5.0	1.3	...wet, gray	
9		S-3	8-12	68			1.7	Gray, Clayey fine to coarse SAND and fine to coarse GRAVEL, wet	
10							6.0		
11							24.7		
12						174.9	13.8 103	Gray, fine to medium Sand, some fine to medium Gravel, wet (TILL)	
13		S-4	12-12.9	80		70.0	22.6	Weathered SHALE	
14								Equipment Refusal @ 12.9'	
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-04

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
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DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-05

Date Started: 12/19/2018 Date Ended: 12/19/2018
Borehole Depth: 12.5' Borehole Diameter: 2 1/4"
Completion Method: ☐ Well Installed ■ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							3.1	Concrete Floor	
						4.3		Tan, Clayey fine to coarse Sand and fine to coarse Gravel, damp (FILL)	
2		S-1	0-4	70			2.2		
								Red/Brown, Silty fine Sand, Coal fragments, corrosion (acid?) (FILL)	
3							1.1	Dark Brown, Silty Clay and medium to coarse Gravel (FILL)	
								Tan, Clayey fine Sand and fine to coarse Gravel, Shale fragments, moist (FILL)	
4							0.9		
5		S-2	4-8	65		5.7	1.3		
6							0.8		
								Brown/Gray, Clayey SILT, little medium to coarse Gravel, wet	
7							0.6	...dark brown, little Clay, little fine Sand	
8							0.5	...gray	
9		S-3	8-12	100			0.9		
								Gray, Clayey medium to coarse SAND and fine to coarse GRAVEL, wet	
10							0.7		
11						129.4	7.6		
							80.8	Gray, Silty fine SAND, little medium to coarse Gravel, wet (TILL)	
12		S-4	12-12.5	100		117	527	...Shale fragments and weathered SHALE	
								Equipment Refusal @ 12.5'	
13									
14									
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-05

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-06/MW-G

Date Started: 12/19/2018 Date Ended: 12/19/2018
Borehole Depth: 11.5' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.8	Concrete Floor	Installed MW-G
2		S-1	0-4	58		3.8	1.7	Brown, Clayey fine Sand and fine to coarse Gravel, damp (FILL) Red/Brown, Silty fine to medium Sand and fine to coarse Gravel, little Cobbles, damp (FILL)	
3							1.0	Tan/Brown, medium Sand, little fine Gravel, little Cinders, moist (FILL)	
4							0.6	Dark Brown, Clayey SILT, little fine Sand, little medium to coarse Gravel, moist	
5		S-2	4-8	60		6.5	0.7	...trace Gravel, wet	
6							1.3	...gray	
7							1.8	Gray, Silty fine to medium SAND and fine to medium GRAVEL, wet	
8							2.4		
9		S-3	8-11.5	94		25.4	0.4	... medium to coarse SAND and fine to coarse GRAVEL, trace Clay	
10							1.2		
11							1.1	Gray, Silty fine to medium SAND, little fine to coarse Gravel, little Shale fragments (TILL)	
12							8.8	Equipment Refusal @ 11.5'	
13									
14									
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-06/MW-G

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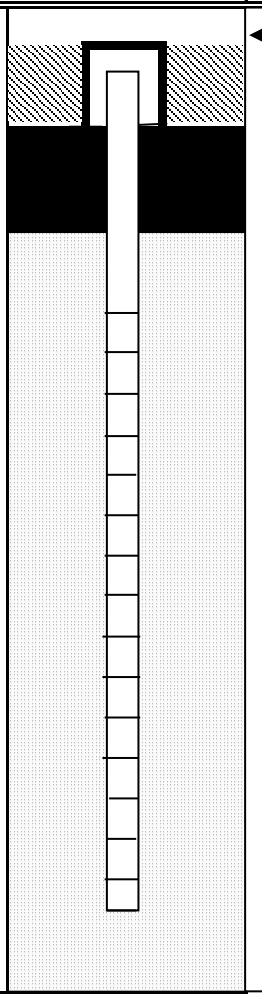
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-G

Date Started: 12/19/2018 Date Ended: 12/19/2018

Refer to Test Boring Log TB-06 for Soil Description



Flush Mounted Roadbox
0.24 Depth to Top of Riser Pipe (ft)
0.5 Depth to Top of Bentonite Seal (ft)
3.7 Depth to Bottom of Bentonite Seal (ft)
4.7 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type OON - Sand
2.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10
10.7 Depth to Bottom of Well Screen (ft)
11.5 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-G

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-07/MW-H

Date Started: 12/18/2018 Date Ended: 12/18/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.4	Concrete Floor	Installed MW-H
2		S-1	0-4	65		1.8	0.3	Brown, Clayey fine to coarse Sand and fine to coarse Gravel, damp (FILL)	
3							0.2	Gray, Clay, little fine Sand, trace fine Gravel (FILL)	
4							0.2	Dark Brown, Clayey Silt, little fine Sand, little medium to coarse Gravel, moist (FILL)	
5		S-2	4-8	40		1.7	0.0		
6							1.8	Concrete fragments, wet (FILL)	
7							0.9	Gray, Silty CLAY, little fine to coarse Sand, little coarse Gravel, wet	
8									
9		S-3	8-12	100			0.4	Gray/Brown, Clayey SILT and occasional plant fibers, wet	
10							0.6		
11							0.6		
12							0.3	Gray, Silty fine to medium SAND, some, fine to medium Gravel, wet (TILL)	
13								Bottom of Test Boring @ 12.0'	
14									
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-07/MW-H

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AN AFFILIATE OF DAY ENGINEERING, P.C.

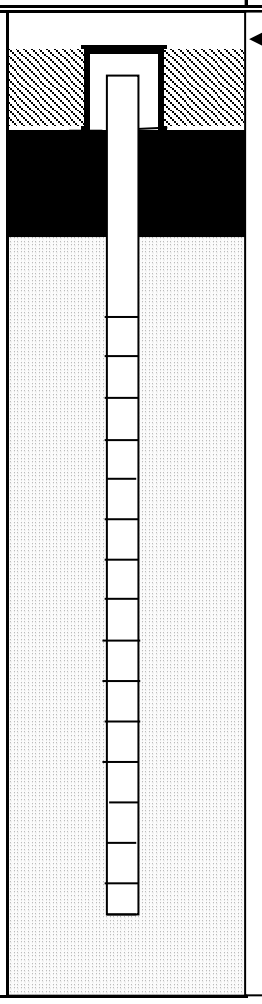
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-H

Date Started: 12/18/2018 Date Ended: 12/18/2018

Refer to Test Boring Log TB-07 for Soil Description



Flush Mounted Roadbox
0.26 Depth to Top of Riser Pipe (ft)
0.5 Depth to Top of Bentonite Seal (ft)
4.8 Depth to Bottom of Bentonite Seal (ft)
5.8 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type OON - Sand
2.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10
11.8 Depth to Bottom of Well Screen (ft)
12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-H

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-08/MW-I

Date Started: 12/18/2018 Date Ended: 12/18/2018
Borehole Depth: 10.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Asphalt (0.2') above Concrete (0.3')	Installed MW-I
2		S-1	0-4	35			0.1	Tan/Brown, Clayey fine Sand, crushed Rock, damp (FILL)	
3						0.6		Black, fine to medium Sand, Cinders, little Gravel, damp (FILL)	
4							0.1	Brown, Clayey SILT, little fine to medium Sand, little fine to coarse Gravel, moist	
5		S-2	4-8	100			0.0	Red/Brown, Silty CLAY, little fine Sand, trace fine Gravel, moist	
6							0.0		
7						0.2	0.0	Tan, Clayey fine to medium SAND and fine to medium GRAVEL, damp	
8		S-3	8-10	100			0.0	...cobbles/shale fragments	
9						0.2	0.0	Gray/Green weathered SHALE, moist	
10							0.0	Equipment Refusal @ 10.0'	
11									
12									
13									
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-08/MW-I

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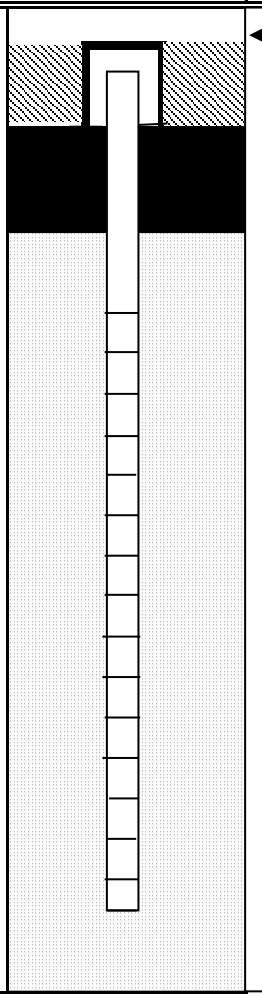
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-I

Date Started: 12/18/2018 Date Ended: 12/18/2018

Refer to Test Boring Log TB-07 for Soil Description



Flush Mounted Roadbox
0.28 Depth to Top of Riser Pipe (ft)
0.5 Depth to Top of Bentonite Seal (ft)
2.7 Depth to Bottom of Bentonite Seal (ft)
3.7 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type OON - Sand
1.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10
9.7 Depth to Bottom of Well Screen (ft)
10.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-I

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-09/MW-J

Date Started: 12/18/2018 Date Ended: 12/18/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Concrete	Installed MW-J
2		S-1	0-4	28			0.0	Brown, Clayey fine to coarse Sand, little fine to coarse Gravel, damp (FILL)	
3						0.4		Brick and weathered Concrete fragments, Cobbles, damp (FILL)	
4							0.0		
5							0.0		
6		S-2	4-8	35			0.0	Tan/Brown, Clayey fine SAND, trace Gravel, moist	
7						0.3			
8							0.0	...wet	
9							0.0	...fine to coarse SAND, some fine to coarse Gravel	
10		S-3	8-12	65			0.0		
11						7.5	0.7 3.5	Gray, Silty fine to medium SAND, little fine to medium Gravel, wet (TILL)	
12							1.3		
13								Bottom of Test Boring @ 12.0'	
14									
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-09/MW-J

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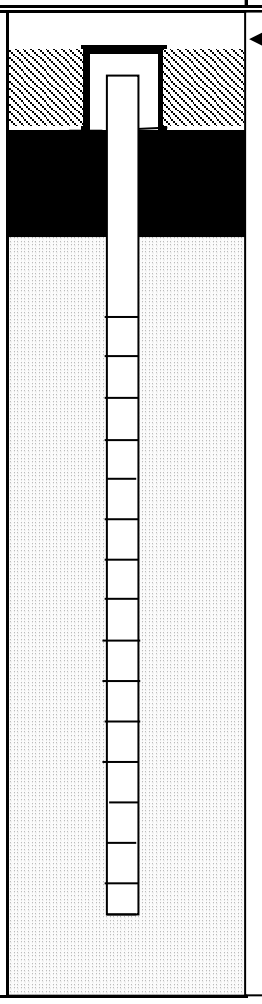
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-J

Date Started: 12/18/2018 Date Ended: 12/18/2018

Refer to Test Boring Log TB-07 for Soil Description



Flush Mounted Roadbox
0.37 Depth to Top of Riser Pipe (ft)
0.5 Depth to Top of Bentonite Seal (ft)
4.9 Depth to Bottom of Bentonite Seal (ft)
5.9 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type OON - Sand
1.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10
11.9 Depth to Bottom of Well Screen (ft)
12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-J

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-10/MW-K

Date Started: 12/18/2018 Date Ended: 12/18/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Concrete	Installed MW-K
2		S-1	0-4	63		0.0	0.0	Dark Brown, Silty fine to medium Sand and fine to coarse Gravel, moist (FILL)	
3							0.0	Tan, Clayey fine Sand, some fine to coarse Gravel, moist (FILL)	
4						45.3	31.0	Red/Brown, Clayey Silt, little fine to medium Gravel, moist (FILL) Concrete layer	Solvent-type odor ~3.5' to 4.5'
5		S-2	4-8	60		9.6	17.4	Brown, Clayey SILT, little fine Sand, trace Gravel, trace Plant fibers, Wood fragments, wet	
6							12.1		
7							5.3		
8							4.1		
9		S-3	8-12	100			2.2	Gray, Silty fine to medium SAND and fine to medium Gravel, wet (TILL)	
10							1.4		
11						1.6	1.8		
12								Bottom of Test Boring @ 12.0'	
13									
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-10/MW-K

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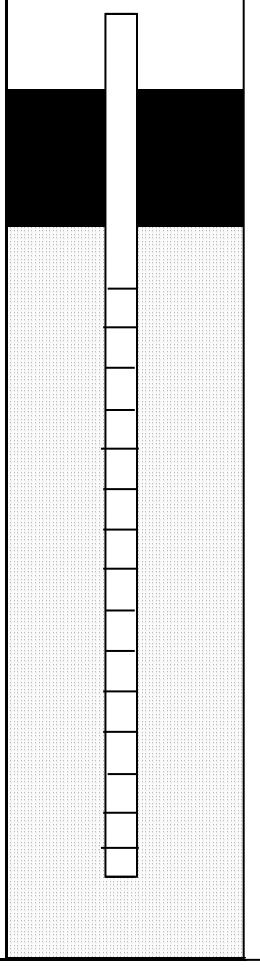
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-K

Date Started: 12/18/2018 Date Ended: 12/18/2018

Refer to Test Boring Log TB-10 for Soil Description



3.15 Height of Stickup (ft)

Ground Surface

0.0 Depth to Top of Bentonite Seal (ft)

2.8 Depth to Bottom of Bentonite Seal (ft)

3.8 Depth to Top of Well Screen (ft)

2 1/4 Diameter of Borehole (in)

Backfill Type OON - Sand

1.0 Inside Diameter of Well (in)

Type of Pipe PVC
Screen slot size #10

11.8 Depth to Bottom of Well Screen (ft)

12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-K

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-11

Date Started: 12/18/2018 Date Ended: 12/18/2018
Borehole Depth: 11.5' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Concrete	Installed temporary monitoring well
								Brown, coarse Sand and fine Gravel, trace Silt, moist (FILL)	
								...little Clay, little Cinders	
2		S-1	0-4	63		0.0	0.0	Brown/Tan, Silty fine Sand, little fine to coarse Gravel, moist (FILL)	
3							0.0	…trace Cobbles	
4							0.0		
5		S-2	4-8	55		0.3	0.0	...trace Clay	
								…stone fragments	
6							0.0	Brown, Clayey SILT, little fine Sand, little coarse Gravel, damp	
								...wet	
7							0.0		
8							0.0	Tan/Brown, fine SAND and fine to coarse GRAVEL, little Clay, wet	
9		S-3	8-11.5	78		0.6	0.0		
10							0.0		
11							0.0	Gray/Green, weathered SHALE	
12								Equipment Refusal @ 11.5'	
13									
14									
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-11

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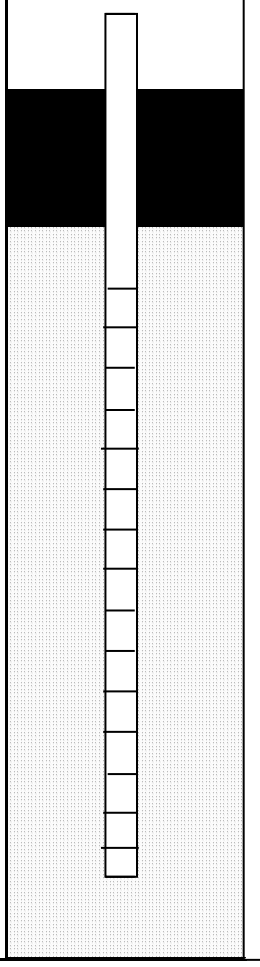
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL TB-11

Date Started: 12/18/2018 Date Ended: 12/18/2018

Refer to Test Boring Log TB-11 for Soil Description



3.02 Height of Stickup (ft)

← Ground Surface
0.0 Depth to Top of Bentonite Seal (ft)

4.3 Depth to Bottom of Bentonite Seal (ft)

5.3 Depth to Top of Well Screen (ft)

2 1/4 Diameter of Borehole (in)

Backfill Type OON - Sand

1.0 Inside Diameter of Well (in)

Type of Pipe PVC
Screen slot size #10

11.3 Depth to Bottom of Well Screen (ft)

11.5 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL TB-11

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-12/MW-L

Date Started: 12/18/2018 Date Ended: 12/18/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Concrete	Installed MW-L
								Crushed Rock	
								Tan, Clayey fine to medium Sand and fine to coarse Gravel, damp (FILL)	
2		S-1	0-4	53		0.4	1.8	Black, medium to coarse Sand and Cinders, little fine to medium Gravel (FILL)	
3							0.1	Tan, Clayey fine Sand, little coarse Gravel, moist (FILL)	
4							0.0	Brown, Clayey Silt, little fine Sand, little fine to medium Gravel, moist (FILL)	
5		S-2	4-8	43		0.3	0.0	Tan, Clayey fine to coarse Sand and fine to coarse Gravel, moist (FILL)	
6							0.1	...wet	
7							0.2	Tan, Clayey fine Sand, trace Gravel, wet (FILL)	
8							0.0	Gray, Silty fine to coarse SAND and fine to coarse GRAVEL, wet	
9		S-3	8-12	60			0.0	...coarse SAND and fine GRAVEL, little Silt	
10							0.0	...little Clay	
11							0.0	...coarse GRAVEL	
						0.8	0.0	Gray, fine to medium SAND and fine to medium GRAVEL, wet (TILL)	
12									
13								Bottom of Test Boring @ 12.0'	
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
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4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-12/MW-L

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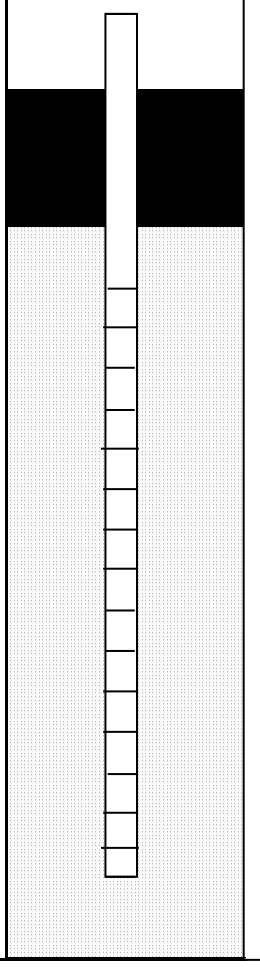
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-L

Date Started: 12/18/2018 Date Ended: 12/18/2018

Refer to Test Boring Log TB-12 for Soil Description



3.04 Height of Stickup (ft)

← Ground Surface
0.0 Depth to Top of Bentonite Seal (ft)

4.8 Depth to Bottom of Bentonite Seal (ft)

5.8 Depth to Top of Well Screen (ft)

2 1/4 Diameter of Borehole (in)

Backfill Type OON - Sand

1.0 Inside Diameter of Well (in)

Type of Pipe PVC
Screen slot size #10

11.8 Depth to Bottom of Well Screen (ft)

12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-L

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ENVIRONMENTAL CONSULTANTS
AN AFFILIATE OF DAY ENGINEERING, P.C.

Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-13/MW-M

Date Started: 12/17/2018 Date Ended: 12/17/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Topsoil	Installed MW-M
2		S-1	0-4	48			0.0		
3						0.6	0.0	Black, Silty fine Sand, little medium Gravel, damp (FILL)	
4							0.0	Tan, Clayey medium to coarse Sand and fine to coarse Gravel, Wood fragments, moist (FILL)	
5		S-2	4-8	33		0.0	0.0	Black, charred Wood, Organic Material, Glass, wet (FILL)	
6							0.0	Brown, Clayey Silt, little fine Sand, trace Silt, wet (FILL)	
7							0.0	Tan, Clayey fine to coarse Sand and fine to coarse Gravel (FILL)	
8							0.0	Gray/Green, Clay, trace Sand, trace Gravel, wet (FILL)	
9		S-3	8-12	80			0.0	Brown/Gray, Clayey SILT, wet	
10							0.0	...some Plant Fibers/Wood fragments	
11						0.3	0.0		
12							0.0	Gray/Green, Silty fine SAND , some fine to coarse Gravel, wet (TILL)	
13								Bottom of Test Boring @ 12.0'	
14									
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-13/MW-M

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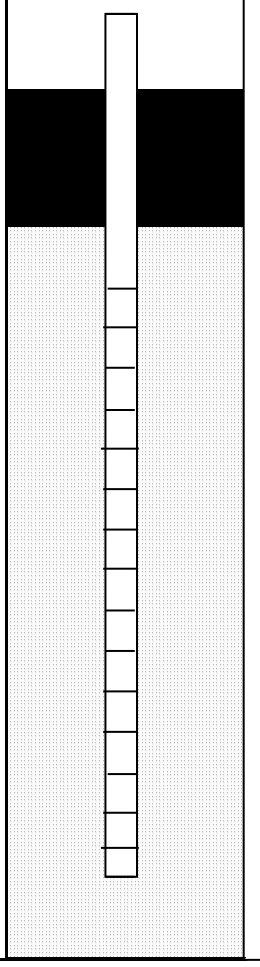
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-M

Date Started: 12/18/2018 Date Ended: 12/18/2018

Refer to Test Boring Log TB-13 for Soil Description



1.95 Height of Stickup (ft)

← Ground Surface
0.0 Depth to Top of Bentonite Seal (ft)

2.9 Depth to Bottom of Bentonite Seal (ft)

3.9 Depth to Top of Well Screen (ft)

2 1/4 Diameter of Borehole (in)

Backfill Type OON - Sand

1.0 Inside Diameter of Well (in)

Type of Pipe PVC
Screen slot size #10

11.9 Depth to Bottom of Well Screen (ft)

12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-M

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-14/MW-N

Date Started: 12/18/2018 Date Ended: 12/18/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1								Concrete Floor	**Installed MW-N**
								Void	
2		S-1	0-4	20		7.2	0.1	Brown, Clayey fine to coarse Sand and fine to coarse Gravel, little Cobbles, moist (FILL)	
3									
4							0.4	...wet	
5							1.7		
6		S-2	4-8	48		5.8	1.8	Brown, Clayey SILT, trace fine Sand, trace Gravel, wet	
7							3.8		
8								...some Wood fragments and Plant fibers	
9							3.4		
10		S-3	8-12	70			2.9		
11						9.1	4.5		
						6.1	2.4	Gray, Silty fine to medium SAND, little fine to medium Gravel (TILL)	
12									
13								Bottom of Test Boring @ 12.0'	
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-14/MW-N

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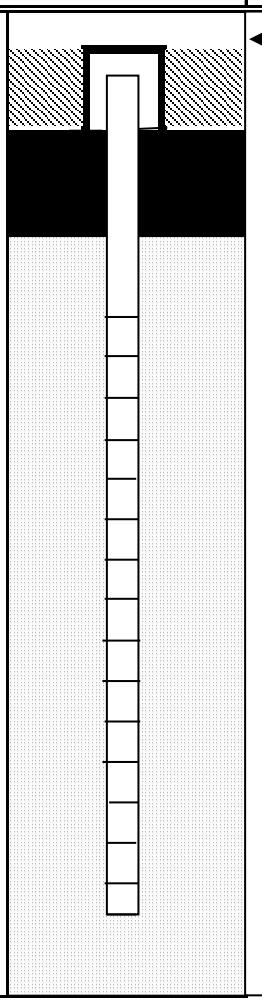
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-N

Date Started: 12/18/2018 Date Ended: 12/18/2018

Refer to Test Boring Log TB-14 for Soil Description



Flush Mounted Roadbox
0.45 Depth to Top of Riser Pipe (ft)
0.5 Depth to Top of Bentonite Seal (ft)
4.9 Depth to Bottom of Bentonite Seal (ft)
5.9 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type OON - Sand
1.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10
11.9 Depth to Bottom of Well Screen (ft)
12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-N

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-15/MW-O

Date Started: 12/17/2018 Date Ended: 12/17/2018
Borehole Depth: 15.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Topsoil	Installed MW-O
								Brown/Tan, Silty fine to medium Sand, little fine to medium Gravel, damp (FILL)	
2		S-1	0-4	43			0.0	...coarse Gravel, little Cobbles	
3						0.3	0.2	Black/Brown, Silty fine to medium Sand and fine to coarse Gravel, little Cinders, damp (FILL)	
4							0.4	Tan/Brown, Clayey fine Sand, little fine to medium Gravel, moist (FILL)	
5		S-2	4-8	48		0.0	0.0		
6							0.1	Brown, Clayey fine to coarse Sand and fine to coarse Gravel, moist (FILL)	
7							0.0	...wet	
8									
9		S-3	8-12	63		0.5	0.0		
10							0.0		
11							0.3	Brown, medium SAND, trace Clay, trace fine Gravel, wet	
12							0.4		
13		S-4	12-15	100		0.2	0.0	...coarse SAND, little Silt	
14							0.0	Gray, Silty SAND, little Clay, little Gravel, wet (TILL)	
15							0.0		
16								Equipment Refusal @ 15.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-15/MW-O

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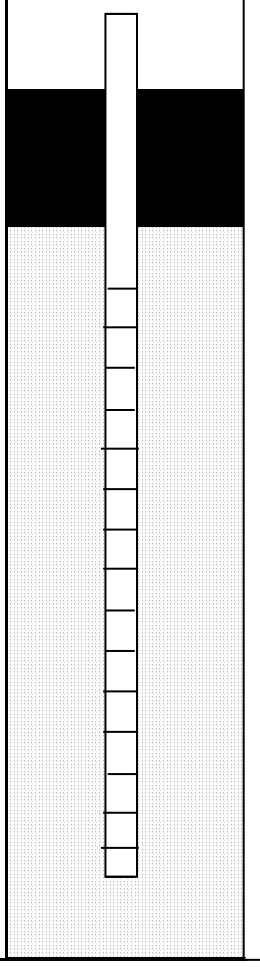
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-O

Date Started: 12/18/2018 Date Ended: 12/18/2018

Refer to Test Boring Log TB-15 for Soil Description



2.93 Height of Stickup (ft)

← Ground Surface
0.0 Depth to Top of Bentonite Seal (ft)

6.0 Depth to Bottom of Bentonite Seal (ft)

7.0 Depth to Top of Well Screen (ft)

2 1/4 Diameter of Borehole (in)

Backfill Type Sand

1.0 Inside Diameter of Well (in)

Type of Pipe PVC
Screen slot size #10

15.0 Depth to Bottom of Well Screen (ft)

15.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-O

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-16/MW-P

Date Started: 12/17/2018 Date Ended: 12/17/2018
Borehole Depth: 16.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1		S-1	0-4	18		0.0	0.0	Topsoil Coarse Gravel and Cobbles, little fine Silty Sand, damp (FILL)	**Installed MW-P**
2									
3									
4		S-2	4-8	48		0.0	0.0	Brown, Clayey medium to coarse Sand and fine to coarse Gravel, moist (FILL)	
5							0.2	Gray/Brown, SILT, little Clay, little fine Sand, moist	
6							0.0	...some Wood fibers	
7									
8		S-3	8-12	85		0.1	0.0	...some Wood fragments Brown, Clayey fine SAND, trace fine Gravel, little Wood fibers, wet	
9							0.0		
10							0.0	Brown, medium to coarse SAND, little fine to coarse Gravel, wet	
11							0.0		
12		S-4	12-16	3.1		0.1	0.0	Gray, medium to coarse GRAVEL, little Sand, wet	
13							0.0		
14							0.0	...some coarse Sand, little Silt	
15							0.0	Gray, fine Silty SAND, little fine to medium Gravel, little Clay, wet (TILL)	
16							0.0		
								Bottom of Test Boring @ 16.0'	

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-16/MW-P

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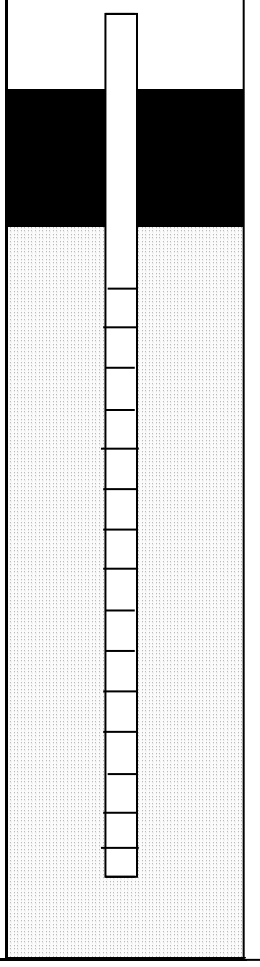
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-P

Date Started: 12/18/2018 Date Ended: 12/18/2018

Refer to Test Boring Log TB-16 for Soil Description



3.25 Height of Stickup (ft)

← Ground Surface

0.0 Depth to Top of Bentonite Seal (ft)

5.0 Depth to Bottom of Bentonite Seal (ft)

6.0 Depth to Top of Well Screen (ft)

2 1/4 Diameter of Borehole (in)

Backfill Type Sand

1.0 Inside Diameter of Well (in)

Type of Pipe PVC
Screen slot size #10

16.0 Depth to Bottom of Well Screen (ft)

16.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-P

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-17/MW-Q

Date Started: 12/17/2018 Date Ended: 12/17/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Topsoil	Installed MW-Q
							0.0	Brown, Silty fine to medium Sand and fine to coarse Gravel, trace Clay, damp (FILL)	
2		S-1	0-4	45		0.0	0.0		
3							0.0		
4							0.0	...tan, trace brick, trace roots	
5							0.0	Black, Clayey fine to medium Sand and fine Gravel, Cinders, Brick fragments, moist (FILL)	
6		S-2	4-8	55			0.0	Brown, SILT, little fine Sand, little Clay, trace Gravel, Roots, moist	
7						0.0	0.0	Blue/Gray, Clayey fine SAND, trace Gravel, wet	
8							0.0	…trace Silt	
9							0.0	Gray, Clayey medium SAND and coarse GRAVEL, little Cobbles, wet	
10		S-3	8-12	85			0.0		
11						0.0	0.0	Gray, Silty fine to medium SAND and fine to medium GRAVEL, wet (TILL)	
12								Bottom of Test Boring @ 12.0'	
13									
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-17/MW-Q

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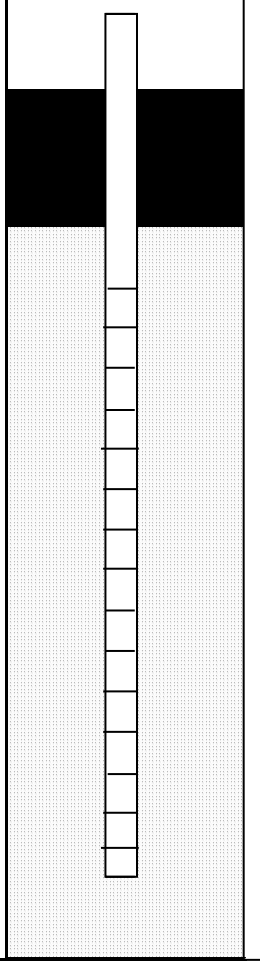
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-Q

Date Started: 12/17/2018 Date Ended: 12/17/2018

Refer to Test Boring Log TB-17 for Soil Description



3.01 Height of Stickup (ft)

← Ground Surface
0.0 Depth to Top of Bentonite Seal (ft)

4.9 Depth to Bottom of Bentonite Seal (ft)

5.9 Depth to Top of Well Screen (ft)

2 1/4 Diameter of Borehole (in)

Backfill Type Sand

1.0 Inside Diameter of Well (in)

Type of Pipe PVC
Screen slot size #10

11.9 Depth to Bottom of Well Screen (ft)

12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-Q

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-18

Date Started: 12/17/2018 Date Ended: 12/17/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Topsoil	Installed temporary monitoring well
2		S-1	0-4	43		0.0	0.0	Brown, Silty fine to coarse Sand and fine to coarse Gravel, damp (FILL) ...granite fragment	
3							0.0	...few Cobbles	
4								...moist, little Clay	
5		S-2	4-8	60		0.1	0.0	Black, Clayey fine Sand, little Gravel, Cinders (FILL)	
6							0.0	Gray/Brown, Clayey SILT, little fine Sand, trace Gravel, damp	
7							0.0	...wet	
8		S-3	8-12	50			0.0	...black, little medium to coarse Sand, little fine to medium Gravel, wet	
9							0.0	...gray	
10							0.0	...medium to coarse Sand, medium to coarse Gravel	
11						0.2	0.0	Red/Brown, Silty fine SAND and GRAVEL, wet (TILL)	
12								Bottom of Test Boring @ 12.0'	
13									
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
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3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-18

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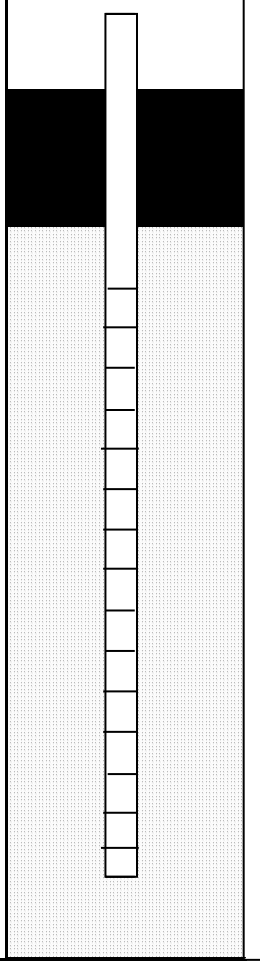
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL TB-18

Date Started: 12/17/2018 Date Ended: 12/17/2018

Refer to Test Boring Log TB-18 for Soil Description



3.42 Height of Stickup (ft)

← Ground Surface
0.0 Depth to Top of Bentonite Seal (ft)

3.5 Depth to Bottom of Bentonite Seal (ft)

4.5 Depth to Top of Well Screen (ft)

2 1/4 Diameter of Borehole (in)

Backfill Type Sand

1.0 Inside Diameter of Well (in)

Type of Pipe PVC
Screen slot size #10

11.5 Depth to Bottom of Well Screen (ft)

12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL TB-18

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DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS

AN AFFILIATE OF DAY ENGINEERING, P.C.

Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-19/MW-R

Date Started: 12/17/2018 Date Ended: 12/17/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Asphalt with Rubber(?) Liner at base	Installed MW-R
								Brown, Silty fine to coarse Sand and fine to coarse Gravel, damp (FILL)	
2		S-1	0-4	58		0.1	0.2	...tan	
3							0.0	...moist	
4							0.0		
5		S-2	4-8	65			0.2	...little Clay, wet	
6							1.4	Black, Wood fragments (FILL)	
7						0.5	0.6	Gray/Green Clayey fine SAND, little Gravel, wet	
8							2.0		
9						4.6	1.2		
10		S-3	8-12	95			0.9	Gray, Silty CLAY, little fine Sand, trace fine Gravel, wet	
11							0.0		
12								Bottom of Test Boring @ 12.0'	
13									
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-19/MW-R

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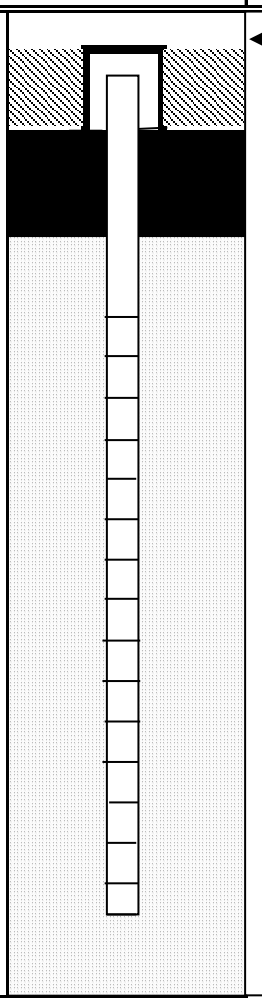
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-R

Date Started: 12/17/2018 Date Ended: 12/17/2018

Refer to Test Boring Log TB-19 for Soil Description



Flush Mounted Roadbox
0.22 Depth to Top of Riser Pipe (ft)
0.5 Depth to Top of Bentonite Seal (ft)
5.0 Depth to Bottom of Bentonite Seal (ft)
6.0 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type OON - Sand
1.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10
12.0 Depth to Bottom of Well Screen (ft)
12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-R

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AN AFFILIATE OF DAY ENGINEERING, P.C.

Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-20/MW-S

Date Started: 12/17/2018 Date Ended: 12/17/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Asphalt	Installed MW-S
2		S-1	0-4	45		0.1	0.0	Brown, medium to coarse Silty Sand and fine to coarse Gravel, little Cobbles, damp (FILL)	
3							0.0	…some Cobbles	
4									
5		S-2	4-8	18		0.3	0.0	Brown, medium to coarse GRAVEL, trace fine to coarse Sand, wet	
6									
7							0.0	Gray, Clayey fine SAND, little fine to medium Gravel, wet (TILL)	
8									
9		S-3	8-12	73		0.1	0.0	...gray/brown …some Gravel	
10							0.0		
11							0.1		
12							0.6		
13								Bottom of Test Boring @ 12.0'	
14									
15									
16									

Notes:
1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-20/MW-S

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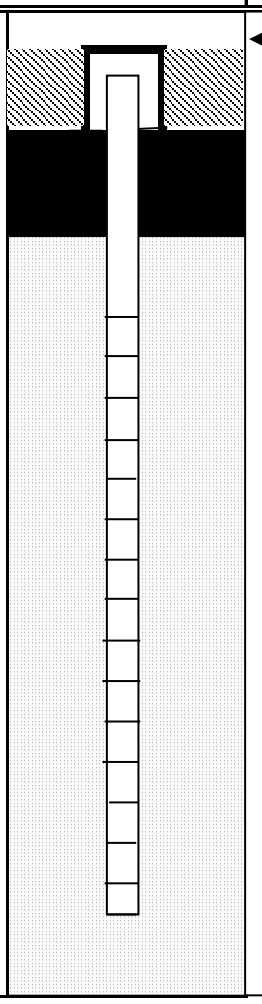
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-S

Date Started: 12/17/2018 Date Ended: 12/17/2018

Refer to Test Boring Log TB-20 for Soil Description



Flush Mounted Roadbox
0.21 Depth to Top of Riser Pipe (ft)
0.5 Depth to Top of Bentonite Seal (ft)
5.0 Depth to Bottom of Bentonite Seal (ft)
6.0 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type OON - Sand
1.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10
12.0 Depth to Bottom of Well Screen (ft)
12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-S

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-21/MW-T

Date Started: 12/17/2018 Date Ended: 12/17/2018
Borehole Depth: 12.0' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1		S-1	0-4	70		0.1	0.0	Asphalt	**Installed MW-T**
2							0.0	Brown/Tan, Silty fine to coarse Sand and fine to medium Gravel, damp (FILL)	
3							0.0		
4							0.0		
5		S-2	4-8	98			0.0	Black/Purple/Brown, Clayey SILT, moist	
6							0.0	...Brown	
7						0.3	0.0	Gray, Clayey fine SAND, some medium to coarse Gravel, moist (TILL)	**Slight sheen on sample ~7' to 9'**
8							0.0	...wet	
9		S-3	8-12	100			0.0	...coarse SAND and fine to coarse GRAVEL	
10							0.0	Red/Gray, Clayey fine to medium SAND, some medium Gravel, wet (TILL)	
11							0.0	…trace Silt	
12								Bottom of Test Boring @ 12.0'	
13									
14									
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-21/MW-T

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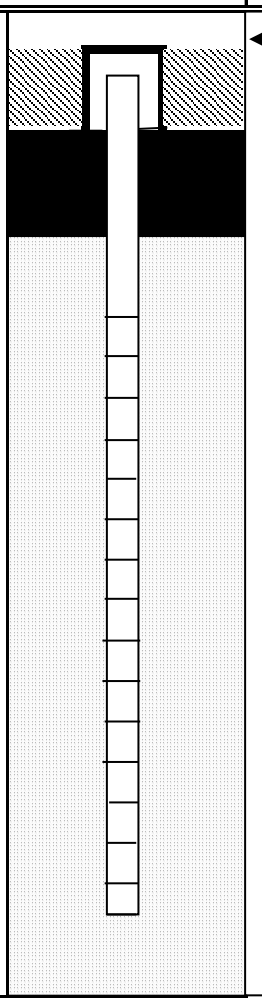
MONITORING WELL CONSTRUCTION DIAGRAM

Project #: 5529S-18
Project Address: 415 and 441 Chandler St.
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling

MONITORING WELL MW-T

Date Started: 12/17/2018 Date Ended: 12/17/2018

Refer to Test Boring Log TB-21 for Soil Description



Flush Mounted Roadbox
0.26 Depth to Top of Riser Pipe (ft)
4.0 Depth to Top of Bentonite Seal (ft)
5.0 Depth to Bottom of Bentonite Seal (ft)
5.9 Depth to Top of Well Screen (ft)
2 1/4 Diameter of Borehole (in)
Backfill Type OON - Sand
1.0 Inside Diameter of Well (in)
Type of Pipe PVC
Screen slot size #10
11.9 Depth to Bottom of Well Screen (ft)
12.0 Depth to Bottom of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) NA = Not Available or Not Applicable

MONITORING WELL MW-T

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Project #: 5529S-18
Project Address: 415 and 441 Chandler Street
Jamestown, New York
DAY Representative: C. Hampton
Drilling Contractor: Nothnagle Drilling
Sampling Method: Direct Push

Test Boring TB-22

Date Started: 12/20/2018 Date Ended: 12/20/2018
Borehole Depth: 13.2' Borehole Diameter: 2 1/4"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID (ppm)	PID Reading (ppm)	Sample Description	Notes
1							1.8	Concrete Floor Brown, coarse Sand, little Clay, damp (FILL)	
2		S-1	0-4	43		1.9	2.3	Brown, Clayey fine to coarse Sand and fine to coarce Gravel, Brick fragments, Glass, moist (FILL)	
3							0.8	...cobbles	
4									
5		S-2	4-8	50		12.2	0.7		
6							4.5	Clayey coarse Sand and fine to medium Gravel, wet (FILL)	
7							6.1	Brown, Clayey SILT, little fine Sand, little medium to coarse Gravel, little Peat, wet	**Slight odor/sheen ~ 6'**
8							1.8		
9		S-3	8-12	65		58.6	4.7	Gray, Clayey coarse SAND and fine to coarse GRAVEL, wet	**Product in sample ~8.5' to 10'**
10							4.3		
11							11.8 55.7	Gray, Silty fine to medium SAND and fine to medium GRAVEL, wet (TILL)	
12							62.4		
13		S-4	12-13.2	92		25.7	12.2		
14								Equipment Refusal @ 13.2'	
15									
16									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.
2) Stratification lines represent approximate boundaries. Transitions may be gradual.
3) PID readings are referenced to an isobutylene standard. A MiniRae 3000 equipped with a 10.6 eV lamp was used to obtain the PID readings.
4) NA = Not Available or Not Applicable
5) Headspace PID readings may be influenced by moisture

Test Boring TB-22

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APPENDIX E
MONITORING WELL DEVELOPMENT LOGS

WELL DEVELOPMENT DATA
MW-A

SITE LOCATION: 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	11/8/18 11:55	11/8/18 12:20	11/8/18 12:38	11/8/18 12:43	11/8/18 12:46	11/8/18 12:50	11/8/18 13:00	11/8/18 13:08
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump
PID (PPM)	535	NM	NM	NM	NM	NM	NM	NM
DEPTH OF WELL (FT)	11.14	NM	NM	NM	NM	11.70	NM	NM
STATIC WATER LEVEL (SWL) FT	LNAPL 4.45 SWL 4.81	NM	NM	NM	NM	LNAPL 4.48 SWL 4.60	NM	NM
VOLUME EVACUATED (GAL)	0	0.4	0.2	0.3	0.2	0.3	0.3	0.3
TOTAL VOLUME EVACUATED (GAL)	0	0.4	0.6	0.9	1.1	1.4	1.7	2.0
TEMPERATURE (°C)	NM	NM	24.1	24.7	25.0	25.3	24.2	24.9
pH	NM	NM	6.73	6.65	6.68	6.68	6.79	6.78
ORP (mV)	NM	NM	39	0	-23	-31	-32	-33
CONDUCTIVITY (µs/cm)	NM	NM	Meter out of battery	Meter out of battery	Meter out of battery	Meter out of battery	Meter out of battery	Meter out of battery
VISUAL OBSERVATION	NM	Brown, Muddy, LNAPL, Solvent-type Odor	Brown, Muddy, LNAPL, Solvent-type Odor	Brown, Cloudy, Sheen, Solvent-type Odor	Brown, Cloudy, Sheen, Solvent-type Odor	Brown, Cloudy, Sheen, Solvent-type Odor	Brown, Cloudy, Sheen, Solvent-type Odor	Brown, Cloudy, Sheen, Solvent-type Odor

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-B

SITE LOCATION: 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	11/8/18 09:26	11/8/18 09:30	11/8/18 09:42	11/8/18 09:54	11/8/18 09:59	11/8/18 10:03	11/8/18 10:08	11/8/18 10:13
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump
PID (PPM)	3.7	NM	NM	NM	NM	NM	NM	NM
DEPTH OF WELL (FT)	10.2	NM	NM	NM	10.68	NM	NM	10.68
STATIC WATER LEVEL (SWL) FT	3.42	NM	NM	NM	3.43	NM	NM	3.44
VOLUME EVACUATED (GAL)	0	0.4	0.2	0.4	0.2	0.3	0.2	0.3
TOTAL VOLUME EVACUATED (GAL)	0	0.4	0.6	1.0	1.2	1.5	1.7	2.0
TEMPERATURE (°C)	NM	NM	22.1	21.6	21.5	21.8	21.2	21.8
pH	NM	NM	6.54	6.60	6.58	6.57	6.65	6.62
ORP (mV)	NM	NM	-16	-26	-40	-52	-59	-60
CONDUCTIVITY (µs/cm)	NM	NM	Meter out of battery	Meter out of battery	Meter out of battery	Meter out of battery	Meter out of battery	Meter out of battery
VISUAL OBSERVATION	NM	Muddy w/Silt No odor	Brown, Muddy w/Silt	Brown, Cloudy	Brown, Cloudy	Cloudy/Clear	Cloudy/Clear	Clear

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-C

SITE LOCATION: 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	11/8/18 6:40	11/8/18 6:58	11/8/18 7:01	11/8/18 7:08	11/8/18 7:14	11/8/18 7:20	11/8/18 7:25	11/8/18 7:32	11/8/18 7:39
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump
PID (PPM)	15,000+	NM	NM	NM	NM	NM	NM	NM	11,690
DEPTH OF WELL (FT)	8.45	NM	8.91	NM	NM	NM	8.91	NM	NM
STATIC WATER LEVEL (SWL) FT	3.84	NM	4.12	NM	NM	NM	5.12	NM	NM
VOLUME EVACUATED (GAL)	0	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.2
TOTAL VOLUME EVACUATED (GAL)	0	0.2	0.4	0.7	0.9	1.2	1.5	1.8	2.0
TEMPERATURE (°C)	NM	NM	NM	20.7	21.1	21.4	21.3	21.2	21.3
pH	NM	NM	NM	6.31	6.32	6.35	6.33	6.37	6.35
ORP (mV)	NM	NM	NM	-34	-57	-79	-82	-80	-88
CONDUCTIVITY (µs/cm)	NM	NM	NM	1540	1440	1430	1420	1340	1320
VISUAL OBSERVATION	Slight Oily Texture	Sediment and Water Black in Color, Petroleum-type Sheen on Purge Water Surface	Black, Cloudy w/Sheen	Black, Cloudy w/Sheen	Gray, Cloudy, Oil Globules on Purge Water Surface	Gray, Cloudy, Oil Globules	Gray, Cloudy, Oil Globules	Black, Cloudy, Oil Globules	Gray, Cloudy, Oil Globules

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-D

SITE LOCATION: 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	11/8/18 7:56	11/8/18 8:04	11/8/18 8:12	11/8/18 8:16	11/8/18 8:23	11/8/18 8:27	11/8/18 8:34	11/8/18 8:38	11/8/18 8:42
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump
PID (PPM)	451	NM	NM	NM	NM	NM	NM	NM	184.9
DEPTH OF WELL (FT)	8.28	NM	NM	NM	8.31	NM	NM	NM	8.31
STATIC WATER LEVEL (SWL) FT	3.54	NM	NM	NM	3.57	NM	NM	NM	3.55
VOLUME EVACUATED (GAL)	0	0.4	0.2	0.3	0.3	0.2	0.4	0.2	0.2
TOTAL VOLUME EVACUATED (GAL)	0	0.4	0.6	0.9	1.2	1.4	1.8	2.0	2.2
TEMPERATURE (°C)	NM	NM	21.5	21.9	21.5	21.6	21.6	21.5	21.6
pH	NM	NM	6.48	6.43	6.36	6.34	6.30	6.30	6.32
ORP (mV)	NM	NM	-82	-85	-84	-83	-76	-74	-72
CONDUCTIVITY (µs/cm)	NM	NM	1450	1280	1910	1640	1540	1670	1620
VISUAL OBSERVATION	NM	Black, Muddy w/Sediment, Odor	Black, Muddy, Odor	Black, Cloudy, Odor	Gray, Cloudy, Odor	Black, Cloudy, Odor	Black, Cloudy, Odor	Gray, Cloudy, Odor	Gray, Cloudy, Odor

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-E

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-21-18 11:50	12-21-18 12:06	12-21-18 12:12	12-21-18 12:18	12-21-18 12:33	12-21-18 12:38	12-21-18 12:45			
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump			
PID/FID (PPM)	15,000 (over)	NM	274	NM	51.8	NM	13.1			
DEPTH OF WELL (FT)	12.30	NM	NM	NM	NM	NM	12.30			
STATIC WATER LEVEL (SWL) (FT)	4.94	6.59	9.62	11.35	10.25	11.87	12.30			
VOLUME EVACUATED (GAL)	0	0.5	0.4	0.6	0	0.8	0.5			
TOTAL VOLUME EVACUATED (GAL)	0	0.5	0.9	1.5	1.5	2.3	2.8			
TEMPERATURE (°C)	NM	22.3	22.9	23.4	23.3	23.7	23.7			
pH	NM	7.22	7.20	7.17	7.11	7.15	7.17			
ORP (mV)	NM	-3	-5	8	28	28	16			
CONDUCTIVITY (µs/cm)	NM	310	310	310	310	310	310			
VISUAL OBSERVATIONS	None	Cloudy/ Clear Solvent-type Odor	Clear Solvent-type Odor	Clear Solvent-type Odor	Clear Solvent-type Odor	Clear Solvent - type Odor	Clear Solvent - type Odor			

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-F

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-21-18 10:34	12-21-18 10:50	12-21-18 10:47	12-21-18 11:03	12-21-18 11:13	12-21-18 11:33				
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump				
PID/FID (PPM)	659	NM	NM	NM	NM	0.3				
DEPTH OF WELL (FT)	12.52	NM	NM	NM	NM	12.55				
STATIC WATER LEVEL (SWL) (FT)	5.04	9.90	11.35	12.33	11.90	12.10				
VOLUME EVACUATED (GAL)	0	0.5	0.5	0.3	0.2	0.1				
TOTAL VOLUME EVACUATED (GAL)	0	0.5	1.0	1.3	1.5	1.6				
TEMPERATURE (°C)	NM	21.2	22.6	22.5	22.1	22.4				
pH	NM	7.17	7.04	7.04	7.09	6.95				
ORP (mV)	NM	-37	-43	-74	-72	-94				
CONDUCTIVITY (µs/cm)	NM	380	370	350	340	340				
VISUAL OBSERVATIONS	None	Muddy	Cloudy/ Clear	Muddy Purge to Dry	Cloudy Purge to Dry	Cloudy Purge to Dry				

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-G

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-21-18 9:08	12-21-18 9:21	12-21-18 9:26	12-21-18 9:32	12-21-18 9:36	12-21-18 9:43	12-21-18 9:53	12-21-18 10:00	12-21-18 10:10	
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	
PID/FID (PPM)	14.6	NM	NM	NM	NM	NM	NM	NM	0.8	
DEPTH OF WELL (FT)	10.46	NM	NM	NM	NM	10.46	NM	NM	NM	
STATIC WATER LEVEL (SWL) (FT)	4.96	NM	NM	NM	NM	7.90	NM	NM	NM	
VOLUME EVACUATED (GAL)	0	0.2	0.5	0.5	0.5	0.5	0.6	0.6	NM	
TOTAL VOLUME EVACUATED (GAL)	0	0.2	0.7	1.2	1.7	2.2	2.8	3.4	NM	
TEMPERATURE (°C)	NM	19.1	20.2	20.9	20.9	21.0	21.0	21.1	NM	
pH	NM	6.67	6.65	6.64	6.54	6.53	6.50	6.48	NM	
ORP (mV)	NM	-71	-79	-84	-88	-90	-90	-94	NM	
CONDUCTIVITY (µs/cm)	NM	410	410	400	380	360	370	370	NM	
VISUAL OBSERVATIONS	Trace NAPL	Muddy, NAPL on purge water surface	Cloudy	Cloudy	Cloudy, LNAPL	Cloudy	Cloudy	Cloudy/ Clear	None	

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-H

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-21-18 6:24	12-21-18 6:37	12-21-18 6:43	12-21-18 6:48	12-21-18 6:53	12-21-18 7:03	12-21-18 7:08	12-21-18 7:13	12-21-18 7:17	
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	
PID/FID (PPM)	0.5	NM	NM	NM	NM	NM	NM	NM	NM	
DEPTH OF WELL (FT)	10.45	NM	NM	NM	NM	11.55	NM	NM	11.55	
STATIC WATER LEVEL (SWL) (FT)	4.64	NM	NM	NM	NM	4.89	NM	NM	4.86	
VOLUME EVACUATED (GAL)	0	0.5	0.5	1.0	0.5	0.5	0.5	0.5	NM	
TOTAL VOLUME EVACUATED (GAL)	0	0.5	1.0	2.0	2.5	3.0	3.5	4.0	NM	
TEMPERATURE (°C)	NM	20.4	22.0	22.1	22.4	22.4	22.4	22.4	NM	
pH	NM	6.93	6.78	6.72	6.65	6.67	6.65	6.61	NM	
ORP (mV)	NM	-70	-84	-85	-92	-99	-95	-97	NM	
CONDUCTIVITY (µs/cm)	NM	390	390	370	380	380	370	360	NM	
VISUAL OBSERVATIONS	Muddy	Cloudy	Cloudy/ Clear	Cloudy/ Clear	Cloudy/ Clear	Cloudy	Cloudy/ Clear	Cloudy/ Clear	None	

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-I

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-21-18 7:40	12-21-18 7:55	12-21-18 8:02	12-21-18 8:07	12-21-18 8:15	12-21-18 8:19	12-21-18 8:24	12-21-18 8:29	12-21-18 8:34	12-21-18 8:37
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump
PID/FID (PPM)	0.4	NM	NM	NM	NM	NM	NM	NM	NM	NM
DEPTH OF WELL (FT)	9.43	NM	NM	NM	NM	NM	NM	NM	NM	NM
STATIC WATER LEVEL (SWL) (FT)	3.31	NM	NM	NM	NM	7.10	NM	NM	NM	5.94
VOLUME EVACUATED (GAL)	0	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	NM
TOTAL VOLUME EVACUATED (GAL)	0	0.2	0.4	0.7	1.0	1.2	1.4	1.7	2.0	NM
TEMPERATURE (°C)	NM	14.2	13.6	13.5	13.0	13.1	12.6	12.3	12.5	NM
pH	NM	7.18	7.06	7.11	7.11	7.11	7.18	7.19	7.22	NM
ORP (mV)	NM	-38	-19	-32	-49	-75	-46	-59	-21	NM
CONDUCTIVITY (µs/cm)	NM	480	520	530	530	540	530	550	550	NM
VISUAL OBSERVATIONS	None	Cloudy/ Clear	Cloudy/ Clear	Clear	Clear	Clear	Clear	Clear	Clear	None

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-J

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-20-18 14:00	12-20-18 14:05	12-20-18 14:10	12-20-18 14:15	12-20-18 14:20	12-20-18 14:25	12-20-18 14:30			
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump			
PID/FID (PPM)	0.6	NM	NM	NM	NM	NM	0.0			
DEPTH OF WELL (FT)	11.55	NM	NM	NM	11.55	NM	11.55			
STATIC WATER LEVEL (SWL) (FT)	6.43	NM	NM	NM	7.81	NM	7.95			
VOLUME EVACUATED (GAL)	0	0.5	0.25	0.25	0.25	0.25	0.25			
TOTAL VOLUME EVACUATED (GAL)	0	0.5	0.75	1.0	1.25	1.5	1.75			
TEMPERATURE (°C)	NM	12.2	12.4	13.3	13.2	13.1	13.2			
pH	NM	7.26	7.36	7.41	7.40	7.34	7.37			
ORP (mV)	NM	-70	-24	-17	-21	-21	-5			
CONDUCTIVITY (µs/cm)	NM	460	470	480	480	480	480			
VISUAL OBSERVATIONS	Soft Bottom	Brown, Turbid	Slightly Turbid	Yellow Hue	Slightly Turbid	Slightly Turbid	Yellow Hue			

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-K

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-20-18 13:00	12-20-18 13:05	12-20-18 13:10	12-20-18 13:15	12-20-18 13:20	12-20-18 13:25	12-20-18 13:30	12-20-18 13:35		
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump		
PID/FID (PPM)	5.2	NM	NM	NM	NM	NM	NM	5.7		
DEPTH OF WELL (FT)	14.80	NM	NM	NM	NM	14.95	NM	14.95		
STATIC WATER LEVEL (SWL) (FT)	5.46	NM	NM	NM	NM	5.60	NM	5.61		
VOLUME EVACUATED (GAL)	0	0.5	0.5	1.0	1.0	0.5	0.25	0.25		
TOTAL VOLUME EVACUATED (GAL)	0	0.5	1.0	2.0	3.0	3.5	3.75	4.0		
TEMPERATURE (°C)	NM	9.2	8.9	8.6	8.0	8.0	8.0	7.9		
pH	NM	8.08	7.85	7.67	7.50	7.40	7.30	7.28		
ORP (mV)	NM	-31	-63	-71	-81	-73	-75	-77		
CONDUCTIVITY (µs/cm)	NM	250	220	190	190	200	200	190		
VISUAL OBSERVATIONS	Soft Bottom, Slight Petroleum-type Odor	Brown, Turbid, Slight Petroleum-type Odor and Sheen	Brown, Turbid with Sheen, Slight Petroleum-type Odor	Slightly Turbid	Clear	Brown, Turbid	Slightly Turbid	Clear		

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-L

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-20-18 11:20	12-20-18 11:30	12-20-18 11:35	12-20-18 11:40	12-20-18 11:45	12-20-18 11:50	12-20-18 11:55			
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump			
PID/FID (PPM)	0.1	NM	NM	NM	NM	NM	0.0			
DEPTH OF WELL (FT)	14.20	NM	NM	NM	14.85	NM	14.85			
STATIC WATER LEVEL (SWL) (FT)	6.73	NM	NM	NM	6.81	NM	6.79			
VOLUME EVACUATED (GAL)	0	0.5	0.5	0.5	0.5	0.5	0.5			
TOTAL VOLUME EVACUATED (GAL)	0	0.5	1.0	1.5	2.0	2.5	3.0			
TEMPERATURE (°C)	NM	9.2	9.5	9.7	10.0	10.0	10.0			
pH	NM	7.43	7.29	7.25	7.21	7.19	7.17			
ORP (mV)	NM	-28	-39	-44	-47	-48	-48			
CONDUCTIVITY (µs/cm)	NM	360	390	390	390	390	390			
VISUAL OBSERVATIONS	Soft Bottom	Brown, Turbid	Slightly Turbid	Slightly Turbid	Brown, Turbid	Slightly Turbid	Slightly Turbid			

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-M

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-20-18 10:15	12-20-18 10:20	12-20-18 10:25	12-20-18 10:30	12-20-18 10:35	12-20-18 10:40	12-20-18 10:45			
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump			
PID/FID (PPM)	0.1	NM	NM	NM	NM	NM	0.0			
DEPTH OF WELL (FT)	13.69	NM	NM	NM	13.80	NM	13.80			
STATIC WATER LEVEL (SWL) (FT)	7.37	NM	NM	NM	7.36	NM	7.35			
VOLUME EVACUATED (GAL)	0	0.5	0.5	0.5	0.5	0.5	0.5			
TOTAL VOLUME EVACUATED (GAL)	0	0.5	1.0	1.5	2.0	2.5	3.0			
TEMPERATURE (°C)	NM	10.9	11.1	10.9	11.0	11.1	11.0			
pH	NM	7.87	7.71	7.58	7.59	7.59	7.57			
ORP (mV)	NM	22	-33	-47	-50	-50	-50			
CONDUCTIVITY (µs/cm)	NM	420	340	340	320	320	320			
VISUAL OBSERVATIONS	Soft Bottom	Brown, Turbid	Brown, Turbid	Yellow Hue	Brown, Turbid	Brown, Turbid	Yellow Hue			

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-N

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-20-18 15:00	12-20-18 15:20	12-20-18 15:25	12-20-18 15:30	12-20-18 15:35	12-20-18 15:40	12-20-18 15:45	12-20-18 15:50	12-20-18 15:55	12-20-18 16:00
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump
PID/FID (PPM)	5.4	NM	NM	NM	NM	NM	NM	NM	NM	11.4
DEPTH OF WELL (FT)	11.38	NM	NM	NM	11.43	NM	NM	NM	NM	11.43
STATIC WATER LEVEL (SWL) (FT)	4.95	NM	NM	NM	4.96	NM	NM	NM	NM	4.96
VOLUME EVACUATED (GAL)	0	0.25	0.25	0.25	0.5	0.5	0.5	0.5	0.25	0.5
TOTAL VOLUME EVACUATED (GAL)	0	0.25	0.5	0.75	1.25	1.75	2.25	2.75	3.0	3.5
TEMPERATURE (°C)	NM	16.1	16.1	15.8	16.2	16.1	16.1	16.1	16.1	16.2
pH	NM	7.58	7.48	7.48	7.43	7.40	7.37	7.30	7.26	7.24
ORP (mV)	NM	-30	-44	-48	-44	-47	-47	-47	-45	-45
CONDUCTIVITY (µs/cm)	NM	300	250	240	230	210	210	210	210	200
VISUAL OBSERVATIONS	Soft Bottom, Petroleum-type Odor, LNAPL 4.95 to 5.00	Petroleum-type Odor, Brown, Turbid	Clear	Clear	Hard Bottom, Brown, Turbid, Sheen	Clear, Slight Petroleum-type Odor	Clear, Slight Petroleum-type Odor, Sheen	Slightly Turbid, Slight Petroleum-type Odor, Sheen	Clear, Slight Petroleum-type Odor, Sheen	Clear, Slight Petroleum-type Odor, Sheen

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-O

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-19-18 14:00	12-19-18 14:15	12-19-18 14:20	12-19-18 14:25	12-19-18 14:30	12-19-18 14:35	12-19-18 14:40			
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump			
PID/FID (PPM)	0.1	NM	NM	NM	NM	NM	0.0			
DEPTH OF WELL (FT)	17.92	NM	NM	NM	17.92	NM	17.92			
STATIC WATER LEVEL (SWL) (FT)	6.69	NM	NM	NM	6.90	NM	6.73			
VOLUME EVACUATED (GAL)	0.0	0.5	0.5	0.5	0.25	0.25	0.25			
TOTAL VOLUME EVACUATED (GAL)	0.0	0.5	1.0	1.5	1.75	2.0	2.25			
TEMPERATURE (°C)	NM	10.0	9.9	9.9	9.8	9.5	9.7			
pH	NM	7.43	7.36	7.29	7.31	7.25	7.26			
ORP (mV)	NM	-179	-115	-138	-136	-103	-88			
CONDUCTIVITY (µs/cm)	NM	380	430	420	420	450	450			
VISUAL OBSERVATIONS	Soft Bottom, Slight Petroleum-type Odor	Brown, Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid			

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-P

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-19-18 12:10	12-19-18 12:22	12-19-18 12:26	12-19-18 12:30	12-19-18 12:38	12-19-18 12:43	12-19-18 12:47			
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump			
PID/FID (PPM)	0.0	NM	NM	NM	NM	NM	0.0			
DEPTH OF WELL (FT)	18.36	NM	NM	NM	19.22	NM	19.22			
STATIC WATER LEVEL (SWL) (FT)	7.64	NM	NM	NM	7.71	NM	7.72			
VOLUME EVACUATED (GAL)	0.0	0.5	0.5	0.5	0.5	0.25	0.25			
TOTAL VOLUME EVACUATED (GAL)	0.0	0.5	1.0	1.5	2.0	2.25	2.5			
TEMPERATURE (°C)	NM	10.2	10.1	9.9	10.2	10.2	10.3			
pH	NM	6.84	6.93	6.96	6.89	6.86	6.88			
ORP (mV)	NM	-52	-56	-62	-58	-60	-59			
CONDUCTIVITY (µs/cm)	NM	490	470	460	470	470	460			
VISUAL OBSERVATIONS	Soft Bottom	Brown, Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid			

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-Q

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-19-18 11:20	12-19-18 11:30	12-19-18 11:35	12-19-18 11:40	12-19-18 11:45	12-19-18 11:50	12-19-18 11:55			
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump			
PID/FID (PPM)	0.0	NM	NM	NM	NM	NM	0.0			
DEPTH OF WELL (FT)	14.85	NM	NM	NM	14.86	NM	14.86			
STATIC WATER LEVEL (SWL) (FT)	7.98	NM	NM	NM	7.98	NM	7.96			
VOLUME EVACUATED (GAL)	0.0	0.5	0.25	0.25	0.25	0.25	0.25			
TOTAL VOLUME EVACUATED (GAL)	0.0	0.5	0.75	1.0	1.25	1.5	1.75			
TEMPERATURE (°C)	NM	11.2	11.4	11.1	10.9	11.1	11.2			
pH	NM	7.01	6.97	6.95	6.95	6.94	6.93			
ORP (mV)	NM	-27	-29	-35	-40	-50	-52			
CONDUCTIVITY (µs/cm)	NM	510	480	470	460	450	450			
VISUAL OBSERVATIONS	Soft Bottom	Brown, Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid			

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-R

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-19-18 16:30	12-19-18 16:45	12-19-18 16:50	12-19-18 16:55	12-19-18 17:00	12-19-18 17:05	12-19-18 17:10			
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump			
PID/FID (PPM)	74.4	NM	NM	NM	NM	NM	2.5			
DEPTH OF WELL (FT)	11.80	NM	NM	NM	11.82	NM	11.82			
STATIC WATER LEVEL (SWL) (FT)	3.86	NM	NM	NM	3.93	NM	3.92			
VOLUME EVACUATED (GAL)	0.0	0.5	0.5	0.5	0.5	0.5	0.5			
TOTAL VOLUME EVACUATED (GAL)	0.0	0.5	1.0	1.5	2.0	2.5	3.0			
TEMPERATURE (°C)	NM	8.7	9.3	9.5	9.3	9.5	9.5			
pH	NM	7.27	7.21	7.19	7.20	7.21	7.20			
ORP (mV)	NM	-80	-59	-59	-57	-57	-57			
CONDUCTIVITY (µs/cm)	NM	630	610	610	610	610	610			
VISUAL OBSERVATIONS	Soft Bottom	Brown, Turbid	Slightly Turbid	Clear/ Cloudy	Slightly Turbid	Yellow Hue	Yellow Hue			

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-S

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-19-18 15:25	12-19-18 15:35	12-19-18 15:40	12-19-18 15:45	12-19-18 15:50	12-19-18 15:55	12-19-18 16:00			
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump			
PID/FID (PPM)	0.5	NM	NM	NM	NM	NM	0.0			
DEPTH OF WELL (FT)	11.65	NM	NM	NM	11.82	NM	11.82			
STATIC WATER LEVEL (SWL) (FT)	3.73	NM	NM	NM	3.75	NM	3.75			
VOLUME EVACUATED (GAL)	0.0	0.5	0.5	0.5	0.5	0.25	0.25			
TOTAL VOLUME EVACUATED (GAL)	0.0	0.5	1.0	1.5	2.0	2.25	2.5			
TEMPERATURE (°C)	NM	9.3	9.2	9.0	8.9	8.9	8.9			
pH	NM	7.30	7.26	7.19	7.22	7.20	7.19			
ORP (mV)	NM	-132	-84	-89	-90	-86	-87			
CONDUCTIVITY (µs/cm)	NM	540	540	550	550	550	550			
VISUAL OBSERVATIONS	Soft Bottom	Brown, Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid	Slightly Turbid			

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
MW-T

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-20-18 9:05	12-20-18 9:10	12-20-18 9:20	12-20-18 9:25	12-20-18 9:30	12-20-18 9:40	12-20-18 9:50	12-20-18 9:55		
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump		
PID/FID (PPM)	0.2	NM	NM	NM	NM	NM	NM	0.0		
DEPTH OF WELL (FT)	11.60	NM	NM	NM	11.66	NM	NM	11.66		
STATIC WATER LEVEL (SWL) (FT)	4.13	NM	NM	NM	10.71	NM	NM	10.35		
VOLUME EVACUATED (GAL)	0.0	0.25	0.25	0.5	0.25	0.25	0.25	0.25		
TOTAL VOLUME EVACUATED (GAL)	0.0	0.25	0.5	1.0	1.25	1.5	1.75	2.0		
TEMPERATURE (°C)	NM	11.0	10.5	9.9	9.3	9.3	9.4	9.3		
pH	NM	8.36	8.19	8.37	8.36	8.37	8.42	8.41		
ORP (mV)	NM	-66	-75	3	11	14	12	14		
CONDUCTIVITY (µs/cm)	NM	380	350	340	340	340	330	330		
VISUAL OBSERVATIONS	Soft Bottom	Petroleum-type Sheen, Brown, Turbid	Petroleum-type Sheen, Brown, Turbid	Petroleum-type Sheen, Slightly Turbid	Petroleum-type Sheen, Slightly Turbid	Petroleum-type Sheen, Slightly Turbid	Petroleum-type Sheen, Clear Purged to Dry	Petroleum-type Sheen, Clear Purged to Dry		

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
TB-11

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-20-18 12:00	12-20-18 12:10	12-20-18 12:15	12-20-18 12:20	12-20-18 12:25	12-20-18 12:30	12-20-18 12:35	12-20-18 12:40		
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump		
PID/FID (PPM)	0.0	NM	NM	NM	NM	NM	NM	0.0		
DEPTH OF WELL (FT)	14.28	NM	NM	NM	14.28	NM	NM	14.28		
STATIC WATER LEVEL (SWL) (FT)	9.13	NM	NM	NM	10.60	NM	NM	9.41		
VOLUME EVACUATED (GAL)	0	0.5	0.5	0.5	0.25	0.25	0.25	0.25		
TOTAL VOLUME EVACUATED (GAL)	0	0.5	1.0	1.5	1.75	2.0	2.25	2.5		
TEMPERATURE (°C)	NM	10.3	10.1	10.3	10.6	10.9	11.1	11.2		
pH	NM	7.20	7.24	7.36	7.35	7.36	7.35	7.35		
ORP (mV)	NM	-49	-11	-4	-34	-38	-39	-40		
CONDUCTIVITY (µs/cm)	NM	320	380	380	380	380	380	380		
VISUAL OBSERVATIONS	Soft Bottom	Brown, Turbid	Brown, Turbid	Brown, Turbid	Brown, Turbid	Brown, Turbid	Brown, Turbid	Slightly Turbid		

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

WELL DEVELOPMENT DATA
TB-18

SITE LOCATION: 415 and 441 Chandler Street, Jamestown, New York JOB#: 5529S-18

DATE/ TIME	12-19-18 10:05	12-19-18 10:25	12-19-18 10:30	12-19-18 10:33	12-19-18 10:37	12-19-18 10:42	12-19-18 10:47			
EVACUATION METHOD	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump			
PID/FID (PPM)	0.0	NM	NM	NM	NM	NM	0.0			
DEPTH OF WELL (FT)	14.93	NM	NM	NM	14.93	NM	14.93			
STATIC WATER LEVEL (SWL) (FT)	7.95	NM	NM	NM	8.02	NM	8.08			
VOLUME EVACUATED (GAL)	0	0.3	0.35	0.3	0.25	0.25	0.25			
TOTAL VOLUME EVACUATED (GAL)	0	0.3	0.65	0.95	1.20	1.45	1.70			
TEMPERATURE (°C)	NM	10.1	10.1	9.2	9.2	9.2	9.2			
pH	NM	6.76	6.86	6.88	6.94	6.94	6.94			
ORP (mV)	NM	3	-4	-20	-25	-32	-35			
CONDUCTIVITY (µs/cm)	NM	500	580	600	600	600	600			
VISUAL OBSERVATIONS	Soft Bottom	Brown, Turbid	Slightly Turbid	Slightly Turbid	Hard Bottom, Slight Turbidity	Slightly Turbid	Slightly Turbid			

LEGEND: NM = Not Measured

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

APPENDIX F
GROUNDWATER SAMPLING LOGS

NOVEMBER 8, 2018
GROUNDWATER SAMPLING LOGS

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-A

SECTION 1 - SITE INFORMATION

SITE LOCATION: 441 Chandler Street **JOB #:** 5529S-18

Jamestown, New York **DATE :** 11/8/2018

SAMPLE COLLECTOR(S): C. Hampton

WEATHER CONDITIONS: (indoors) **PID IN WELL (PPM)**: 52.3 **LNAPL** 0.36' **DNAPL** ND

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 11.70 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 4.81 (MEASURED FROM T.O.C.)

T.O.C. TO GROUND SURFACE [FT]: -0.19

THICKNESS OF WATER COLUMN [FT]: 7.24

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.28 **CASING DIA.:** 1"

CALCULATIONS:

CASING DIA. (FT)	WELL CONSTANT(GAL/FT)
¾" (0.0625)	0.023
1" (0.0833)	0.041
1¼" (0.1041)	0.063
2" (0.1667)	0.1632
3" (0.250)	0.380
4" (0.3333)	0.6528
4½" (0.375)	0.826
6" (0.5000)	1.4688
8" (0.666)	2.611

CALCULATIONS
VOL. OF H_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 0.85

ACTUAL VOLUME PURGED [GAL]: 2.8 (volume indicates well development and purge)

PURGE METHOD: Peristaltic Pump **PURGE START:** 11:55 **END:** 13:22

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-A	11/8/18 @ 13:25	Bailer	Halocarbons

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uS/cm)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
4.46	24.9	6.78	(meter out of battery)	N/M	N/M	-33	Cloudy with Sheen

N/M = Not Measured
ND = Not Detected

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-B

SECTION 1 - SITE INFORMATION

SITE LOCATION: 441 Chandler Street **JOB #:** 5529S-18

Jamestown, New York **DATE :** 11/8/2018

SAMPLE COLLECTOR(S): C. Hampton

WEATHER CONDITIONS: (indoors) **PID IN WELL (PPM)**: 3.7 **LNAPL** ND **DNAPL** ND

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 10.68 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 3.41 (MEASURED FROM T.O.C.)

T.O.C. TO GROUND SURFACE [FT]: 0.31

THICKNESS OF WATER COLUMN [FT]: 7.44

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.30 **CASING DIA.:** 1"

CALCULATIONS:

CASING DIA. (FT)	WELL CONSTANT(GAL/FT)
¾" (0.0625)	0.023
1" (0.0833)	0.041
1¼" (0.1041)	0.063
2" (0.1667)	0.1632
3" (0.250)	0.380
4" (0.3333)	0.6528
4½" (0.375)	0.826
6" (0.5000)	1.4688
8" (0.666)	2.611

CALCULATIONS
VOL. OF H_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 0.89

ACTUAL VOLUME PURGED [GAL]: 2.6 (volume indicates well development and purge)

PURGE METHOD: Peristaltic Pump **PURGE START:** 09:26 11:15 **END:** 10:13 11:30

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-B	11/8/18 @ 11:35	Bailer	Halocarbons

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uS/cm)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
3.41	21.8	6.62	(meter out of battery)	N/M	N/M	-60	Cloudy

N/M = Not Measured
ND = Not Detected

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-C

SECTION 1 - SITE INFORMATION

SITE LOCATION: 441 Chandler Street **JOB #:** 5529S-18

Jamestown, New York **DATE :** 11/8/2018

SAMPLE COLLECTOR(S): C. Hampton

WEATHER CONDITIONS: (indoors) **PID IN WELL (PPM)**: 12.8 **LNAPL** ND **DNAPL** ND

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 8.91 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 3.81 (MEASURED FROM T.O.C.)

T.O.C. TO GROUND SURFACE [FT]: 0.31

THICKNESS OF WATER COLUMN [FT]: 5.1

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.21 **CASING DIA.:** 1"

CALCULATIONS:

CASING DIA. (FT)	WELL CONSTANT(GAL/FT)
¾" (0.0625)	0.023
1" (0.0833)	0.041
1¼" (0.1041)	0.063
2" (0.1667)	0.1632
3" (0.250)	0.380
4" (0.3333)	0.6528
4½" (0.375)	0.826
6" (0.5000)	1.4688
8" (0.666)	2.611

CALCULATIONS
VOL. OF H_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 0.63

ACTUAL VOLUME PURGED [GAL]: 2.4 (volume indicates well development and purge)

PURGE METHOD: Peristaltic Pump **PURGE START:** 06:40 10:15 **END:** 07:39 10:30

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-C	11/8/18 @ 10:35	Bailer	Halocarbons

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uS/cm)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
3.81	21.3	6.35	1320	N/M	N/M	-88	Cloudy / Gray

N/M = Not Measured
ND = Not Detected

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-D

SECTION 1 - SITE INFORMATION

SITE LOCATION: 441 Chandler Street **JOB #:** 5529S-18

Jamestown, New York **DATE :** 11/8/2018

SAMPLE COLLECTOR(S): C. Hampton

WEATHER CONDITIONS: (indoors) **PID IN WELL (PPM)**: 10.7 **LNAPL** ND **DNAPL** ND

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 8.31 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 3.56 (MEASURED FROM T.O.C.)

T.O.C. TO GROUND SURFACE [FT]: 0.28

THICKNESS OF WATER COLUMN [FT]: 4.75

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.19 **CASING DIA.:** 1"

CALCULATIONS:

CASING DIA. (FT)	WELL CONSTANT(GAL/FT)
¾" (0.0625)	0.023
1" (0.0833)	0.041
1¼" (0.1041)	0.063
2" (0.1667)	0.1632
3" (0.250)	0.380
4" (0.3333)	0.6528
4½" (0.375)	0.826
6" (0.5000)	1.4688
8" (0.666)	2.611

CALCULATIONS
VOL. OF H_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 0.58

ACTUAL VOLUME PURGED [GAL]: 2.5 (volume indicates well development and purge)

PURGE METHOD: Peristaltic Pump **PURGE START:** 07:56 10:45 **END:** 08:42 11:00

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-D	11/8/18 @ 11:05	Bailer	Halocarbons

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uS/cm)	TURBIDITY (NTU)	DO (mg/L)	ORP (mV)	VISUAL
3.56	21.6	6.32	1620	N/M	N/M	-72	Cloudy, Gray/Black

N/M = Not Measured
ND = Not Detected

DECEMBER 26 AND 27, 2018

GROUNDWATER SAMPLING LOGS

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-A

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/27/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): 55 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 6.9 – 11.9 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 5.12 / 12-27-18

WELL DEPTH [FT BGS]: 11.9 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.9

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: 0.10’ **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 360 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** *

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
09:24	Start	*	N/M						0
09:27	360	*	1.85	54	8.1	0.843	6.89	23.83	1,080
09:32	360	*	0.34	-20	0.8	0.865	6.66	23.96	2,880
09:37	360	*	0.28	-40	0.0	0.872	6.63	24.02	4,680
09:42	360	*	0.25	-51	0.0	0.875	6.64	24.09	6,480
09:47	360	*	0.24	-57	0.0	0.876	6.63	24.02	8,280
09:52	360	*	0.23	-60	0.0	0.876	6.64	24.06	10,080

SAMPLE OBSERVATIONS: Clear

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-A	12-27-18 / 09:53	Peristaltic Pump	Halocarbons

N/M = Not Measured

* = 1” ID well, can’t mSe mini probe while pumping due to LNAPL

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-B

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/27/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): N/M **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 6.0 – 11.0 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 3.93 / 12-27-18

WELL DEPTH [FT BGS]: 11.0 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.0
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 360 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 4.24

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
10:45	Start	N/M	N/M						0
10:48	360	4.23	1.56	8	69.8	0.821	6.83	21.36	1,080
10:53	360	4.23	0.33	-45	50.4	0.821	6.89	20.56	2,880
10:58	360	4.24	0.30	-60	23.5	0.824	6.91	20.44	4,680
11:03	360	4.24	0.27	-68	11.2	0.825	6.92	20.30	6,480
11:08	360	4.24	0.25	-71	9.1	0.826	6.92	20.38	8,280

SAMPLE OBSERVATIONS: Clear

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-B	12-27-18 / 11:09	Peristaltic Pump	Halocarbons

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-C

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/27/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): 2.5 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 4.2 – 9.2 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 4.71 / 12-27-18

WELL DEPTH [FT BGS]: 9.2 **DEPTH OF PUMP INTAKE [FT BGS]:** ~7.5
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 110 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 6.11

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
07:48	-	4.89	N/M						0
08:00	180	7.13	7.00	-78	165	1.51	6.61	19.40	360
08:08	110	7.45	6.39	-87	153	1.51	6.59	19.34	1,240
08:18	110	6.11	5.55	-92	136	1.50	6.55	19.31	2,340
08:23	110	6.11	5.08	-94	128	1.48	6.54	19.24	2,890
08:28	110	6.11	4.78	-96	114	1.47	6.54	19.24	3,440
08:33	110	6.11	4.55	-97	109	1.46	6.53	19.24	3,990
08:38	110	6.11	4.48	-97	103	1.45	6.53	19.22	4,540

SAMPLE OBSERVATIONS: Clear

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-C	12-27-18 / 08:40	Peristaltic Pump	VOCs, SVOCs, Metals, PCB, CN

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-D

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/27/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): 35.5 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 3.6 – 8.6 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 4.48 / 12-27-18

WELL DEPTH [FT BGS]: 8.6 **DEPTH OF PUMP INTAKE [FT BGS]:** ~7
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 250 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 4.82

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
09:24	-	4.65	N/M						0
09:35	220	4.82	0.46	-109	61.4	2.47	6.83	20.26	2,420
09:40	250	4.82	0.40	-146	10.7	2.46	6.81	20.26	3,670
09:45	250	4.82	0.22	-141	5.7	2.40	6.82	20.26	4,920
09:50	250	4.82	0.16	-137	4.2	2.40	6.82	20.29	6,170
09:55	250	4.82	0.18	-134	3.5	2.40	6.82	20.29	7,420

SAMPLE OBSERVATIONS: Clear

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-D	12-27-18 / 10:00	Peristaltic Pump	VOCs, SVOCs, Metals, PCB, CN

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-E

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/27/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): 4,500 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 2”

SCREENED INTERVAL [FT BGS]: 10.6 – 12.6 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 5.01 / 12-27-18

WELL DEPTH [FT BGS]: 12.6 **DEPTH OF PUMP INTAKE [FT BGS]:** ~11.6

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 320 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 11.11

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
08:38	Start	N/M	N/M						0
08:40	320	6.66	5.52	-44	41.3	0.903	6.93	22.84	640
08:45	320	8.30	4.48	-61	28.4	0.860	6.85	22.55	2,240
08:50	320	9.88	4.12	-45	19.4	0.854	6.83	23.70	3,840
08:55	320	11.11	3.80	-22	14.6	0.857	6.83	23.73	5,440

SAMPLE OBSERVATIONS: Clear

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-E	12-27-18 / 08:56	Peristaltic Pump	Halocarbons

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-F

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/27/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): 2,570 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 2”

SCREENED INTERVAL [FT BGS]: 11.1 – 12.8 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 5.05 / 12-27-18

WELL DEPTH [FT BGS]: 12.8 **DEPTH OF PUMP INTAKE [FT BGS]:** ~11.8
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 280 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 10.22

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
07:21	Start	N/M	N/M						0
07:23	320	7.30	3.78	-40	88.9	1.63	6.89	20.65	640
07:28	280	8.85	3.43	-54	47.6	1.63	7.00	21.52	2,040
07:33	280	10.05	3.41	-43	38.7	1.62	7.08	21.92	3,240
Well dry. Lowered suction to bottom, pumped out well. Purge complete @ 07:38. Recharge until 10:30									
10:30	0	10.22	N/M						
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-F	12-27-18 / 10:30	Peristaltic Pump	Halocarbons

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-G

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/27/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): 15 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 4.7 – 10.7 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 5.00 / 12-27-18

WELL DEPTH [FT BGS]: 10.7 **DEPTH OF PUMP INTAKE [FT BGS]:** ~9.5

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: 0.05’ **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 320 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** *

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
07:53	Start	*	N/M						0
07:55	320	*	1.14	-53	>1000	2.83	6.93	20.73	640
08:00	320	*	0.29	-69	894	2.76	6.83	20.83	2,240
08:05	320	*	0.21	-80	356	2.72	6.79	20.89	3,840
08:10	320	*	0.19	-86	492	2.71	6.78	20.87	5,440
08:16	320	*	0.16	-90	201	2.71	6.75	20.93	7,360
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-G	12-27-18 / 08:17	Peristaltic Pump	Halocarbons

N/M = Not Measured

* = 1” ID well, can’t mSe mini probe while pumping due to LNAPL

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-H

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/27/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): 1.0 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 5.8 – 11.8 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 4.84 / 12-27-18

WELL DEPTH [FT BGS]: 11.8 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.3

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 400 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 5.12

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
06:45	0	4.98	N/M						0
07:03	400	5.12	1.14	-95	48.1	1.32	6.75	21.69	7,200
07:08	400	5.12	1.63	-99	45.0	1.32	6.74	21.83	9,200
07:13	400	5.12	1.75	-101	37.0	1.30	6.73	21.91	11,200
07:18	400	5.12	2.03	-103	15.5	1.29	6.77	21.98	13,200
07:23	400	5.12	2.07	-103	9.8	1.29	6.72	22.03	15,200

SAMPLE OBSERVATIONS: Clear

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-H	12-27-18 / 07:25	Peristaltic Pump	Halocarbons, Metals

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-I

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 0.8 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 3.7 – 9.7 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 4.79 / 12-26-18

WELL DEPTH [FT BGS]: 9.7 **DEPTH OF PUMP INTAKE [FT BGS]:** ~8.5
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): N/A **STABILIZED DRAWDOWN WATER LEVEL [FT]:** N/A

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
15:04	Start	N/M	N/M						0
15:14	N/M	8.50 (dry)	N/M						575
15:16	0	Well Recharge							575
16:10	0	6.48	N/M						575
16:35	0	6.00	N/M						575
16:56	0	5.73	N/M						575
12/27/18 11:24	0	4.82	N/M						0
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-I	12-27-18 / 11:25	Peristaltic Pump	Halocarbons

N/O = Not Observed
N/M = Not Measured
N/A = Not Applicable

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-J

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 0.1 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 5.9 – 11.9 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 6.32 / 12-26-18

WELL DEPTH [FT BGS]: 11.9 **DEPTH OF PUMP INTAKE [FT BGS]:** **N/M**
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 190 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 6.89

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
13:06	Start	N/M	N/M						0
13:12	440	7.20	3.85	105	458	0.918	7.61	10.41	2,640
13:16	160	6.93	1.12	72	203	0.870	7.30	11.71	3,280
13:20	200	6.92	0.89	58	175	0.867	7.20	11.18	4,080
13:25	200	6.90	0.53	38	110	0.857	7.11	11.33	5,080
13:32	190	6.90	0.35	20	65.0	0.856	7.08	11.22	6,410
13:38	190	6.90	0.32	14	55.5	0.859	7.08	11.07	7,550
13:43	190	6.89	0.30	14	52.0	0.857	7.09	11.03	8,500
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-J	12-26-18 / 13:44	Peristaltic Pump	Halocarbons

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-K

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/27/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~35°F, Partly Sunny

PID READING IN WELL HEADSPACE (PPM): 0.4 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 3.8 – 11.8 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 5.19 / 12-27-18

WELL DEPTH [FT BGS]: 11.8 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.3
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 320 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 5.49

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
10:39	-	5.41	N/M						0
10:46	320	5.49	1.45	-49	18.2	0.316	7.61	9.65	2,240
10:51	320	5.49	0.38	-102	7.8	0.277	7.36	8.52	3,840
10:56	320	5.49	0.26	-101	6.3	0.261	7.19	8.18	5,440
11:01	320	5.49	0.28	-93	4.6	0.252	7.08	7.99	7,040
11:06	320	5.49	0.28	-88	4.7	0.246	7.02	7.96	8,640
11:11	320	5.49	0.23	-83	4.1	0.241	6.96	7.85	10,240
11:16	320	5.49	0.19	-80	4.2	0.238	6.93	7.79	11,840
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-K	12-27-18 / 11:20	Peristaltic Pump	VOCs, SVOCs, Metals

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-L

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 0.0 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 5.8 – 11.8 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 6.32 / 12-26-18

WELL DEPTH [FT BGS]: 11.8 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.3

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 220 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 6.63

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
16:30	220	6.51	N/M						0
16:40	220	6.51	0.96	-39	535	0.612	6.71	9.75	2,200
16:45	220	6.51	0.84	-61	84.3	0.639	6.73	10.12	3,300
16:50	220	6.51	0.84	-65	34.7	0.645	6.73	10.10	4,400
16:55	220	6.51	0.76	-67	24.9	0.646	6.73	10.12	5,500
17:00	220	6.51	0.76	-68	22.1	0.648	6.73	10.13	6,600
17:05	220	6.51	0.75	-69	24.9	0.650	6.73	10.12	7,700

SAMPLE OBSERVATIONS: Clear

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-L	12-26-18 / 17:10	Peristaltic Pump	VOCs, SVOCs

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-N

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): N/M **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 5.9 – 11.9 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 4.62 / 12-26-18

WELL DEPTH [FT BGS]: 11.9 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.9

(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: 0.06’ **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 280 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** *

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
15:53	Start	*	N/M						0
15:56	280	*	1.38	7	138	0.464	6.95	15.14	840
16:01	280	*	0.51	-31	48.7	0.371	6.94	15.33	2,240
16:06	280	*	0.43	-38	18.3	0.355	6.82	15.60	3,640
16:11	280	*	0.35	-46	4.5	0.347	6.81	15.81	5,040
16:16	280	*	0.33	-48	2.0	0.343	6.80	15.95	6,440
16:21	280	*	0.31	-48	0.0	0.341	6.77	16.00	7,840
16:28	0	4.63	N/M						N/M
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-N	12-26-18 / 16:22	Peristaltic Pump	VOCs, SVOCs

N/M = Not Measured

* = 1” ID well, can’t mSe mini probe while pumping due to LNAPL

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-O

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 0.4 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 7.0 – 15.0 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 6.47 / 12-26-18

WELL DEPTH [FT BGS]: 15.0 **DEPTH OF PUMP INTAKE [FT BGS]:** ~14.0
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 330 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 7.01

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
09:28	Start	N/M	N/M						0
09:32	400	6.99	N/M						1,600
09:34	320	6.94	N/M						3,520
09:43	320	6.97	0.74	-191	82.4	0.684	7.00	10.40	6,400
09:50	320	6.98	0.38	-188	63.4	0.696	7.04	10.38	8,640
09:55	330	7.00	0.25	-185	71.3	0.703	7.09	10.35	10,290
10:00	330	7.01	0.19	-183	70.9	0.709	7.10	10.33	11,940

SAMPLE OBSERVATIONS: Slightly Turbid

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-O	12-26-18 / 10:01	Peristaltic Pump	VOCs, Metals, CN

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-P

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 0.0 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 6.0 – 16.0 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 7.35 / 12-26-18

WELL DEPTH [FT BGS]: 16.0 **DEPTH OF PUMP INTAKE [FT BGS]:** ~15.0
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 380 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 7.51

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
10:26	Start	N/M	N/M						0
10:30	420	7.45	6.67	116	249	0.479	7.36	10.37	1,680
10:35	370	7.46	4.92	118	109	0.481	7.35	10.65	3,530
10:40	370	7.47	3.94	113	74.3	0.484	7.34	10.86	5,380
10:45	380	7.48	3.22	107	47.8	0.489	7.33	11.00	7,280
10:50	380	7.50	2.68	100	32.6	0.492	7.31	11.12	9,180
10:55	380	7.50	2.40	95	21.9	0.496	7.28	11.14	11,080
11:00	380	7.51	2.09	88	12.8	0.500	7.29	11.21	12,980
11:05	380	7.51	1.97	84	18.5	0.502	7.27	11.28	14,880
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-P	12-26-18 / 11:06	Peristaltic Pump	VOCs, Metals, CN

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-Q

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 0.0 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 5.9 – 11.9 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 7.62 / 12-26-18

WELL DEPTH [FT BGS]: 11.9 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.4
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 400 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 7.78

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
10:31	400	7.78	N/M						0
10:40	400	7.78	1.78	-94	100	0.796	7.01	13.58	3,600
10:45	400	7.78	1.68	-102	57.9	0.788	7.01	14.02	5,200
10:52	400	7.78	0.68	-106	23.0	0.783	7.00	14.06	8,400
10:57	400	7.78	0.77	-107	7.0	0.782	7.00	14.04	10,400
11:02	400	7.78	0.82	-108	5.5	0.783	6.99	14.08	12,400

SAMPLE OBSERVATIONS: None

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-Q	12-26-18 / 11:05	Peristaltic Pump	VOC, Metals, CN

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-R

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 46.7 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 6.0 – 12.0 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 3.71 / 12-26-18

WELL DEPTH [FT BGS]: 12.0 **DEPTH OF PUMP INTAKE [FT BGS]:** ~11.0
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 3.98 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 400

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
11:50	Start	3.82	N/M						0
12:02	400	3.98	N/M						4,800
12:07	400	3.98	2.90	-27	42.7	1.34	6.97	12.09	6,800
12:12	400	3.98	0.48	-49	28.7	1.35	6.97	9.97	8,800
12:21	400	3.98	0.37	-56	24.3	1.35	6.96	10.05	12,400
12:26	400	3.98	0.25	-58	20.3	1.35	6.96	10.08	14,400
12:31	400	3.98	0.28	-59	16.1	1.35	6.96	10.08	16,400
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-R	12-26-18 / 12:35	Peristaltic Pump	VOCs, Metals, CN

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-S

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 0.2 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 6.0 – 12.0 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 3.51 / 12-26-18

WELL DEPTH [FT BGS]: 12.0 **DEPTH OF PUMP INTAKE [FT BGS]:** ~11.0
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 400 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 3.59

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
11:53	Start	N/M	N/M						0
11:56	340	N/M	N/M						1,020
12:00	400	3.57	0.83	-158	405	1.03	7.15	8.61	2,620
12:05	400	3.59	0.23	-143	38.8	1.03	7.10	8.72	4,620
12:10	480	3.59	0.07	-134	33.3	1.03	7.08	8.71	6,620
12:15	400	3.59	0.01	-132	101	1.03	7.07	8.85	9,020
12:20	400	3.59	0.00	-129	27.9	1.03	7.07	8.59	11,020
12:25	400	3.59	0.00	-125	13.2	1.03	7.05	8.55	13,020
12:30	400	3.59	0.00	-123	5.3	1.03	7.06	8.59	15,020
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-S	12-26-18 / 12:31	Peristaltic Pump	Metals, CN

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-T

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 0.4 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 5.9 – 11.9 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 4.00 / 12-26-18

WELL DEPTH [FT BGS]: 11.9 **DEPTH OF PUMP INTAKE [FT BGS]:** ~9.9
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 95 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 7.44

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
13:35	95	7.44	N/M						1,000
13:38	95	7.44	4.00	-45	756	0.485	7.65	7.21	1,285
13:43	95	7.85	3.85	-78	772	0.488	7.63	7.75	1,760
13:48	95	7.85	3.22	-87	746	0.458	7.62	7.87	2,235
13:53	95	7.85	2.75	-90	735	0.446	7.62	7.91	2,710
13:58	95	7.48	2.55	-91	626	0.448	7.60	7.94	3,185
14:03	95	7.48	2.56	-91	535	0.452	7.58	7.95	3,660
14:08	95	7.48	2.48	-92	543	0.454	7.56	7.96	4,135
14:13	95	7.48	2.27	-93	548	0.454	7.56	8.01	4,610

SAMPLE OBSERVATIONS: Cloudy/Clear - Sheen

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-T	12-26-18 / 14:15	Peristaltic Pump	VOCs, Metals, CN

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL TB-18

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 0.0 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 4.5 – 11.5 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 7.64 / 12-26-18

WELL DEPTH [FT BGS]: 11.5 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.0
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 300 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 8.25

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
09:36	300	7.64	N/M						0
09:46	300	8.25	N/M						3,000
09:50	300	8.25	3.04	12	150	1.06	7.00	9.64	4,200
09:53	300	8.25	1.38	-59	75.3	1.06	7.00	10.55	5,100
10:00	300	8.25	1.34	-70	59.4	1.06	7.00	10.62	7,200
10:05	300	8.25	1.32	-76	61.1	1.07	7.00	10.62	8,700
10:10	300	8.25	1.26	-80	64.8	1.07	7.00	10.58	10,200
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
TB-18	12-26-18 / 10:15	Peristaltic Pump	VOCs

N/O = Not Observed
N/M = Not Measured

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL TB-11

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 12/26/18

SAMPLE COLLECTOR(S): C. Hampton / T. Roszak **WEATHER:** ~34°F, Overcast

PID READING IN WELL HEADSPACE (PPM): 0.0 **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 5.3 – 11.3 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 8.55 / 12-26-18

WELL DEPTH [FT BGS]: 11.3 **DEPTH OF PUMP INTAKE [FT BGS]:** ~9.8
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Horiba U-52

STABILIZED PUMP RATE (ml/min): 220 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 9.12

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (mS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
15:27	Start	8.69	N/M						0
15:41	220	9.12	3.65	89	>1,000	0.602	7.05	10.33	3,080
15:45	220	9.12	3.00	91	>1,000	0.605	7.03	10.69	3,960
15:50	220	9.12	2.94	91	640	0.605	7.03	10.79	5,060
15:55	220	9.12	2.76	91	322	0.613	7.03	10.82	6,160
16:00	220	9.12	2.68	92	150	0.615	7.03	10.91	7,260
16:05	220	9.12	2.45	92	153	0.616	7.02	10.86	8,360
16:10	220	9.12	2.27	92	111	0.617	7.02	10.83	9,460
16:15	220	9.12	2.19	92	145	0.617	7.02	10.88	10,560
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
TB-11	12-26-18 / 16:20	Peristaltic Pump	VOCs, SVOCs

N/O = Not Observed
N/M = Not Measured

JANUARY 2, 2019
GROUNDWATER SAMPLING LOGS

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-C

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 1/2/19

SAMPLE COLLECTOR(S): C. Hampton **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): N/M **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 4.2 – 9.2 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 4.39 / 1-2-19

WELL DEPTH [FT BGS]: 9.2 **DEPTH OF PUMP INTAKE [FT BGS]:** ~7.7
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Oakton: pH/ORP/EC/Temp

STABILIZED PUMP RATE (ml/min): 125 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 5.34

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (uS/cm)	pH	Temp. (°C)	Total Vol. Pumped (ml)
07:20	Start	4.55	N/M						0
07:27	125	5.34	N/M						500
07:30	125	5.34	N/M	-73	N/M	380	6.72	16.8	875
07:35	125	5.34	N/M	-74	N/M	360	6.65	18.4	1,500
07:40	125	5.34	N/M	-77	N/M	340	6.61	18.7	2,125
07:45	125	5.34	N/M	-78	N/M	340	6.61	18.8	2,750
07:50	125	5.34	N/M	-79	N/M	340	6.61	18.8	3,375

SAMPLE OBSERVATIONS: Clear

SECTION 4 – SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-C	1/2/19 @ 07:55	Peristaltic Pump	PFAs and 1,4-Dioxane

N/M = Not Measured
N/O = Not Observed

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-H

SECTION 1 – SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 1/2/19

SAMPLE COLLECTOR(S): C. Hampton **WEATHER:** Indoors

PID READING IN WELL HEADSPACE (PPM): N/M **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 5.8 – 11.8 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 4.56 / 1-2-19

WELL DEPTH [FT BGS]: 11.8 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.3
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Oakton: pH/ORP/EC/Temp

STABILIZED PUMP RATE (ml/min): 225 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 4.79

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (uS/cm)	pH	Temp. (C^0)	Total Vol. Pumped (ml)
08:28	225	4.71	N/M						0
08:35	225	4.79	N/M	-74	N/M	270	6.78	20.6	1,575
08:40	225	4.79	N/M	-74	N/M	270	6.66	21.7	2,700
08:45	225	4.79	N/M	-77	N/M	260	6.66	21.8	3,825
08:50	225	4.79	N/M	-79	N/M	270	6.65	21.8	4,950
08:55	225	4.79	N/M	-80	N/M	260	6.65	21.8	6,075

SAMPLE OBSERVATIONS: Clear

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-H	1/2/19 @ 09:00	Peristaltic Pump	PFAs and 1,4-Dioxane

N/M = Not Measured
N/O = Not Observed

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-P

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 1/2/19

SAMPLE COLLECTOR(S): C. Hampton **WEATHER:** ~30°F, Overcast

PID READING IN WELL HEADSPACE (PPM): N/M **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 6.0 – 16.0 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 7.04 / 1-2-19

WELL DEPTH [FT BGS]: 16.0 **DEPTH OF PUMP INTAKE [FT BGS]:** ~14.5
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Oakton:pH/ORP/EC/Temp

STABILIZED PUMP RATE (ml/min): 300 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 7.24

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (uS/cm)	pH	Temp. (C^0)	Total Vol. Pumped (ml)
10:46	300	7.20	N/M						0
10:49	300	7.24	N/M	-33	N/M	190	7.70	7.4	900
10:55	300	7.24	N/M	-36	N/M	190	7.60	9.8	2,700
11:00	300	7.24	N/M	-36	N/M	190	7.50	10.5	4,200
11:05	300	7.24	N/M	-38	N/M	190	7.44	10.9	5,700
11:10	300	7.24	N/M	-39	N/M	190	7.44	11.1	7,200
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-P	1/2/19 @ 11:15	Peristaltic Pump	PFAs and 1,4-Dioxane

N/M = Not Measured
N/O = Not Observed

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-Q

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 1/2/19

SAMPLE COLLECTOR(S): C. Hampton **WEATHER:** ~30°F, Overcast

PID READING IN WELL HEADSPACE (PPM): N/M **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 2.9 – 11.9 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 7.32 / 1-2-19

WELL DEPTH [FT BGS]: 11.9 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.4
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Oakton:pH/ORP/EC/Temp

STABILIZED PUMP RATE (ml/min): 425 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 7.63

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (uS/cm)	pH	Temp. (C^0)	Total Vol. Pumped (ml)
09:30	425	7.48	N/M						0
09:35	425	7.63	N/M	-37	N/M	240	7.57	13.3	2,125
09:41	425	7.63	N/M	-64	N/M	230	7.20	13.2	4,675
09:46	425	7.63	N/M	-73	N/M	230	7.11	13.3	6,800
09:51	425	7.63	N/M	-78	N/M	230	7.06	13.2	8,925
09:56	425	7.63	N/M	-81	N/M	230	7.04	13.4	11,050
10:01	425	7.63	N/M	-74	N/M	230	7.04	13.2	13,175

SAMPLE OBSERVATIONS: Clear

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-Q	1/2/19 @ 10:05	Peristaltic Pump	PFAs and 1,4-Dioxane (Also MS/MSD and Duplicate)

N/M = Not Measured
N/O = Not Observed

DAY ENVIRONMENTAL, INC.

LOW-FLOW GROUNDWATER PURGING AND SAMPLING LOG

WELL MW-R

SECTION 1 - SITE AND WELL INFORMATION

SITE LOCATION: 415 and 441 Chandler St., Jamestown, NY **JOB #** 5529S-18

PROJECT NAME: Weber Knapp Co. **DATE:** 1/2/19

SAMPLE COLLECTOR(S): C. Hampton **WEATHER:** ~30°F, Overcast

PID READING IN WELL HEADSPACE (PPM): N/M **MEASURING POINT (for water levels):** Top of Casing

CASING TYPE: PVC **WELL DIAMETER (INCHES):** 1”

SCREENED INTERVAL [FT BGS]: 6.0 – 12.0 **INITIAL WATER LEVEL (SWL) [FT]:** **SWL / Date Measured** 3.43 / 1-2-19

WELL DEPTH [FT BGS]: 12.0 **DEPTH OF PUMP INTAKE [FT BGS]:** ~10.5
(Do NOT Measure Well depth Prior To Purging And Sampling)

LNAPL: N/O **DNAPL:** N/M **OTHER OBSERVATIONS:** None

SECTION 2 – SAMPLING EQUIPMENT

PUMP TYPE: Geotech Geopump™ - Peristaltic pump **WATER LEVEL METER:** Heron HO1L

WATER QUALITY METER(s): Oakton:pH/ORP/EC/Temp

STABILIZED PUMP RATE (ml/min): 375 **STABILIZED DRAWDOWN WATER LEVEL [FT]:** 3.68

SECTION 3 – WATER QUALITY DATA MONITORING

Time	Pumping Rate (ml/min)	Water Level (ft)	DO (mg/L)	ORP (mv)	Turbidity (NTU)	Conductivity (uS/cm)	pH	Temp. (C^0)	Total Vol. Pumped (ml)
11:44	375	3.62	N/M						0
11:48	375	3.68	N/M	7	N/M	270	7.28	7.7	1,500
11:53	375	3.68	N/M	-6	N/M	270	7.20	8.8	3,375
11:58	375	3.68	N/M	-20	N/M	270	7.15	9.2	5,250
12:03	375	3.68	N/M	-24	N/M	270	7.14	9.5	7,125
12:08	375	3.68	N/M	-30	N/M	270	7.15	9.5	9,000
12:13	375	3.68	N/M	-33	N/M	270	7.12	9.4	10,875
	SAMPLE OBSERVATIONS: Clear								

SECTION 4 - SAMPLE IDENTIFICATION AND ANALYTICAL LABORATORY PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-R	1/2/19 @ 12:15	Peristaltic Pump	PFAs and 1,4-Dioxane

N/M = Not Measured
N/O = Not Observed

APPENDIX G
ANALYTICAL LABORATORY REPORTS
AND
CHAIN OF CUSTODY DOCUMENTATION

ALS ENVIRONMENTAL
LABORATORY REPORT
P1804628

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

LABORATORY REPORT

September 13, 2018

Charles Hampton
Day Environmental, Incorporated
1563 Lyell Avenue
Rochester, NY 14606

RE: 441 Chandler Street / 5529S-18

Dear Charles:

Enclosed are the results of the samples submitted to our laboratory on September 6, 2018. For your reference, these analyses have been assigned our service request number P1804628.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 1:44 pm, Sep 13, 2018

Sue Anderson
Project Manager

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Day Environmental, Incorporated
Project: 441 Chandler Street / 5529S-18

Service Request No: P1804628
New York Lab ID: 11221

CASE NARRATIVE

The samples were received intact under chain of custody on September 6, 2018 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. For projects requiring DoD QSM 5.1 compliance canisters were cleaned to <1/2 the MRL. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Alaska DEC	http://dec.alaska.gov/eh/lab.aspx	17-019
Arizona DHS	http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home	AZ0694
Florida DOH (NELAP)	http://www.floridahealth.gov/licensing-and-regulation/environmental-laboratories/index.html	E871020
Louisiana DEQ (NELAP)	http://www.deq.louisiana.gov/page/la-lab-accreditation	05071
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/professionals/labCert.shtml	2016036
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	1347317
New Jersey DEP (NELAP)	http://www.nj.gov/dep/enforcement/oqa.html	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://www.oregon.gov/oha/ph/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	4068-005
Pennsylvania DEP	http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx	68-03307 (Registration)
PJLA (DoD ELAP)	http://www.pjlabs.com/search-accredited-labs	65818 (Testing)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/agency/qa/env_lab_accreditation.html	T104704413-18-9
Utah DOH (NELAP)	http://health.utah.gov/lab/lab_cert_env	CA016272018-9
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Day Environmental, Incorporated Service Request: P1804628
Project ID: 441 Chandler Street / 5529S-18

Date Received: 9/6/2018
Time Received: 09:15

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC Cans
SSV-1	P1804628-001	Air	9/5/2018	14:25	SC02170	-3.84	3.72	X
SSV-2	P1804628-002	Air	9/5/2018	14:30	SC01873	-3.55	3.88	X
SSV-3	P1804628-003	Air	9/5/2018	14:26	SC00286	-4.17	4.22	X
SSV-4	P1804628-004	Air	9/5/2018	14:29	SC02197	-3.69	3.82	X
SSV-5	P1804628-005	Air	9/5/2018	14:31	SC01756	-3.76	3.86	X
SSV-6	P1804628-006	Air	9/5/2018	14:35	SC01745	-4.17	3.53	X

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard 5 day TAT

ALS Project No. P180 4628

Company Name & Address (Reporting Information)
Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

Project Name: 441 Chandler Street

Project Number: 5529S-18

Project Manager: C. Hampton

P.O. # / Billing Information

Phone: 585-454-0210

Fax:

Email Address for Result Reporting: champton@daymail.net

Sampler (Print & Sign): Charles Hampton

ALS Contact:

Analysis Method: VOCs TO-15

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	VOCs TO-15		Comments e.g. Actual Preservative or specific instructions
SSV-1	1	9/5/18	14:25	SC02170	OA01429	-28.92	-6.48		X		
SSV-2	2		14:30	SC01873	OA01035	-28.94	-5.68		X		
SSV-3	3		14:26	SC00286	OA01413	-28.85	-6.82		X		
SSV-4	4		14:29	SC02197	OA00322	-28.97	-6.41		X		
SSV-5	5		14:31	SC01756	OA02032	-28.97	-6.46		X		
SSV-6	6		14:35	SC01745	OA02061	-28.98	-6.97		X		

Report Tier Levels - please select

Tier I - Results (Default in not specified) ____
Tier II (Results + QC Summaries X
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Date Validation Package) 10% Surcharge ____

EDD required YES / No
Type: Standard Units: ____

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	9/5/18	~17:30	FED EX	9/5/18	~17:30
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
				9/6/18	0715

Cooler / Blank Temperature ____ °C

5 of 37

ALS Environmental

Sample Acceptance Check Form

Client: Day Environmental, Incorporated Work order: P1804628

Project: 441 Chandler Street / 5529S-18

Sample(s) received on: 9/6/18 Date opened: 9/6/18 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Did **sample containers** arrive in good condition?	☒	☐	☐
3	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
4	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
5	Was **sample volume** received adequate for analysis?	☒	☐	☐
6	Are samples within specified holding times?	☒	☐	☐
7	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
8	Were **custody seals** on outside of cooler/Box/Container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
9	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
10	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
11	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1804628-001.01	6.0 L Source Can					
P1804628-002.01	6.0 L Source Can					
P1804628-003.01	6.0 L Source Can					
P1804628-004.01	6.0 L Source Can					
P1804628-005.01	6.0 L Source Can					
P1804628-006.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-1** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-001

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/12/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.0015 Liter(s)
Test Notes:
Container ID: SC02170

Initial Pressure (psig): -3.84 Final Pressure (psig): 3.72

Container Dilution Factor: 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	590	ND	340	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	590	ND	120	
74-87-3	Chloromethane	ND	570	ND	270	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	580	ND	83	
75-01-4	Vinyl Chloride	ND	600	ND	240	
106-99-0	1,3-Butadiene	ND	590	ND	270	
74-83-9	Bromomethane	ND	570	ND	150	
75-00-3	Chloroethane	ND	580	ND	220	
64-17-5	Ethanol	ND	5,800	ND	3,100	
75-05-8	Acetonitrile	ND	590	ND	350	
107-02-8	Acrolein	ND	1,100	ND	490	
67-64-1	Acetone	ND	6,100	ND	2,600	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	600	ND	110	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2,400	ND	970	
107-13-1	Acrylonitrile	ND	590	ND	270	
75-35-4	1,1-Dichloroethene	ND	610	ND	150	
75-09-2	Methylene Chloride	ND	610	ND	180	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	600	ND	190	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	600	ND	78	
75-15-0	Carbon Disulfide	ND	1,200	ND	400	
156-60-5	trans-1,2-Dichloroethene	ND	600	ND	150	
75-34-3	1,1-Dichloroethane	ND	590	ND	150	
1634-04-4	Methyl tert-Butyl Ether	ND	610	ND	170	
108-05-4	Vinyl Acetate	ND	6,000	ND	1,700	
78-93-3	2-Butanone (MEK)	ND	1,100	ND	380	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-1** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-001

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/12/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.0015 Liter(s)
Test Notes:
Container ID: SC02170

Initial Pressure (psig): -3.84 Final Pressure (psig): 3.72

Container Dilution Factor: 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	**3,600**	600	**900**	150	
141-78-6	Ethyl Acetate	ND	1,200	ND	350	
110-54-3	n-Hexane	ND	610	ND	170	
67-66-3	Chloroform	**620**	610	**130**	130	
109-99-9	Tetrahydrofuran (THF)	ND	600	ND	200	
107-06-2	1,2-Dichloroethane	ND	600	ND	150	
71-55-6	1,1,1-Trichloroethane	ND	610	ND	110	
71-43-2	Benzene	ND	590	ND	180	
56-23-5	Carbon Tetrachloride	ND	590	ND	94	
110-82-7	Cyclohexane	ND	1,100	ND	330	
78-87-5	1,2-Dichloropropane	ND	610	ND	130	
75-27-4	Bromodichloromethane	ND	600	ND	90	
79-01-6	Trichloroethene	**110,000**	600	**20,000**	110	
123-91-1	1,4-Dioxane	ND	600	ND	170	
80-62-6	Methyl Methacrylate	ND	1,200	ND	300	
142-82-5	n-Heptane	ND	610	ND	150	
10061-01-5	cis-1,3-Dichloropropene	ND	630	ND	140	
108-10-1	4-Methyl-2-pentanone	ND	600	ND	150	
10061-02-6	trans-1,3-Dichloropropene	ND	600	ND	130	
79-00-5	1,1,2-Trichloroethane	ND	610	ND	110	
108-88-3	Toluene	ND	600	ND	160	
591-78-6	2-Hexanone	ND	610	ND	150	
124-48-1	Dibromochloromethane	ND	610	ND	72	
106-93-4	1,2-Dibromoethane	ND	610	ND	80	
123-86-4	n-Butyl Acetate	ND	610	ND	130	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-1** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-001

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/12/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.0015 Liter(s)
Test Notes:
Container ID: SC02170

Initial Pressure (psig): -3.84 Final Pressure (psig): 3.72

Container Dilution Factor: 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	610	ND	130	
127-18-4	Tetrachloroethene	**800**	600	**120**	89	
108-90-7	Chlorobenzene	ND	600	ND	130	
100-41-4	Ethylbenzene	ND	590	ND	140	
179601-23-1	m,p-Xylenes	ND	1,200	ND	290	
75-25-2	Bromoform	ND	600	ND	58	
100-42-5	Styrene	ND	600	ND	140	
95-47-6	o-Xylene	ND	600	ND	140	
111-84-2	n-Nonane	ND	610	ND	120	
79-34-5	1,1,2,2-Tetrachloroethane	ND	600	ND	88	
98-82-8	Cumene	ND	600	ND	120	
80-56-8	alpha-Pinene	ND	590	ND	110	
103-65-1	n-Propylbenzene	ND	610	ND	120	
622-96-8	4-Ethyltoluene	ND	600	ND	120	
108-67-8	1,3,5-Trimethylbenzene	ND	600	ND	120	
95-63-6	1,2,4-Trimethylbenzene	ND	600	ND	120	
100-44-7	Benzyl Chloride	ND	1,200	ND	240	
541-73-1	1,3-Dichlorobenzene	ND	610	ND	100	
106-46-7	1,4-Dichlorobenzene	ND	610	ND	100	
95-50-1	1,2-Dichlorobenzene	ND	610	ND	100	
5989-27-5	d-Limonene	ND	580	ND	100	
96-12-8	1,2-Dibromo-3-chloropropane	ND	590	ND	61	
120-82-1	1,2,4-Trichlorobenzene	ND	600	ND	81	
91-20-3	Naphthalene	ND	580	ND	110	
87-68-3	Hexachlorobutadiene	ND	600	ND	56	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-2** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-002

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.10 Liter(s)
Test Notes: 0.020 Liter(s)
Container ID: SC01873

Initial Pressure (psig): -3.55 Final Pressure (psig): 3.88

Container Dilution Factor: 1.67

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**14**	8.7	**8.2**	5.0	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	8.7	ND	1.8	
74-87-3	Chloromethane	ND	8.4	ND	4.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	8.5	ND	1.2	
75-01-4	Vinyl Chloride	ND	8.9	ND	3.5	
106-99-0	1,3-Butadiene	ND	8.7	ND	3.9	
74-83-9	Bromomethane	ND	8.4	ND	2.2	
75-00-3	Chloroethane	ND	8.5	ND	3.2	
64-17-5	Ethanol	ND	85	ND	45	
75-05-8	Acetonitrile	ND	8.7	ND	5.2	
107-02-8	Acrolein	ND	17	ND	7.3	
67-64-1	Acetone	**110**	90	**48**	38	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	8.9	ND	1.6	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	35	ND	14	
107-13-1	Acrylonitrile	ND	8.7	ND	4.0	
75-35-4	1,1-Dichloroethene	ND	9.0	ND	2.3	
75-09-2	Methylene Chloride	ND	9.0	ND	2.6	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	8.9	ND	2.8	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	8.9	ND	1.2	
75-15-0	Carbon Disulfide	ND	18	ND	5.9	
156-60-5	trans-1,2-Dichloroethene	ND	8.9	ND	2.2	
75-34-3	1,1-Dichloroethane	ND	8.7	ND	2.1	
1634-04-4	Methyl tert-Butyl Ether	ND	9.0	ND	2.5	
108-05-4	Vinyl Acetate	ND	89	ND	25	
78-93-3	2-Butanone (MEK)	**46**	17	**16**	5.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-2** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-002

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.10 Liter(s)
Test Notes: 0.020 Liter(s)
Container ID: SC01873

Initial Pressure (psig): -3.55 Final Pressure (psig): 3.88

Container Dilution Factor: 1.67

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	8.9	ND	2.2	
141-78-6	Ethyl Acetate	ND	18	ND	5.1	
110-54-3	n-Hexane	**41**	9.0	**12**	2.6	
67-66-3	Chloroform	ND	9.0	ND	1.8	
109-99-9	Tetrahydrofuran (THF)	ND	8.9	ND	3.0	
107-06-2	1,2-Dichloroethane	ND	8.9	ND	2.2	
71-55-6	1,1,1-Trichloroethane	ND	9.0	ND	1.7	
71-43-2	Benzene	**13**	8.7	**4.1**	2.7	
56-23-5	Carbon Tetrachloride	ND	8.7	ND	1.4	
110-82-7	Cyclohexane	ND	17	ND	4.9	
78-87-5	1,2-Dichloropropane	ND	9.0	ND	2.0	
75-27-4	Bromodichloromethane	ND	8.9	ND	1.3	
79-01-6	Trichloroethene	**5,800**	44	**1,100**	8.2	**D**
123-91-1	1,4-Dioxane	ND	8.9	ND	2.5	
80-62-6	Methyl Methacrylate	ND	18	ND	4.5	
142-82-5	n-Heptane	**56**	9.0	**14**	2.2	
10061-01-5	cis-1,3-Dichloropropene	ND	9.4	ND	2.1	
108-10-1	4-Methyl-2-pentanone	**9.2**	8.9	**2.2**	2.2	
10061-02-6	trans-1,3-Dichloropropene	ND	8.9	ND	2.0	
79-00-5	1,1,2-Trichloroethane	ND	9.0	ND	1.7	
108-88-3	Toluene	**130**	8.9	**33**	2.3	
591-78-6	2-Hexanone	**10**	9.0	**2.5**	2.2	
124-48-1	Dibromochloromethane	ND	9.0	ND	1.1	
106-93-4	1,2-Dibromoethane	ND	9.0	ND	1.2	
123-86-4	n-Butyl Acetate	ND	9.0	ND	1.9	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-2** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-002

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.10 Liter(s)
Test Notes: 0.020 Liter(s)
Container ID: SC01873

Initial Pressure (psig): -3.55 Final Pressure (psig): 3.88

Container Dilution Factor: 1.67

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	**54**	9.0	**12**	1.9	
127-18-4	Tetrachloroethene	**15**	8.9	**2.3**	1.3	
108-90-7	Chlorobenzene	ND	8.9	ND	1.9	
100-41-4	Ethylbenzene	ND	8.7	ND	2.0	
179601-23-1	m,p-Xylenes	**24**	18	**5.5**	4.2	
75-25-2	Bromoform	ND	8.9	ND	0.86	
100-42-5	Styrene	ND	8.9	ND	2.1	
95-47-6	o-Xylene	ND	8.9	ND	2.0	
111-84-2	n-Nonane	**34**	9.0	**6.4**	1.7	
79-34-5	1,1,2,2-Tetrachloroethane	ND	8.9	ND	1.3	
98-82-8	Cumene	ND	8.9	ND	1.8	
80-56-8	alpha-Pinene	ND	8.7	ND	1.6	
103-65-1	n-Propylbenzene	ND	9.0	ND	1.8	
622-96-8	4-Ethyltoluene	ND	8.9	ND	1.8	
108-67-8	1,3,5-Trimethylbenzene	ND	8.9	ND	1.8	
95-63-6	1,2,4-Trimethylbenzene	ND	8.9	ND	1.8	
100-44-7	Benzyl Chloride	ND	18	ND	3.5	
541-73-1	1,3-Dichlorobenzene	ND	9.0	ND	1.5	
106-46-7	1,4-Dichlorobenzene	ND	9.0	ND	1.5	
95-50-1	1,2-Dichlorobenzene	ND	9.0	ND	1.5	
5989-27-5	d-Limonene	ND	8.5	ND	1.5	
96-12-8	1,2-Dibromo-3-chloropropane	ND	8.7	ND	0.90	
120-82-1	1,2,4-Trichlorobenzene	ND	8.9	ND	1.2	
91-20-3	Naphthalene	ND	8.5	ND	1.6	
87-68-3	Hexachlorobutadiene	ND	8.9	ND	0.83	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-3** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-003

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00286

Initial Pressure (psig): -4.17 Final Pressure (psig): 4.22

Container Dilution Factor: 1.80

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**3.1**	0.94	**1.8**	0.54	
75-71-8	Dichlorodifluoromethane (CFC 12)	**2.3**	0.94	**0.46**	0.19	
74-87-3	Chloromethane	ND	0.90	ND	0.44	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.92	ND	0.13	
75-01-4	Vinyl Chloride	ND	0.95	ND	0.37	
106-99-0	1,3-Butadiene	ND	0.94	ND	0.42	
74-83-9	Bromomethane	ND	0.90	ND	0.23	
75-00-3	Chloroethane	ND	0.92	ND	0.35	
64-17-5	Ethanol	ND	9.2	ND	4.9	
75-05-8	Acetonitrile	**2.2**	0.94	**1.3**	0.56	
107-02-8	Acrolein	ND	1.8	ND	0.79	
67-64-1	Acetone	**27**	9.7	**11**	4.1	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.7**	0.95	**0.30**	0.17	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	3.8	ND	1.5	
107-13-1	Acrylonitrile	ND	0.94	ND	0.43	
75-35-4	1,1-Dichloroethene	ND	0.97	ND	0.25	
75-09-2	Methylene Chloride	ND	0.97	ND	0.28	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.95	ND	0.30	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.95	ND	0.12	
75-15-0	Carbon Disulfide	ND	2.0	ND	0.64	
156-60-5	trans-1,2-Dichloroethene	ND	0.95	ND	0.24	
75-34-3	1,1-Dichloroethane	ND	0.94	ND	0.23	
1634-04-4	Methyl tert-Butyl Ether	ND	0.97	ND	0.27	
108-05-4	Vinyl Acetate	**11**	9.5	**3.1**	2.7	
78-93-3	2-Butanone (MEK)	**32**	1.8	**11**	0.61	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-3** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-003

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00286

Initial Pressure (psig): -4.17 Final Pressure (psig): 4.22

Container Dilution Factor: 1.80

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.95	ND	0.24	
141-78-6	Ethyl Acetate	ND	2.0	ND	0.55	
110-54-3	n-Hexane	ND	0.97	ND	0.28	
67-66-3	Chloroform	**8.4**	0.97	**1.7**	0.20	
109-99-9	Tetrahydrofuran (THF)	ND	0.95	ND	0.32	
107-06-2	1,2-Dichloroethane	ND	0.95	ND	0.24	
71-55-6	1,1,1-Trichloroethane	**2.5**	0.97	**0.45**	0.18	
71-43-2	Benzene	ND	0.94	ND	0.29	
56-23-5	Carbon Tetrachloride	ND	0.94	ND	0.15	
110-82-7	Cyclohexane	ND	1.8	ND	0.52	
78-87-5	1,2-Dichloropropane	ND	0.97	ND	0.21	
75-27-4	Bromodichloromethane	ND	0.95	ND	0.14	
79-01-6	Trichloroethene	**33**	0.95	**6.1**	0.18	
123-91-1	1,4-Dioxane	ND	0.95	ND	0.26	
80-62-6	Methyl Methacrylate	ND	2.0	ND	0.48	
142-82-5	n-Heptane	ND	0.97	ND	0.24	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22	
108-10-1	4-Methyl-2-pentanone	**20**	0.95	**4.8**	0.23	
10061-02-6	trans-1,3-Dichloropropene	ND	0.95	ND	0.21	
79-00-5	1,1,2-Trichloroethane	ND	0.97	ND	0.18	
108-88-3	Toluene	**84**	0.95	**22**	0.25	
591-78-6	2-Hexanone	**1.5**	0.97	**0.36**	0.24	
124-48-1	Dibromochloromethane	ND	0.97	ND	0.11	
106-93-4	1,2-Dibromoethane	ND	0.97	ND	0.13	
123-86-4	n-Butyl Acetate	ND	0.97	ND	0.20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-3** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-003

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00286

Initial Pressure (psig): -4.17 Final Pressure (psig): 4.22

Container Dilution Factor: 1.80

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.97	ND	0.21	
127-18-4	Tetrachloroethene	**35**	0.95	**5.1**	0.14	
108-90-7	Chlorobenzene	ND	0.95	ND	0.21	
100-41-4	Ethylbenzene	**3.9**	0.94	**0.90**	0.22	
179601-23-1	m,p-Xylenes	**17**	2.0	**4.0**	0.46	
75-25-2	Bromoform	ND	0.95	ND	0.092	
100-42-5	Styrene	**2.3**	0.95	**0.54**	0.22	
95-47-6	o-Xylene	**5.8**	0.95	**1.3**	0.22	
111-84-2	n-Nonane	ND	0.97	ND	0.19	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.95	ND	0.14	
98-82-8	Cumene	ND	0.95	ND	0.19	
80-56-8	alpha-Pinene	**1.7**	0.94	**0.31**	0.17	
103-65-1	n-Propylbenzene	**1.3**	0.97	**0.26**	0.20	
622-96-8	4-Ethyltoluene	**1.9**	0.95	**0.39**	0.19	
108-67-8	1,3,5-Trimethylbenzene	**1.8**	0.95	**0.36**	0.19	
95-63-6	1,2,4-Trimethylbenzene	**6.5**	0.95	**1.3**	0.19	
100-44-7	Benzyl Chloride	ND	2.0	ND	0.38	
541-73-1	1,3-Dichlorobenzene	ND	0.97	ND	0.16	
106-46-7	1,4-Dichlorobenzene	ND	0.97	ND	0.16	
95-50-1	1,2-Dichlorobenzene	ND	0.97	ND	0.16	
5989-27-5	d-Limonene	**2.1**	0.92	**0.38**	0.16	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.94	ND	0.097	
120-82-1	1,2,4-Trichlorobenzene	ND	0.95	ND	0.13	
91-20-3	Naphthalene	**2.0**	0.92	**0.38**	0.18	
87-68-3	Hexachlorobutadiene	ND	0.95	ND	0.089	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-4** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-004

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.050 Liter(s)
Test Notes: 0.0050 Liter(s)
Container ID: SC02197

Initial Pressure (psig): -3.69 Final Pressure (psig): 3.82

Container Dilution Factor: 1.68

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	17	ND	10	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	17	ND	3.5	
74-87-3	Chloromethane	ND	17	ND	8.1	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	17	ND	2.5	
75-01-4	Vinyl Chloride	ND	18	ND	7.0	
106-99-0	1,3-Butadiene	ND	17	ND	7.9	
74-83-9	Bromomethane	ND	17	ND	4.3	
75-00-3	Chloroethane	ND	17	ND	6.5	
64-17-5	Ethanol	ND	170	ND	91	
75-05-8	Acetonitrile	ND	17	ND	10	
107-02-8	Acrolein	ND	34	ND	15	
67-64-1	Acetone	ND	180	ND	76	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	18	ND	3.2	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	71	ND	29	
107-13-1	Acrylonitrile	ND	17	ND	8.1	
75-35-4	1,1-Dichloroethene	ND	18	ND	4.6	
75-09-2	Methylene Chloride	ND	18	ND	5.2	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	18	ND	5.7	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	18	ND	2.3	
75-15-0	Carbon Disulfide	ND	37	ND	12	
156-60-5	trans-1,2-Dichloroethene	ND	18	ND	4.5	
75-34-3	1,1-Dichloroethane	ND	17	ND	4.3	
1634-04-4	Methyl tert-Butyl Ether	ND	18	ND	5.0	
108-05-4	Vinyl Acetate	ND	180	ND	51	
78-93-3	2-Butanone (MEK)	ND	34	ND	11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-4** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-004

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.050 Liter(s)
Test Notes: 0.0050 Liter(s)
Container ID: SC02197

Initial Pressure (psig): -3.69 Final Pressure (psig): 3.82

Container Dilution Factor: 1.68

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	**22**	18	**5.6**	4.5	
141-78-6	Ethyl Acetate	ND	37	ND	10	
110-54-3	n-Hexane	ND	18	ND	5.1	
67-66-3	Chloroform	ND	18	ND	3.7	
109-99-9	Tetrahydrofuran (THF)	ND	18	ND	6.0	
107-06-2	1,2-Dichloroethane	ND	18	ND	4.4	
71-55-6	1,1,1-Trichloroethane	**19**	18	**3.4**	3.3	
71-43-2	Benzene	ND	17	ND	5.5	
56-23-5	Carbon Tetrachloride	ND	17	ND	2.8	
110-82-7	Cyclohexane	ND	34	ND	9.8	
78-87-5	1,2-Dichloropropane	ND	18	ND	3.9	
75-27-4	Bromodichloromethane	ND	18	ND	2.7	
79-01-6	Trichloroethene	**13,000**	180	**2,400**	33	**D**
123-91-1	1,4-Dioxane	ND	18	ND	4.9	
80-62-6	Methyl Methacrylate	ND	37	ND	9.0	
142-82-5	n-Heptane	ND	18	ND	4.4	
10061-01-5	cis-1,3-Dichloropropene	ND	19	ND	4.1	
108-10-1	4-Methyl-2-pentanone	ND	18	ND	4.3	
10061-02-6	trans-1,3-Dichloropropene	ND	18	ND	3.9	
79-00-5	1,1,2-Trichloroethane	ND	18	ND	3.3	
108-88-3	Toluene	**140**	18	**38**	4.7	
591-78-6	2-Hexanone	ND	18	ND	4.4	
124-48-1	Dibromochloromethane	ND	18	ND	2.1	
106-93-4	1,2-Dibromoethane	ND	18	ND	2.4	
123-86-4	n-Butyl Acetate	ND	18	ND	3.8	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-4** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-004

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.050 Liter(s)
Test Notes: 0.0050 Liter(s)
Container ID: SC02197

Initial Pressure (psig): -3.69 Final Pressure (psig): 3.82

Container Dilution Factor: 1.68

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	18	ND	3.9	
127-18-4	Tetrachloroethene	**42**	18	**6.2**	2.6	
108-90-7	Chlorobenzene	ND	18	ND	3.9	
100-41-4	Ethylbenzene	ND	17	ND	4.0	
179601-23-1	m,p-Xylenes	ND	37	ND	8.5	
75-25-2	Bromoform	ND	18	ND	1.7	
100-42-5	Styrene	ND	18	ND	4.2	
95-47-6	o-Xylene	ND	18	ND	4.1	
111-84-2	n-Nonane	ND	18	ND	3.5	
79-34-5	1,1,2,2-Tetrachloroethane	ND	18	ND	2.6	
98-82-8	Cumene	ND	18	ND	3.6	
80-56-8	alpha-Pinene	ND	17	ND	3.1	
103-65-1	n-Propylbenzene	ND	18	ND	3.7	
622-96-8	4-Ethyltoluene	ND	18	ND	3.6	
108-67-8	1,3,5-Trimethylbenzene	ND	18	ND	3.6	
95-63-6	1,2,4-Trimethylbenzene	ND	18	ND	3.6	
100-44-7	Benzyl Chloride	ND	37	ND	7.1	
541-73-1	1,3-Dichlorobenzene	ND	18	ND	3.0	
106-46-7	1,4-Dichlorobenzene	ND	18	ND	3.0	
95-50-1	1,2-Dichlorobenzene	ND	18	ND	3.0	
5989-27-5	d-Limonene	ND	17	ND	3.1	
96-12-8	1,2-Dibromo-3-chloropropane	ND	17	ND	1.8	
120-82-1	1,2,4-Trichlorobenzene	ND	18	ND	2.4	
91-20-3	Naphthalene	ND	17	ND	3.3	
87-68-3	Hexachlorobutadiene	ND	18	ND	1.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-5** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-005

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/12/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.0030 Liter(s)
Test Notes:
Container ID: SC01756

Initial Pressure (psig): -3.76 Final Pressure (psig): 3.86

Container Dilution Factor: 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	290	ND	170	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	290	ND	60	
74-87-3	Chloromethane	ND	280	ND	140	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	290	ND	41	
75-01-4	Vinyl Chloride	ND	300	ND	120	
106-99-0	1,3-Butadiene	ND	290	ND	130	
74-83-9	Bromomethane	ND	280	ND	73	
75-00-3	Chloroethane	ND	290	ND	110	
64-17-5	Ethanol	ND	2,900	ND	1,500	
75-05-8	Acetonitrile	ND	290	ND	180	
107-02-8	Acrolein	ND	570	ND	250	
67-64-1	Acetone	ND	3,100	ND	1,300	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	300	ND	53	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	1,200	ND	480	
107-13-1	Acrylonitrile	ND	290	ND	140	
75-35-4	1,1-Dichloroethene	ND	310	ND	77	
75-09-2	Methylene Chloride	ND	310	ND	88	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	300	ND	96	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	300	ND	39	
75-15-0	Carbon Disulfide	ND	620	ND	200	
156-60-5	trans-1,2-Dichloroethene	ND	300	ND	76	
75-34-3	1,1-Dichloroethane	ND	290	ND	73	
1634-04-4	Methyl tert-Butyl Ether	ND	310	ND	85	
108-05-4	Vinyl Acetate	ND	3,000	ND	850	
78-93-3	2-Butanone (MEK)	ND	570	ND	190	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-5** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-005

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/12/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.0030 Liter(s)
Test Notes:
Container ID: SC01756

Initial Pressure (psig): -3.76 Final Pressure (psig): 3.86

Container Dilution Factor: 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	**5,600**	300	**1,400**	76	
141-78-6	Ethyl Acetate	ND	620	ND	170	
110-54-3	n-Hexane	**1,900**	310	**530**	87	
67-66-3	Chloroform	ND	310	ND	63	
109-99-9	Tetrahydrofuran (THF)	ND	300	ND	100	
107-06-2	1,2-Dichloroethane	ND	300	ND	74	
71-55-6	1,1,1-Trichloroethane	ND	310	ND	56	
71-43-2	Benzene	ND	290	ND	92	
56-23-5	Carbon Tetrachloride	ND	290	ND	47	
110-82-7	Cyclohexane	ND	570	ND	160	
78-87-5	1,2-Dichloropropane	ND	310	ND	66	
75-27-4	Bromodichloromethane	ND	300	ND	45	
79-01-6	Trichloroethene	**44,000**	300	**8,200**	56	
123-91-1	1,4-Dioxane	ND	300	ND	83	
80-62-6	Methyl Methacrylate	ND	620	ND	150	
142-82-5	n-Heptane	**960**	310	**230**	75	
10061-01-5	cis-1,3-Dichloropropene	ND	320	ND	70	
108-10-1	4-Methyl-2-pentanone	ND	300	ND	73	
10061-02-6	trans-1,3-Dichloropropene	ND	300	ND	66	
79-00-5	1,1,2-Trichloroethane	ND	310	ND	56	
108-88-3	Toluene	ND	300	ND	80	
591-78-6	2-Hexanone	ND	310	ND	75	
124-48-1	Dibromochloromethane	ND	310	ND	36	
106-93-4	1,2-Dibromoethane	ND	310	ND	40	
123-86-4	n-Butyl Acetate	ND	310	ND	64	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-5** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-005

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/12/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.0030 Liter(s)
Test Notes:
Container ID: SC01756

Initial Pressure (psig): -3.76 Final Pressure (psig): 3.86

Container Dilution Factor: 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	**320**	310	**69**	66	
127-18-4	Tetrachloroethene	ND	300	ND	44	
108-90-7	Chlorobenzene	ND	300	ND	65	
100-41-4	Ethylbenzene	ND	290	ND	68	
179601-23-1	m,p-Xylenes	ND	620	ND	140	
75-25-2	Bromoform	ND	300	ND	29	
100-42-5	Styrene	ND	300	ND	71	
95-47-6	o-Xylene	ND	300	ND	69	
111-84-2	n-Nonane	ND	310	ND	58	
79-34-5	1,1,2,2-Tetrachloroethane	ND	300	ND	44	
98-82-8	Cumene	ND	300	ND	61	
80-56-8	alpha-Pinene	ND	290	ND	53	
103-65-1	n-Propylbenzene	ND	310	ND	62	
622-96-8	4-Ethyltoluene	ND	300	ND	61	
108-67-8	1,3,5-Trimethylbenzene	ND	300	ND	61	
95-63-6	1,2,4-Trimethylbenzene	ND	300	ND	61	
100-44-7	Benzyl Chloride	ND	620	ND	120	
541-73-1	1,3-Dichlorobenzene	ND	310	ND	51	
106-46-7	1,4-Dichlorobenzene	ND	310	ND	51	
95-50-1	1,2-Dichlorobenzene	ND	310	ND	51	
5989-27-5	d-Limonene	ND	290	ND	52	
96-12-8	1,2-Dibromo-3-chloropropane	ND	290	ND	30	
120-82-1	1,2,4-Trichlorobenzene	ND	300	ND	40	
91-20-3	Naphthalene	ND	290	ND	55	
87-68-3	Hexachlorobutadiene	ND	300	ND	28	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-6** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-006

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: SC01745

Initial Pressure (psig): -4.17 Final Pressure (psig): 3.53

Container Dilution Factor: 1.73

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	**2.9**	0.90	**1.7**	0.52	
75-71-8	Dichlorodifluoromethane (CFC 12)	**5.2**	0.90	**1.1**	0.18	
74-87-3	Chloromethane	ND	0.87	ND	0.42	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.88	ND	0.13	
75-01-4	Vinyl Chloride	ND	0.92	ND	0.36	
106-99-0	1,3-Butadiene	ND	0.90	ND	0.41	
74-83-9	Bromomethane	ND	0.87	ND	0.22	
75-00-3	Chloroethane	ND	0.88	ND	0.33	
64-17-5	Ethanol	ND	8.8	ND	4.7	
75-05-8	Acetonitrile	ND	0.90	ND	0.54	
107-02-8	Acrolein	ND	1.7	ND	0.75	
67-64-1	Acetone	**26**	9.3	**11**	3.9	
75-69-4	Trichlorofluoromethane (CFC 11)	**1.4**	0.92	**0.24**	0.16	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	3.6	ND	1.5	
107-13-1	Acrylonitrile	ND	0.90	ND	0.41	
75-35-4	1,1-Dichloroethene	ND	0.93	ND	0.24	
75-09-2	Methylene Chloride	ND	0.93	ND	0.27	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.92	ND	0.29	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.92	ND	0.12	
75-15-0	Carbon Disulfide	**8.0**	1.9	**2.6**	0.61	
156-60-5	trans-1,2-Dichloroethene	ND	0.92	ND	0.23	
75-34-3	1,1-Dichloroethane	ND	0.90	ND	0.22	
1634-04-4	Methyl tert-Butyl Ether	ND	0.93	ND	0.26	
108-05-4	Vinyl Acetate	ND	9.2	ND	2.6	
78-93-3	2-Butanone (MEK)	**33**	1.7	**11**	0.59	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-6** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-006

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: SC01745

Initial Pressure (psig): -4.17 Final Pressure (psig): 3.53

Container Dilution Factor: 1.73

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	**2.0**	0.92	**0.50**	0.23	
141-78-6	Ethyl Acetate	ND	1.9	ND	0.53	
110-54-3	n-Hexane	**32**	0.93	**9.2**	0.27	
67-66-3	Chloroform	ND	0.93	ND	0.19	
109-99-9	Tetrahydrofuran (THF)	ND	0.92	ND	0.31	
107-06-2	1,2-Dichloroethane	ND	0.92	ND	0.23	
71-55-6	1,1,1-Trichloroethane	ND	0.93	ND	0.17	
71-43-2	Benzene	**10**	0.90	**3.2**	0.28	
56-23-5	Carbon Tetrachloride	ND	0.90	ND	0.14	
110-82-7	Cyclohexane	**11**	1.7	**3.2**	0.50	
78-87-5	1,2-Dichloropropane	ND	0.93	ND	0.20	
75-27-4	Bromodichloromethane	ND	0.92	ND	0.14	
79-01-6	Trichloroethene	**320**	9.2	**59**	1.7	**D**
123-91-1	1,4-Dioxane	ND	0.92	ND	0.25	
80-62-6	Methyl Methacrylate	ND	1.9	ND	0.46	
142-82-5	n-Heptane	**21**	0.93	**5.2**	0.23	
10061-01-5	cis-1,3-Dichloropropene	ND	0.97	ND	0.21	
108-10-1	4-Methyl-2-pentanone	**1.2**	0.92	**0.29**	0.22	
10061-02-6	trans-1,3-Dichloropropene	ND	0.92	ND	0.20	
79-00-5	1,1,2-Trichloroethane	**1.1**	0.93	**0.20**	0.17	
108-88-3	Toluene	**120**	0.92	**33**	0.24	
591-78-6	2-Hexanone	ND	0.93	ND	0.23	
124-48-1	Dibromochloromethane	ND	0.93	ND	0.11	
106-93-4	1,2-Dibromoethane	ND	0.93	ND	0.12	
123-86-4	n-Butyl Acetate	ND	0.93	ND	0.20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **SSV-6** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P1804628-006

Test Code: EPA TO-15 Date Collected: 9/5/18
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: 9/6/18
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: SC01745

Initial Pressure (psig): -4.17 Final Pressure (psig): 3.53

Container Dilution Factor: 1.73

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	**16**	0.93	**3.4**	0.20	
127-18-4	Tetrachloroethene	**6.2**	0.92	**0.91**	0.14	
108-90-7	Chlorobenzene	ND	0.92	ND	0.20	
100-41-4	Ethylbenzene	**7.7**	0.90	**1.8**	0.21	
179601-23-1	m,p-Xylenes	**35**	1.9	**8.2**	0.44	
75-25-2	Bromoform	ND	0.92	ND	0.089	
100-42-5	Styrene	**3.2**	0.92	**0.76**	0.22	
95-47-6	o-Xylene	**11**	0.92	**2.6**	0.21	
111-84-2	n-Nonane	**11**	0.93	**2.1**	0.18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.92	ND	0.13	
98-82-8	Cumene	ND	0.92	ND	0.19	
80-56-8	alpha-Pinene	**2.3**	0.90	**0.41**	0.16	
103-65-1	n-Propylbenzene	**1.9**	0.93	**0.39**	0.19	
622-96-8	4-Ethyltoluene	**2.7**	0.92	**0.55**	0.19	
108-67-8	1,3,5-Trimethylbenzene	**3.1**	0.92	**0.64**	0.19	
95-63-6	1,2,4-Trimethylbenzene	**8.4**	0.92	**1.7**	0.19	
100-44-7	Benzyl Chloride	ND	1.9	ND	0.37	
541-73-1	1,3-Dichlorobenzene	ND	0.93	ND	0.16	
106-46-7	1,4-Dichlorobenzene	ND	0.93	ND	0.16	
95-50-1	1,2-Dichlorobenzene	ND	0.93	ND	0.16	
5989-27-5	d-Limonene	**2.2**	0.88	**0.39**	0.16	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.90	ND	0.093	
120-82-1	1,2,4-Trichlorobenzene	ND	0.92	ND	0.12	
91-20-3	Naphthalene	**1.5**	0.88	**0.29**	0.17	
87-68-3	Hexachlorobutadiene	ND	0.92	ND	0.086	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **Method Blank** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180912-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 9/12/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	ND	0.30	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	ND	0.11	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.51	ND	0.073	
75-01-4	Vinyl Chloride	ND	0.53	ND	0.21	
106-99-0	1,3-Butadiene	ND	0.52	ND	0.24	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.51	ND	0.19	
64-17-5	Ethanol	ND	5.1	ND	2.7	
75-05-8	Acetonitrile	ND	0.52	ND	0.31	
107-02-8	Acrolein	ND	1.0	ND	0.44	
67-64-1	Acetone	ND	5.4	ND	2.3	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.53	ND	0.094	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.1	ND	0.85	
107-13-1	Acrylonitrile	ND	0.52	ND	0.24	
75-35-4	1,1-Dichloroethene	ND	0.54	ND	0.14	
75-09-2	Methylene Chloride	ND	0.54	ND	0.16	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	ND	0.17	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.53	ND	0.069	
75-15-0	Carbon Disulfide	ND	1.1	ND	0.35	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.52	ND	0.13	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	ND	0.15	
108-05-4	Vinyl Acetate	ND	5.3	ND	1.5	
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.34	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Day Environmental, Incorporated**

Client Sample ID: **Method Blank** ALS Project ID: P1804628

Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180912-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Simon Cao Date Analyzed: 9/12/18

Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.53	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.1	ND	0.31	
110-54-3	n-Hexane	ND	0.54	ND	0.15	
67-66-3	Chloroform	ND	0.54	ND	0.11	
109-99-9	Tetrahydrofuran (THF)	ND	0.53	ND	0.18	
107-06-2	1,2-Dichloroethane	ND	0.53	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.54	ND	0.099	
71-43-2	Benzene	ND	0.52	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.52	ND	0.083	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.54	ND	0.12	
75-27-4	Bromodichloromethane	ND	0.53	ND	0.079	
79-01-6	Trichloroethene	ND	0.53	ND	0.099	
123-91-1	1,4-Dioxane	ND	0.53	ND	0.15	
80-62-6	Methyl Methacrylate	ND	1.1	ND	0.27	
142-82-5	n-Heptane	ND	0.54	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.56	ND	0.12	
108-10-1	4-Methyl-2-pentanone	ND	0.53	ND	0.13	
10061-02-6	trans-1,3-Dichloropropene	ND	0.53	ND	0.12	
79-00-5	1,1,2-Trichloroethane	ND	0.54	ND	0.099	
108-88-3	Toluene	ND	0.53	ND	0.14	
591-78-6	2-Hexanone	ND	0.54	ND	0.13	
124-48-1	Dibromochloromethane	ND	0.54	ND	0.063	
106-93-4	1,2-Dibromoethane	ND	0.54	ND	0.070	
123-86-4	n-Butyl Acetate	ND	0.54	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Day Environmental, Incorporated**

Client Sample ID: **Method Blank** ALS Project ID: P1804628

Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180912-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Simon Cao Date Analyzed: 9/12/18

Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.54	ND	0.12	
127-18-4	Tetrachloroethene	ND	0.53	ND	0.078	
108-90-7	Chlorobenzene	ND	0.53	ND	0.12	
100-41-4	Ethylbenzene	ND	0.52	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.1	ND	0.25	
75-25-2	Bromoform	ND	0.53	ND	0.051	
100-42-5	Styrene	ND	0.53	ND	0.12	
95-47-6	o-Xylene	ND	0.53	ND	0.12	
111-84-2	n-Nonane	ND	0.54	ND	0.10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	ND	0.077	
98-82-8	Cumene	ND	0.53	ND	0.11	
80-56-8	alpha-Pinene	ND	0.52	ND	0.093	
103-65-1	n-Propylbenzene	ND	0.54	ND	0.11	
622-96-8	4-Ethyltoluene	ND	0.53	ND	0.11	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	ND	0.11	
95-63-6	1,2,4-Trimethylbenzene	ND	0.53	ND	0.11	
100-44-7	Benzyl Chloride	ND	1.1	ND	0.21	
541-73-1	1,3-Dichlorobenzene	ND	0.54	ND	0.090	
106-46-7	1,4-Dichlorobenzene	ND	0.54	ND	0.090	
95-50-1	1,2-Dichlorobenzene	ND	0.54	ND	0.090	
5989-27-5	d-Limonene	ND	0.51	ND	0.092	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.52	ND	0.054	
120-82-1	1,2,4-Trichlorobenzene	ND	0.53	ND	0.071	
91-20-3	Naphthalene	ND	0.51	ND	0.097	
87-68-3	Hexachlorobutadiene	ND	0.53	ND	0.050	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Day Environmental, Incorporated**
Client Sample ID: **Method Blank** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180913-MB

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.52	ND	0.30	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.52	ND	0.11	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.51	ND	0.073	
75-01-4	Vinyl Chloride	ND	0.53	ND	0.21	
106-99-0	1,3-Butadiene	ND	0.52	ND	0.24	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.51	ND	0.19	
64-17-5	Ethanol	ND	5.1	ND	2.7	
75-05-8	Acetonitrile	ND	0.52	ND	0.31	
107-02-8	Acrolein	ND	1.0	ND	0.44	
67-64-1	Acetone	ND	5.4	ND	2.3	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.53	ND	0.094	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	2.1	ND	0.85	
107-13-1	Acrylonitrile	ND	0.52	ND	0.24	
75-35-4	1,1-Dichloroethene	ND	0.54	ND	0.14	
75-09-2	Methylene Chloride	ND	0.54	ND	0.16	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.53	ND	0.17	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.53	ND	0.069	
75-15-0	Carbon Disulfide	ND	1.1	ND	0.35	
156-60-5	trans-1,2-Dichloroethene	ND	0.53	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.52	ND	0.13	
1634-04-4	Methyl tert-Butyl Ether	ND	0.54	ND	0.15	
108-05-4	Vinyl Acetate	ND	5.3	ND	1.5	
78-93-3	2-Butanone (MEK)	ND	1.0	ND	0.34	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Day Environmental, Incorporated**

Client Sample ID: **Method Blank** ALS Project ID: P1804628

Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180913-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Simon Cao Date Analyzed: 9/13/18

Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.53	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.1	ND	0.31	
110-54-3	n-Hexane	ND	0.54	ND	0.15	
67-66-3	Chloroform	ND	0.54	ND	0.11	
109-99-9	Tetrahydrofuran (THF)	ND	0.53	ND	0.18	
107-06-2	1,2-Dichloroethane	ND	0.53	ND	0.13	
71-55-6	1,1,1-Trichloroethane	ND	0.54	ND	0.099	
71-43-2	Benzene	ND	0.52	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.52	ND	0.083	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.54	ND	0.12	
75-27-4	Bromodichloromethane	ND	0.53	ND	0.079	
79-01-6	Trichloroethene	ND	0.53	ND	0.099	
123-91-1	1,4-Dioxane	ND	0.53	ND	0.15	
80-62-6	Methyl Methacrylate	ND	1.1	ND	0.27	
142-82-5	n-Heptane	ND	0.54	ND	0.13	
10061-01-5	cis-1,3-Dichloropropene	ND	0.56	ND	0.12	
108-10-1	4-Methyl-2-pentanone	ND	0.53	ND	0.13	
10061-02-6	trans-1,3-Dichloropropene	ND	0.53	ND	0.12	
79-00-5	1,1,2-Trichloroethane	ND	0.54	ND	0.099	
108-88-3	Toluene	ND	0.53	ND	0.14	
591-78-6	2-Hexanone	ND	0.54	ND	0.13	
124-48-1	Dibromochloromethane	ND	0.54	ND	0.063	
106-93-4	1,2-Dibromoethane	ND	0.54	ND	0.070	
123-86-4	n-Butyl Acetate	ND	0.54	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

Client: **Day Environmental, Incorporated**

Client Sample ID: **Method Blank** ALS Project ID: P1804628

Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180913-MB

Test Code: EPA TO-15 Date Collected: NA

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA

Analyst: Simon Cao Date Analyzed: 9/13/18

Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)

Test Notes:

Container Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.54	ND	0.12	
127-18-4	Tetrachloroethene	ND	0.53	ND	0.078	
108-90-7	Chlorobenzene	ND	0.53	ND	0.12	
100-41-4	Ethylbenzene	ND	0.52	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.1	ND	0.25	
75-25-2	Bromoform	ND	0.53	ND	0.051	
100-42-5	Styrene	ND	0.53	ND	0.12	
95-47-6	o-Xylene	ND	0.53	ND	0.12	
111-84-2	n-Nonane	ND	0.54	ND	0.10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.53	ND	0.077	
98-82-8	Cumene	ND	0.53	ND	0.11	
80-56-8	alpha-Pinene	ND	0.52	ND	0.093	
103-65-1	n-Propylbenzene	ND	0.54	ND	0.11	
622-96-8	4-Ethyltoluene	ND	0.53	ND	0.11	
108-67-8	1,3,5-Trimethylbenzene	ND	0.53	ND	0.11	
95-63-6	1,2,4-Trimethylbenzene	ND	0.53	ND	0.11	
100-44-7	Benzyl Chloride	ND	1.1	ND	0.21	
541-73-1	1,3-Dichlorobenzene	ND	0.54	ND	0.090	
106-46-7	1,4-Dichlorobenzene	ND	0.54	ND	0.090	
95-50-1	1,2-Dichlorobenzene	ND	0.54	ND	0.090	
5989-27-5	d-Limonene	ND	0.51	ND	0.092	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.52	ND	0.054	
120-82-1	1,2,4-Trichlorobenzene	ND	0.53	ND	0.071	
91-20-3	Naphthalene	ND	0.51	ND	0.097	
87-68-3	Hexachlorobutadiene	ND	0.53	ND	0.050	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Day Environmental, Incorporated**
Client Project ID: **441 Chandler Street / 5529S-18** ALS Project ID: P1804628

Test Code: EPA TO-15
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date(s) Collected: 9/5/18
Analyst: Simon Cao Date(s) Received: 9/6/18
Sample Type: 6.0 L Summa Canister(s) Date(s) Analyzed: 9/12 - 9/13/18
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 Percent Recovered	Toluene-d8 Percent Recovered	Bromofluorobenzene Percent Recovered	Acceptance Limits	Data Qualifier
Method Blank	P180912-MB	**117**	**100**	**99**	70-130	
Method Blank	P180913-MB	**117**	**96**	**97**	70-130	
Lab Control Sample	P180912-LCS	**107**	**100**	**102**	70-130	
Lab Control Sample	P180913-LCS	**104**	**97**	**99**	70-130	
SSV-1	P1804628-001	**97**	**99**	**97**	70-130	
SSV-2	P1804628-002	**99**	**100**	**95**	70-130	
SSV-3	P1804628-003	**107**	**98**	**97**	70-130	
SSV-4	P1804628-004	**105**	**100**	**98**	70-130	
SSV-5	P1804628-005	**102**	**98**	**97**	70-130	
SSV-6	P1804628-006	**99**	**99**	**100**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Day Environmental, Incorporated**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180912-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 9/12/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	211	**196**	**93**	54-133	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	**192**	**91**	64-115	
74-87-3	Chloromethane	211	**204**	**97**	47-140	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	**184**	**87**	60-112	
75-01-4	Vinyl Chloride	214	**199**	**93**	63-127	
106-99-0	1,3-Butadiene	210	**205**	**98**	57-149	
74-83-9	Bromomethane	212	**215**	**101**	63-132	
75-00-3	Chloroethane	214	**196**	**92**	68-129	
64-17-5	Ethanol	1,020	**1020**	**100**	62-131	
75-05-8	Acetonitrile	206	**199**	**97**	56-136	
107-02-8	Acrolein	205	**168**	**82**	60-132	
67-64-1	Acetone	1,060	**1000**	**94**	63-124	
75-69-4	Trichlorofluoromethane (CFC 11)	211	**184**	**87**	65-113	
67-63-0	2-Propanol (Isopropyl Alcohol)	413	**444**	**108**	62-135	
107-13-1	Acrylonitrile	207	**190**	**92**	68-138	
75-35-4	1,1-Dichloroethene	218	**190**	**87**	72-118	
75-09-2	Methylene Chloride	217	**196**	**90**	67-116	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	216	**224**	**104**	61-143	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	**203**	**94**	68-113	
75-15-0	Carbon Disulfide	218	**197**	**90**	68-120	
156-60-5	trans-1,2-Dichloroethene	214	**210**	**98**	71-125	
75-34-3	1,1-Dichloroethane	216	**200**	**93**	68-118	
1634-04-4	Methyl tert-Butyl Ether	214	**209**	**98**	60-123	
108-05-4	Vinyl Acetate	1,060	**1170**	**110**	73-135	
78-93-3	2-Butanone (MEK)	208	**210**	**101**	70-129	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Day Environmental, Incorporated**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180912-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 9/12/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	211	**208**	**99**	69-121	
141-78-6	Ethyl Acetate	436	**437**	**100**	66-140	
110-54-3	n-Hexane	216	**206**	**95**	61-124	
67-66-3	Chloroform	217	**205**	**94**	69-113	
109-99-9	Tetrahydrofuran (THF)	216	**212**	**98**	66-121	
107-06-2	1,2-Dichloroethane	215	**209**	**97**	62-120	
71-55-6	1,1,1-Trichloroethane	215	**196**	**91**	65-116	
71-43-2	Benzene	211	**186**	**88**	66-111	
56-23-5	Carbon Tetrachloride	212	**205**	**97**	64-122	
110-82-7	Cyclohexane	416	**384**	**92**	69-115	
78-87-5	1,2-Dichloropropane	216	**195**	**90**	69-121	
75-27-4	Bromodichloromethane	215	**206**	**96**	69-123	
79-01-6	Trichloroethene	213	**185**	**87**	69-112	
123-91-1	1,4-Dioxane	214	**209**	**98**	74-123	
80-62-6	Methyl Methacrylate	431	**403**	**94**	75-125	
142-82-5	n-Heptane	215	**198**	**92**	68-118	
10061-01-5	cis-1,3-Dichloropropene	214	**206**	**96**	74-129	
108-10-1	4-Methyl-2-pentanone	209	**217**	**104**	66-138	
10061-02-6	trans-1,3-Dichloropropene	213	**210**	**99**	75-130	
79-00-5	1,1,2-Trichloroethane	215	**199**	**93**	73-117	
108-88-3	Toluene	212	**182**	**86**	66-114	
591-78-6	2-Hexanone	214	**214**	**100**	58-146	
124-48-1	Dibromochloromethane	213	**206**	**97**	67-130	
106-93-4	1,2-Dibromoethane	216	**198**	**92**	70-127	
123-86-4	n-Butyl Acetate	219	**208**	**95**	62-140	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Day Environmental, Incorporated**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180912-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 9/12/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	217	**200**	**92**	65-121	
127-18-4	Tetrachloroethene	213	**190**	**89**	62-119	
108-90-7	Chlorobenzene	215	**189**	**88**	66-115	
100-41-4	Ethylbenzene	212	**188**	**89**	69-117	
179601-23-1	m,p-Xylenes	426	**386**	**91**	67-117	
75-25-2	Bromoform	213	**214**	**100**	67-135	
100-42-5	Styrene	212	**205**	**97**	70-128	
95-47-6	o-Xylene	214	**192**	**90**	67-118	
111-84-2	n-Nonane	215	**202**	**94**	61-127	
79-34-5	1,1,2,2-Tetrachloroethane	214	**202**	**94**	70-125	
98-82-8	Cumene	214	**190**	**89**	68-116	
80-56-8	alpha-Pinene	211	**205**	**97**	69-122	
103-65-1	n-Propylbenzene	218	**197**	**90**	70-118	
622-96-8	4-Ethyltoluene	214	**204**	**95**	69-124	
108-67-8	1,3,5-Trimethylbenzene	214	**191**	**89**	65-117	
95-63-6	1,2,4-Trimethylbenzene	215	**196**	**91**	67-124	
100-44-7	Benzyl Chloride	217	**233**	**107**	75-142	
541-73-1	1,3-Dichlorobenzene	216	**203**	**94**	70-124	
106-46-7	1,4-Dichlorobenzene	216	**201**	**93**	63-124	
95-50-1	1,2-Dichlorobenzene	216	**202**	**94**	66-125	
5989-27-5	d-Limonene	211	**215**	**102**	64-135	
96-12-8	1,2-Dibromo-3-chloropropane	209	**232**	**111**	73-136	
120-82-1	1,2,4-Trichlorobenzene	214	**234**	**109**	70-141	
91-20-3	Naphthalene	203	**228**	**112**	71-146	
87-68-3	Hexachlorobutadiene	209	**192**	**92**	63-126	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Day Environmental, Incorporated**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180913-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	211	**195**	**92**	54-133	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	**187**	**89**	64-115	
74-87-3	Chloromethane	211	**208**	**99**	47-140	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	**183**	**87**	60-112	
75-01-4	Vinyl Chloride	214	**203**	**95**	63-127	
106-99-0	1,3-Butadiene	210	**202**	**96**	57-149	
74-83-9	Bromomethane	212	**206**	**97**	63-132	
75-00-3	Chloroethane	214	**195**	**91**	68-129	
64-17-5	Ethanol	1,020	**1040**	**102**	62-131	
75-05-8	Acetonitrile	206	**204**	**99**	56-136	
107-02-8	Acrolein	205	**164**	**80**	60-132	
67-64-1	Acetone	1,060	**992**	**94**	63-124	
75-69-4	Trichlorofluoromethane (CFC 11)	211	**180**	**85**	65-113	
67-63-0	2-Propanol (Isopropyl Alcohol)	413	**441**	**107**	62-135	
107-13-1	Acrylonitrile	207	**191**	**92**	68-138	
75-35-4	1,1-Dichloroethene	218	**186**	**85**	72-118	
75-09-2	Methylene Chloride	217	**193**	**89**	67-116	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	216	**234**	**108**	61-143	
76-13-1	Trichlorotrifluoroethane (CFC 113)	216	**187**	**87**	68-113	
75-15-0	Carbon Disulfide	218	**197**	**90**	68-120	
156-60-5	trans-1,2-Dichloroethene	214	**201**	**94**	71-125	
75-34-3	1,1-Dichloroethane	216	**196**	**91**	68-118	
1634-04-4	Methyl tert-Butyl Ether	214	**198**	**93**	60-123	
108-05-4	Vinyl Acetate	1,060	**1170**	**110**	73-135	
78-93-3	2-Butanone (MEK)	208	**201**	**97**	70-129	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Client: **Day Environmental, Incorporated**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180913-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	**Result µg/m³**	**% Recovery**	ALS Acceptance Limits	**Data Qualifier**
156-59-2	cis-1,2-Dichloroethene	211	**201**	**95**	69-121	
141-78-6	Ethyl Acetate	436	**436**	**100**	66-140	
110-54-3	n-Hexane	216	**205**	**95**	61-124	
67-66-3	Chloroform	217	**194**	**89**	69-113	
109-99-9	Tetrahydrofuran (THF)	216	**200**	**93**	66-121	
107-06-2	1,2-Dichloroethane	215	**199**	**93**	62-120	
71-55-6	1,1,1-Trichloroethane	215	**193**	**90**	65-116	
71-43-2	Benzene	211	**188**	**89**	66-111	
56-23-5	Carbon Tetrachloride	212	**202**	**95**	64-122	
110-82-7	Cyclohexane	416	**390**	**94**	69-115	
78-87-5	1,2-Dichloropropane	216	**202**	**94**	69-121	
75-27-4	Bromodichloromethane	215	**208**	**97**	69-123	
79-01-6	Trichloroethene	213	**183**	**86**	69-112	
123-91-1	1,4-Dioxane	214	**211**	**99**	74-123	
80-62-6	Methyl Methacrylate	431	**397**	**92**	75-125	
142-82-5	n-Heptane	215	**202**	**94**	68-118	
10061-01-5	cis-1,3-Dichloropropene	214	**211**	**99**	74-129	
108-10-1	4-Methyl-2-pentanone	209	**226**	**108**	66-138	
10061-02-6	trans-1,3-Dichloropropene	213	**213**	**100**	75-130	
79-00-5	1,1,2-Trichloroethane	215	**198**	**92**	73-117	
108-88-3	Toluene	212	**175**	**83**	66-114	
591-78-6	2-Hexanone	214	**217**	**101**	58-146	
124-48-1	Dibromochloromethane	213	**196**	**92**	67-130	
106-93-4	1,2-Dibromoethane	216	**190**	**88**	70-127	
123-86-4	n-Butyl Acetate	219	**210**	**96**	62-140	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Day Environmental, Incorporated**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1804628
Client Project ID: **441 Chandler Street / 5529S-18** ALS Sample ID: P180913-LCS

Test Code: EPA TO-15 Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9 Date Received: NA
Analyst: Simon Cao Date Analyzed: 9/13/18
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	**Result µg/m³**	**% Recovery**	ALS Acceptance Limits	**Data Qualifier**
111-65-9	n-Octane	217	**203**	**94**	65-121	
127-18-4	Tetrachloroethene	213	**177**	**83**	62-119	
108-90-7	Chlorobenzene	215	**180**	**84**	66-115	
100-41-4	Ethylbenzene	212	**181**	**85**	69-117	
179601-23-1	m,p-Xylenes	426	**371**	**87**	67-117	
75-25-2	Bromoform	213	**202**	**95**	67-135	
100-42-5	Styrene	212	**197**	**93**	70-128	
95-47-6	o-Xylene	214	**186**	**87**	67-118	
111-84-2	n-Nonane	215	**206**	**96**	61-127	
79-34-5	1,1,2,2-Tetrachloroethane	214	**199**	**93**	70-125	
98-82-8	Cumene	214	**182**	**85**	68-116	
80-56-8	alpha-Pinene	211	**198**	**94**	69-122	
103-65-1	n-Propylbenzene	218	**191**	**88**	70-118	
622-96-8	4-Ethyltoluene	214	**197**	**92**	69-124	
108-67-8	1,3,5-Trimethylbenzene	214	**182**	**85**	65-117	
95-63-6	1,2,4-Trimethylbenzene	215	**190**	**88**	67-124	
100-44-7	Benzyl Chloride	217	**227**	**105**	75-142	
541-73-1	1,3-Dichlorobenzene	216	**192**	**89**	70-124	
106-46-7	1,4-Dichlorobenzene	216	**192**	**89**	63-124	
95-50-1	1,2-Dichlorobenzene	216	**193**	**89**	66-125	
5989-27-5	d-Limonene	211	**216**	**102**	64-135	
96-12-8	1,2-Dibromo-3-chloropropane	209	**219**	**105**	73-136	
120-82-1	1,2,4-Trichlorobenzene	214	**224**	**105**	70-141	
91-20-3	Naphthalene	203	**219**	**108**	71-146	
87-68-3	Hexachlorobutadiene	209	**182**	**87**	63-126	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

EUROFINS SPECTRUM ANALYTICAL
LABORATORY REPORT
SC50096

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
14-Sep-18 17:11

Laboratory Report
SC50096

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, NY 14606
Attn: Charles Hampton

Project: 441 Chandler St - Jamestown, NY
Project #: 5529S-18

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2972/2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00348
USDA # P330-15-00375
Vermont # VT-11393

Authorized by:

Dawn Wojcik
Laboratory Director

Dawn E Wojcik

Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 17 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our 'Quality' web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC50096

Project: 441 Chandler St - Jamestown, NY

Project Number: 5529S-18

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC50096-01	CFS-A (0-2")	Concrete	05-Sep-18 14:30	06-Sep-18 17:21
SC50096-02	CFS-A (2-6")	Concrete	05-Sep-18 14:30	06-Sep-18 17:21
SC50096-03	CFS-B (0-1.75")	Concrete	05-Sep-18 15:30	06-Sep-18 17:21
SC50096-04	CFS-B (5.5-9")	Concrete	05-Sep-18 15:30	06-Sep-18 17:21
SC50096-05	CFS-C (0-2")	Concrete	05-Sep-18 14:00	06-Sep-18 17:21
SC50096-06	CFS-C (7.5-10")	Concrete	05-Sep-18 14:00	06-Sep-18 17:21
SC50096-07	CFS-D (0-2")	Concrete	05-Sep-18 15:00	06-Sep-18 17:21
SC50096-08	CFS-D (4-5.5")	Concrete	05-Sep-18 15:00	06-Sep-18 17:21
SC50096-09	CFS-E (0-2")	Concrete	05-Sep-18 12:25	06-Sep-18 17:21
SC50096-10	CFS-E (2-3.5")	Concrete	05-Sep-18 12:25	06-Sep-18 17:21
SC50096-11	CFS-F (0-2")	Concrete	05-Sep-18 16:00	06-Sep-18 17:21
SC50096-12	CFS-F (2-4.5")	Concrete	05-Sep-18 16:00	06-Sep-18 17:21

CASE NARRATIVE:

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 2.2 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW846 6010C

Laboratory Control Samples:

1812374 SRM/SRMD

Arsenic percent recoveries (91/83) are outside individual acceptance criteria (83.2-116.8), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

CFS-A (0-2")
CFS-A (2-6")
CFS-B (0-1.75")
CFS-B (5.5-9")
CFS-C (0-2")
CFS-C (7.5-10")
CFS-D (0-2")
CFS-D (4-5.5")
CFS-E (0-2")
CFS-E (2-3.5")
CFS-F (0-2")
CFS-F (2-4.5")

Cadmium percent recoveries (88/79) are outside individual acceptance criteria (83.4-116.6), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

CFS-A (0-2")
CFS-A (2-6")
CFS-B (0-1.75")
CFS-B (5.5-9")
CFS-C (0-2")
CFS-C (7.5-10")
CFS-D (0-2")
CFS-D (4-5.5")
CFS-E (0-2")
CFS-E (2-3.5")
CFS-F (0-2")
CFS-F (2-4.5")

SW846 6010C

Laboratory Control Samples:

1812374 SRM/SRMD

Lead percent recoveries (87/78) are outside individual acceptance criteria (83-117.1), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

CFS-A (0-2")
CFS-A (2-6")
CFS-B (0-1.75")
CFS-B (5.5-9")
CFS-C (0-2")
CFS-C (7.5-10")
CFS-D (0-2")
CFS-D (4-5.5")
CFS-E (0-2")
CFS-E (2-3.5")
CFS-F (0-2")
CFS-F (2-4.5")

Sample Acceptance Check Form

Client:	Day Environmental, Inc.
Project:	441 Chandler St - Jamestown, NY / 5529S-18
Work Order:	SC50096
Sample(s) received on:	9/6/2018

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
Were custody seals present?	☑	☐	☐
Were custody seals intact?	☑	☐	☐
Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
Were samples cooled on ice upon transfer to laboratory representative?	☑	☐	☐
Were sample containers received intact?	☑	☐	☐
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
Were samples accompanied by a Chain of Custody document?	☑	☐	☐
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☑	☐	☐
Did sample container labels agree with Chain of Custody document?	☑	☐	☐
Were samples received within method-specific holding times?	☑	☐	☐

Summary of Hits

Lab ID: SC50096-01 **Client ID:** CFS-A (0-2")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	5.82		1.47	mg/kg	SW846 6010C
Barium	43.2		0.982	mg/kg	SW846 6010C
Cadmium	0.656		0.491	mg/kg	SW846 6010C
Chromium	79.1		0.982	mg/kg	SW846 6010C
Lead	8.74		1.47	mg/kg	SW846 6010C
Silver	1.70		1.47	mg/kg	SW846 6010C
Mercury	0.0098	J	0.0297	mg/kg	SW846 7471B
Cyanide (total)	1.49		0.358	mg/kg	SW846 9012B

Lab ID: SC50096-02 **Client ID:** CFS-A (2-6")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	6.64		1.52	mg/kg	SW846 6010C
Barium	37.0		1.01	mg/kg	SW846 6010C
Cadmium	0.909		0.506	mg/kg	SW846 6010C
Chromium	25.6		1.01	mg/kg	SW846 6010C
Lead	6.53		1.52	mg/kg	SW846 6010C

Lab ID: SC50096-03 **Client ID:** CFS-B (0-1.75")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	3.78		1.57	mg/kg	SW846 6010C
Barium	36.6		1.04	mg/kg	SW846 6010C
Cadmium	0.514	J	0.522	mg/kg	SW846 6010C
Chromium	10.3		1.04	mg/kg	SW846 6010C
Lead	6.26		1.57	mg/kg	SW846 6010C
Cyanide (total)	0.445		0.409	mg/kg	SW846 9012B

Lab ID: SC50096-04 **Client ID:** CFS-B (5.5-9")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	3.93		1.53	mg/kg	SW846 6010C
Barium	39.9		1.02	mg/kg	SW846 6010C
Cadmium	0.522		0.510	mg/kg	SW846 6010C
Chromium	11.7		1.02	mg/kg	SW846 6010C
Lead	6.39		1.53	mg/kg	SW846 6010C
Cyanide (total)	14.9		0.248	mg/kg	SW846 9012B

Lab ID: SC50096-05 **Client ID:** CFS-C (0-2")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	5.48		1.44	mg/kg	SW846 6010C
Barium	44.6		0.962	mg/kg	SW846 6010C
Cadmium	0.603		0.481	mg/kg	SW846 6010C
Chromium	12.2		0.962	mg/kg	SW846 6010C
Lead	7.42		1.44	mg/kg	SW846 6010C

Lab ID: SC50096-06 **Client ID:** CFS-C (7.5-10")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	4.01		1.53	mg/kg	SW846 6010C
Barium	39.4		1.02	mg/kg	SW846 6010C
Cadmium	0.478	J	0.512	mg/kg	SW846 6010C
Chromium	10.2		1.02	mg/kg	SW846 6010C
Lead	5.75		1.53	mg/kg	SW846 6010C

Lab ID: SC50096-07 **Client ID:** CFS-D (0-2")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	4.67		1.52	mg/kg	SW846 6010C
Barium	68.2		1.01	mg/kg	SW846 6010C
Cadmium	0.557		0.507	mg/kg	SW846 6010C
Chromium	10.5		1.01	mg/kg	SW846 6010C
Lead	4.87		1.52	mg/kg	SW846 6010C
Cyanide (total)	0.351		0.348	mg/kg	SW846 9012B

Lab ID: SC50096-08 **Client ID:** CFS-D (4-5.5")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	4.46		1.46	mg/kg	SW846 6010C
Barium	43.1		0.970	mg/kg	SW846 6010C
Cadmium	0.552		0.485	mg/kg	SW846 6010C
Chromium	11.4		0.970	mg/kg	SW846 6010C
Lead	5.61		1.46	mg/kg	SW846 6010C
Cyanide (total)	1.79		0.331	mg/kg	SW846 9012B

Lab ID: SC50096-09 **Client ID:** CFS-E (0-2")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	5.68		1.60	mg/kg	SW846 6010C
Barium	860		1.06	mg/kg	SW846 6010C
Cadmium	0.579		0.532	mg/kg	SW846 6010C
Chromium	23.3		1.06	mg/kg	SW846 6010C
Lead	72.5		1.60	mg/kg	SW846 6010C

Lab ID: SC50096-10 **Client ID:** CFS-E (2-3.5")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	5.50		1.48	mg/kg	SW846 6010C
Barium	46.6		0.985	mg/kg	SW846 6010C
Cadmium	0.668		0.492	mg/kg	SW846 6010C
Chromium	13.4		0.985	mg/kg	SW846 6010C
Lead	5.36		1.48	mg/kg	SW846 6010C

Lab ID: SC50096-11 **Client ID:** CFS-F (0-2")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	7.64		1.51	mg/kg	SW846 6010C
Barium	51.1		1.01	mg/kg	SW846 6010C
Cadmium	0.641		0.504	mg/kg	SW846 6010C
Chromium	14.4		1.01	mg/kg	SW846 6010C
Lead	6.57		1.51	mg/kg	SW846 6010C

Lab ID: SC50096-12 **Client ID:** CFS-F (2-4.5")

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	6.70		1.52	mg/kg	SW846 6010C
Barium	35.5		1.02	mg/kg	SW846 6010C
Cadmium	0.755		0.508	mg/kg	SW846 6010C
Chromium	15.1		1.02	mg/kg	SW846 6010C
Lead	6.57		1.52	mg/kg	SW846 6010C

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification
CFS-A (0-2")
SC50096-01

Client Project #	Matrix	Collection Date/Time	Received
5529S-18	Concrete	05-Sep-18 14:30	06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	**1.70**		mg/kg dry	1.47	0.159	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**5.82**		mg/kg dry	1.47	0.187	1	"	"	"	"	"	X
7440-39-3	Barium	**43.2**		mg/kg dry	0.982	0.116	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.656**		mg/kg dry	0.491	0.0254	1	"	"	"	"	"	X
7440-47-3	Chromium	**79.1**		mg/kg dry	0.982	0.131	1	"	"	"	"	"	X
7439-97-6	Mercury	**0.0098**	J	mg/kg dry	0.0297	0.0082	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**8.74**		mg/kg dry	1.47	0.208	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.47	U	mg/kg dry	1.47	0.281	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**94.9**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	**1.49**		mg/kg dry	0.358	0.283	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-A (2-6")
SC50096-02

Client Project #	Matrix	Collection Date/Time	Received
5529S-18	Concrete	05-Sep-18 14:30	06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.52	U	mg/kg dry	1.52	0.164	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**6.64**		mg/kg dry	1.52	0.192	1	"	"	"	"	"	X
7440-39-3	Barium	**37.0**		mg/kg dry	1.01	0.120	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.909**		mg/kg dry	0.506	0.0262	1	"	"	"	"	"	X
7440-47-3	Chromium	**25.6**		mg/kg dry	1.01	0.135	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0311	U	mg/kg dry	0.0311	0.0086	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**6.53**		mg/kg dry	1.52	0.215	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.52	U	mg/kg dry	1.52	0.290	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**94.3**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	< 0.352	U	mg/kg dry	0.352	0.278	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-B (0-1.75")
SC50096-03

Client Project #: 5529S-18 | Matrix: Concrete | Collection Date/Time: 05-Sep-18 15:30 | Received: 06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.57	U	mg/kg dry	1.57	0.169	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**3.78**		mg/kg dry	1.57	0.198	1	"	"	"	"	"	X
7440-39-3	Barium	**36.6**		mg/kg dry	1.04	0.123	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.514**	J	mg/kg dry	0.522	0.0270	1	"	"	"	"	"	X
7440-47-3	Chromium	**10.3**		mg/kg dry	1.04	0.139	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0300	U	mg/kg dry	0.0300	0.0083	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**6.26**		mg/kg dry	1.57	0.221	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.57	U	mg/kg dry	1.57	0.299	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**95.2**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	**0.445**		mg/kg dry	0.409	0.323	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-B (5.5-9")
SC50096-04

Client Project #: 5529S-18 | Matrix: Concrete | Collection Date/Time: 05-Sep-18 15:30 | Received: 06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.53	U	mg/kg dry	1.53	0.165	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**3.93**		mg/kg dry	1.53	0.194	1	"	"	"	"	"	X
7440-39-3	Barium	**39.9**		mg/kg dry	1.02	0.120	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.522**		mg/kg dry	0.510	0.0264	1	"	"	"	"	"	X
7440-47-3	Chromium	**11.7**		mg/kg dry	1.02	0.136	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0313	U	mg/kg dry	0.0313	0.0087	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**6.39**		mg/kg dry	1.53	0.216	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.53	U	mg/kg dry	1.53	0.292	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**95.2**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	**14.9**		mg/kg dry	0.248	0.196	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-C (0-2")
SC50096-05

Client Project # 5529S-18 | Matrix: Concrete | Collection Date/Time: 05-Sep-18 14:00 | Received: 06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.44	U	mg/kg dry	1.44	0.156	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**5.48**		mg/kg dry	1.44	0.183	1	"	"	"	"	"	X
7440-39-3	Barium	**44.6**		mg/kg dry	0.962	0.113	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.603**		mg/kg dry	0.481	0.0249	1	"	"	"	"	"	X
7440-47-3	Chromium	**12.2**		mg/kg dry	0.962	0.128	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0309	U	mg/kg dry	0.0309	0.0086	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**7.42**		mg/kg dry	1.44	0.204	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.44	U	mg/kg dry	1.44	0.275	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**95.3**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	< 0.283	U	mg/kg dry	0.283	0.224	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-C (7.5-10")
SC50096-06

Client Project # 5529S-18 | Matrix: Concrete | Collection Date/Time: 05-Sep-18 14:00 | Received: 06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.53	U	mg/kg dry	1.53	0.166	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**4.01**		mg/kg dry	1.53	0.194	1	"	"	"	"	"	X
7440-39-3	Barium	**39.4**		mg/kg dry	1.02	0.121	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.478**	J	mg/kg dry	0.512	0.0265	1	"	"	"	"	"	X
7440-47-3	Chromium	**10.2**		mg/kg dry	1.02	0.136	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0279	U	mg/kg dry	0.0279	0.0078	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**5.75**		mg/kg dry	1.53	0.217	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.53	U	mg/kg dry	1.53	0.293	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**96.3**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	< 0.376	U	mg/kg dry	0.376	0.297	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-D (0-2")
SC50096-07

Client Project #	Matrix	Collection Date/Time	Received
5529S-18	Concrete	05-Sep-18 15:00	06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.52	U	mg/kg dry	1.52	0.164	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**4.67**		mg/kg dry	1.52	0.193	1	"	"	"	"	"	X
7440-39-3	Barium	**68.2**		mg/kg dry	1.01	0.120	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.557**		mg/kg dry	0.507	0.0263	1	"	"	"	"	"	X
7440-47-3	Chromium	**10.5**		mg/kg dry	1.01	0.135	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0296	U	mg/kg dry	0.0296	0.0082	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**4.87**		mg/kg dry	1.52	0.215	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.52	U	mg/kg dry	1.52	0.290	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**98.6**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	**0.351**		mg/kg dry	0.348	0.275	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-D (4-5.5")
SC50096-08

Client Project #	Matrix	Collection Date/Time	Received
5529S-18	Concrete	05-Sep-18 15:00	06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.46	U	mg/kg dry	1.46	0.157	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**4.46**		mg/kg dry	1.46	0.184	1	"	"	"	"	"	X
7440-39-3	Barium	**43.1**		mg/kg dry	0.970	0.114	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.552**		mg/kg dry	0.485	0.0251	1	"	"	"	"	"	X
7440-47-3	Chromium	**11.4**		mg/kg dry	0.970	0.129	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0274	U	mg/kg dry	0.0274	0.0076	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**5.61**		mg/kg dry	1.46	0.206	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.46	U	mg/kg dry	1.46	0.278	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**96.8**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	**1.79**		mg/kg dry	0.331	0.262	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-E (0-2")
SC50096-09

Client Project # 5529S-18 | Matrix: Concrete | Collection Date/Time: 05-Sep-18 12:25 | Received: 06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.60	U	mg/kg dry	1.60	0.173	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**5.68**		mg/kg dry	1.60	0.202	1	"	"	"	"	"	X
7440-39-3	Barium	**860**		mg/kg dry	1.06	0.126	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.579**		mg/kg dry	0.532	0.0276	1	"	"	"	"	"	X
7440-47-3	Chromium	**23.3**		mg/kg dry	1.06	0.142	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0321	U	mg/kg dry	0.0321	0.0089	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**72.5**		mg/kg dry	1.60	0.226	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.60	U	mg/kg dry	1.60	0.305	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**93.1**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	< 0.380	U	mg/kg dry	0.380	0.300	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-E (2-3.5")
SC50096-10

Client Project # 5529S-18 | Matrix: Concrete | Collection Date/Time: 05-Sep-18 12:25 | Received: 06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.48	U	mg/kg dry	1.48	0.160	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**5.50**		mg/kg dry	1.48	0.187	1	"	"	"	"	"	X
7440-39-3	Barium	**46.6**		mg/kg dry	0.985	0.116	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.668**		mg/kg dry	0.492	0.0255	1	"	"	"	"	"	X
7440-47-3	Chromium	**13.4**		mg/kg dry	0.985	0.131	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0309	U	mg/kg dry	0.0309	0.0086	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**5.36**		mg/kg dry	1.48	0.209	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.48	U	mg/kg dry	1.48	0.282	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**96.1**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	< 0.399	U	mg/kg dry	0.399	0.316	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-F (0-2'')
SC50096-11

Client Project #	Matrix	Collection Date/Time	Received
5529S-18	Concrete	05-Sep-18 16:00	06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.51	U	mg/kg dry	1.51	0.163	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**7.64**		mg/kg dry	1.51	0.191	1	"	"	"	"	"	X
7440-39-3	Barium	**51.1**		mg/kg dry	1.01	0.119	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.641**		mg/kg dry	0.504	0.0261	1	"	"	"	"	"	X
7440-47-3	Chromium	**14.4**		mg/kg dry	1.01	0.134	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0306	U	mg/kg dry	0.0306	0.0085	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**6.57**		mg/kg dry	1.51	0.213	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.51	U	mg/kg dry	1.51	0.288	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**97.3**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	< 0.282	U	mg/kg dry	0.282	0.223	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Sample Identification
CFS-F (2-4.5'')
SC50096-12

Client Project #	Matrix	Collection Date/Time	Received
5529S-18	Concrete	05-Sep-18 16:00	06-Sep-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Total Metals by EPA 6000/7000 Series Methods													
Prepared by method SW846 3050B													
7440-22-4	Silver	< 1.52	U	mg/kg dry	1.52	0.165	1	SW846 6010C	11-Sep-18	13-Sep-18	TBC	1812374	X
7440-38-2	Arsenic	**6.70**		mg/kg dry	1.52	0.193	1	"	"	"	"	"	X
7440-39-3	Barium	**35.5**		mg/kg dry	1.02	0.120	1	"	"	"	"	"	X
7440-43-9	Cadmium	**0.755**		mg/kg dry	0.508	0.0263	1	"	"	"	"	"	X
7440-47-3	Chromium	**15.1**		mg/kg dry	1.02	0.135	1	"	"	"	"	"	X
7439-97-6	Mercury	< 0.0301	U	mg/kg dry	0.0301	0.0084	1	SW846 7471B	"	13-Sep-18	ABW	1812380	X
Prepared by method SW846 3050B													
7439-92-1	Lead	**6.57**		mg/kg dry	1.52	0.216	1	SW846 6010C	"	13-Sep-18	TBC	1812374	X
7782-49-2	Selenium	< 1.52	U	mg/kg dry	1.52	0.291	1	"	"	"	"	"	X
General Chemistry Parameters													
	Sample Prep	**Completed**		N/A			1	SAI SOP	07-Sep-18		BD	1812257	
	% Solids	**97.7**		%			1	SM2540 G (11) Mod.	07-Sep-18	07-Sep-18	BD	1812258	
Prepared by method SW846 9010B													
57-12-5	Cyanide (total)	< 0.345	U	mg/kg dry	0.345	0.272	1	SW846 9012B	12-Sep-18	13-Sep-18	RLT	1812426	X

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 6010C										
Batch 1812374 - SW846 3050B										
Blank (1812374-BLK1)					Prepared: 11-Sep-18 Analyzed: 13-Sep-18					
Chromium	**0.159**	J	mg/kg wet	0.961						
Silver	< 1.44	U	mg/kg wet	1.44						
Arsenic	< 1.44	U	mg/kg wet	1.44						
Cadmium	< 0.481	U	mg/kg wet	0.481						
Lead	**0.255**	J	mg/kg wet	1.44						
Selenium	**0.279**	J	mg/kg wet	1.44						
Barium	< 0.961	U	mg/kg wet	0.961						
Reference (1812374-SRM1)					Prepared: 11-Sep-18 Analyzed: 13-Sep-18					
Arsenic	**75.0**		mg/kg wet	1.50	81.9		91	83.2-116.8		
Silver	**19.5**		mg/kg wet	1.50	22.0		88	79.9-119.9		
Cadmium	**94.3**		mg/kg wet	0.500	107		88	83.4-116.6		
Chromium	**65.6**		mg/kg wet	1.00	69.2		95	82.4-117.6		
Lead	**49.3**		mg/kg wet	1.50	56.5		87	83-117.1		
Selenium	**89.0**		mg/kg wet	1.50	97.2		92	79.6-120.9		
Barium	**134**		mg/kg wet	1.00	132		102	82.7-117.3		
Reference (1812374-SRM2)					Prepared: 11-Sep-18 Analyzed: 13-Sep-18					
Selenium	**80.8**		mg/kg wet	1.50	98.6		82	79.6-120.9		
Silver	**18.2**		mg/kg wet	1.50	22.4		81	79.9-119.9		
Cadmium	**85.9**	QM9	mg/kg wet	0.500	109		79	83.4-116.6		
Chromium	**60.3**		mg/kg wet	1.00	70.2		86	82.4-117.6		
Arsenic	**69.0**	QM9	mg/kg wet	1.50	83.1		83	83.2-116.8		
Lead	**44.5**	QM9	mg/kg wet	1.50	57.3		78	83-117.1		
Barium	**121**		mg/kg wet	1.00	134		90	82.7-117.3		
SW846 7471B										
Batch 1812380 - EPA200/SW7000 Series										
Blank (1812380-BLK1)					Prepared: 11-Sep-18 Analyzed: 13-Sep-18					
Mercury	< 0.0262	U	mg/kg wet	0.0262						
Reference (1812380-SRM1)					Prepared: 11-Sep-18 Analyzed: 13-Sep-18					
Mercury	**4.52**	D	mg/kg wet	0.600	3.99		113	71.6-128		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SM2540 G (11) Mod.										
Batch 1812258 - General Preparation										
Duplicate (1812258-DUP1)			**Source: SC50096-01**			Prepared & Analyzed: 07-Sep-18				
% Solids	**95.0**		%			94.9			0.1	5
Duplicate (1812258-DUP2)			**Source: SC50096-02**			Prepared & Analyzed: 07-Sep-18				
% Solids	**94.1**		%			94.3			0.3	5
SW846 9012B										
Batch 1812426 - General Preparation										
Blank (1812426-BLK1)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	< 0.500	U	mg/kg wet	0.500						
Blank (1812426-BLK2)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	< 0.500	U	mg/kg wet	0.500						
LCS (1812426-BS1)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**25.4**		mg/kg wet	0.500	25.0		102	90-110		
LCS (1812426-BS2)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**27.1**		mg/kg wet	0.500	25.0		108	90-110		
Calibration Blank (1812426-CCB1)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**0.000529**		mg/kg wet							
Calibration Blank (1812426-CCB2)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**0.00373**		mg/kg wet							
Calibration Blank (1812426-CCB3)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**0.000803**		mg/kg wet							
Calibration Check (1812426-CCV1)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**25.4**		mg/kg wet	0.500	25.0		102	90-110		
Calibration Check (1812426-CCV2)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**25.2**		mg/kg wet	0.500	25.0		101	90-110		
Calibration Check (1812426-CCV3)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**25.1**		mg/kg wet	0.500	25.0		100	90-110		
Duplicate (1812426-DUP1)			**Source: SC50096-09**			Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	< 0.358	U	mg/kg dry	0.358		BRL				35
Matrix Spike (1812426-MS1)			**Source: SC50096-09**			Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**17.7**		mg/kg dry	0.383	19.1	BRL	92	90-110		
Matrix Spike Dup (1812426-MSD1)			**Source: SC50096-09**			Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**19.4**		mg/kg dry	0.419	20.9	BRL	92	90-110	9	35
Reference (1812426-SRM1)						Prepared: 12-Sep-18 Analyzed: 13-Sep-18				
Cyanide (total)	**100**		mg/kg wet	0.971	94.3		106	22.3-116		

Notes and Definitions

D	Data reported from a dilution
J	Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
U	Analyte included in the analysis, but not detected at or above the MDL.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

SC50096 Day

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CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:

☐ Standard TAT - 7 to 10 business days

☒ Rush TAT - Date Needed: 5 day TAT

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Day Environmental, Inc
1563 Lyell Avenue
Rochester NY 14606

Telephone #: 585 454 0210
Project Mgr: C. Hampton

Invoice To: SAME

P.O No.: Quote #:

Project No: 5529.5-18
Site Name: 441 Chandler Street
Location: Jamestown State: NY
Sampler(s): C. Hampton

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= None 12=

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= Concrete X2= X3=

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic Bags	RCRA 8 metals	Cyanide (total)	Check if chlorinated
SC50096-01	CFS-A (0-2")	9/5/18	14:30	G	X1				1	X	X	☐
02	CFS-A (2-6")		14:30						1	X	X	☐
03	CFS-B (0-1.75")		15:30						1	X	X	☐
04	CFS-B (5.5-9")		15:30						1	X	X	☐
05	CFS-C (0-2")		14:00						1	X	X	☐
06	CFS-C (7.5-10")		14:00						1	X	X	☐
07	CFS-D (0-2")		15:00						1	X	X	☐
08	CFS-D (4-5.5")		15:00						1	X	X	☐
09	CFS-E (0-2")		12:25						1	X	X	☐
10	CFS-E (2-3.5")		12:25						1	X	X	☐

List Preservative Code below: 11 4

Analysis

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☒ Standard ☐ No QC
☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other:
State-specific reporting standards:

Crush samples prior to analysis

Relinquished by:	Received by:	Date:	Time:	Temp °C
Charles Hyatt FedEx	Fed-Ex	9/5/18	~17:30	Observed 2.2
	Alice Nall	9/6/18	17:21	Correction Factor 0
				Corrected 2.2
				IR ID # 1

☒ EDD format: Standard
☒ E-mail to: champton@daygroup.net

Condition upon receipt: Custody Seals: ☑ Present ☑ Intact ☐ Broken
☐ Ambient ☑ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

SC 50096

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CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:

- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: 5 day TAT

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Day Environmental, Inc
1563 Lyell Ave
Rochester NY 14606
Telephone #: 585-454-0210
Project Mgr: C. Hampton

Invoice To: SAME

P.O No.: Quote #:

Project No: 55293-18
Site Name: 441 Chandler Street
Location: Jamestown State: NY
Sampler(s): C. Hampton

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= 12=

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= Concrete X2= X3=

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic 8535	RCRA 8 Metals	Cyanide	Check if chlorinated
SC50096-11	CFS-F (0-2")	9/5/18	16:00	G	X1				1	X	X	☐
↓ 12	CFS-F (2-4.5")	9/5/18	16:00	G	X1				1	X	X	☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐
												☐

List Preservative Code below:

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☒ Standard ☐ No QC
☐ DQA*
☐ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other:
State-specific reporting standards:

Crush Samples prior to Analysis

Relinquished by:	Received by:	Date:	Time:
Fedex	Fed Ex	9/5/18	~17:30
	Blue Max	9/6/18	17:21

Temp °C
Observed 2.9
Correction Factor 0
Corrected 2.9
IR ID # 1

☒ EDD format: Standard
☐ E-mail to:

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☑ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Do Not Lift Using This Tag

ORIGIN ID:ROCA (585) 454-0210
ATTN: CHARLES HAMPTON
DAY ENVIRONMENTAL, INC.
1563 LYELL AVE.

ROCHESTER, NY 14606
UNITED STATES US

SHIP DATE: 05SEP18
ACTWGT: 20.00 LB
CAD: 0654830/CAFE3210

552J1/F78C/DCA5

TO **ROBERT BRISTOL**
EUROFINS SPECTRUM ANALYTICAL, INC.
11 ALMGREN DRIVE

AGAWAM MA 01001
(413) 789-9018 REF:
INV:
PO: DEPT:

RMA:

FedEx Express

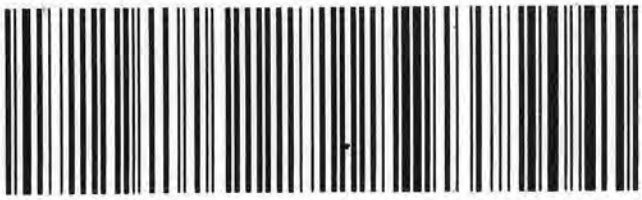
J13211308150 1aw

FedEx
TRK# 0223 **4457 6111 4485**

THU - 06 SEP 10:30A
PRIORITY OVERNIGHT

EB EHTA

01001
MA-US **BDL**



#708071 09/05 552J1/F78C/DCA5

Batch Summary

1812257

General Chemistry Parameters

SC50096-01 (CFS-A (0-2"))
SC50096-02 (CFS-A (2-6"))
SC50096-03 (CFS-B (0-1.75"))
SC50096-04 (CFS-B (5.5-9"))
SC50096-05 (CFS-C (0-2"))
SC50096-06 (CFS-C (7.5-10"))
SC50096-07 (CFS-D (0-2"))
SC50096-08 (CFS-D (4-5.5"))
SC50096-09 (CFS-E (0-2"))
SC50096-10 (CFS-E (2-3.5"))
SC50096-11 (CFS-F (0-2"))
SC50096-12 (CFS-F (2-4.5"))

1812258

General Chemistry Parameters

1812258-DUP1
1812258-DUP2
SC50096-01 (CFS-A (0-2"))
SC50096-02 (CFS-A (2-6"))
SC50096-03 (CFS-B (0-1.75"))
SC50096-04 (CFS-B (5.5-9"))
SC50096-05 (CFS-C (0-2"))
SC50096-06 (CFS-C (7.5-10"))
SC50096-07 (CFS-D (0-2"))
SC50096-08 (CFS-D (4-5.5"))
SC50096-09 (CFS-E (0-2"))
SC50096-10 (CFS-E (2-3.5"))
SC50096-11 (CFS-F (0-2"))
SC50096-12 (CFS-F (2-4.5"))

1812374

Total Metals by EPA 6000/7000 Series Methods

1812374-BLK1
1812374-SRM1
1812374-SRM2
SC50096-01 (CFS-A (0-2"))
SC50096-02 (CFS-A (2-6"))
SC50096-03 (CFS-B (0-1.75"))
SC50096-04 (CFS-B (5.5-9"))
SC50096-05 (CFS-C (0-2"))
SC50096-06 (CFS-C (7.5-10"))
SC50096-07 (CFS-D (0-2"))
SC50096-08 (CFS-D (4-5.5"))
SC50096-09 (CFS-E (0-2"))
SC50096-10 (CFS-E (2-3.5"))
SC50096-11 (CFS-F (0-2"))
SC50096-12 (CFS-F (2-4.5"))

1812380

Total Metals by EPA 6000/7000 Series Methods

1812380-BLK1
1812380-SRM1
SC50096-01 (CFS-A (0-2"))
SC50096-02 (CFS-A (2-6"))
SC50096-03 (CFS-B (0-1.75"))
SC50096-04 (CFS-B (5.5-9"))
SC50096-05 (CFS-C (0-2"))
SC50096-06 (CFS-C (7.5-10"))
SC50096-07 (CFS-D (0-2"))
SC50096-08 (CFS-D (4-5.5"))
SC50096-09 (CFS-E (0-2"))
SC50096-10 (CFS-E (2-3.5"))
SC50096-11 (CFS-F (0-2"))
SC50096-12 (CFS-F (2-4.5"))

1812426

General Chemistry Parameters

1812426-BLK1
1812426-BLK2
1812426-BS1
1812426-BS2
1812426-CCB1
1812426-CCB2
1812426-CCB3
1812426-CCV1
1812426-CCV2
1812426-CCV3
1812426-DUP1
1812426-MS1
1812426-MSD1
1812426-SRM1
SC50096-01 (CFS-A (0-2"))
SC50096-02 (CFS-A (2-6"))
SC50096-03 (CFS-B (0-1.75"))
SC50096-04 (CFS-B (5.5-9"))
SC50096-05 (CFS-C (0-2"))
SC50096-06 (CFS-C (7.5-10"))
SC50096-07 (CFS-D (0-2"))
SC50096-08 (CFS-D (4-5.5"))
SC50096-09 (CFS-E (0-2"))
SC50096-10 (CFS-E (2-3.5"))
SC50096-11 (CFS-F (0-2"))
SC50096-12 (CFS-F (2-4.5"))

EUROFINS SPECTRUM ANALYTICAL
LABORATORY REPORT
SC51827

☑ Final Report
☐ Revised Report

Report Date:
15-Nov-18 17:19

Laboratory Report
SC51827

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, NY 14606
Attn: Charles Hampton

Project: 441 Chandler St - Jamestown, NY
Project #: 5529S-18

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2972/2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00348
USDA # P330-15-00375
Vermont # VT-11393

Authorized by:

Rebecca Merz
Quality Services Manager

Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 53 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our 'Quality' web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC51827

Project: 441 Chandler St - Jamestown, NY

Project Number: 5529S-18

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC51827-01	MW A (4')	Soil	06-Nov-18 10:08	09-Nov-18 10:30
SC51827-02	MW A (8')	Soil	06-Nov-18 10:20	09-Nov-18 10:30
SC51827-03	MW A (11')	Soil	06-Nov-18 10:35	09-Nov-18 10:30
SC51827-04	MW A (13')	Soil	06-Nov-18 10:50	09-Nov-18 10:30
SC51827-05	MW B (9.5')	Soil	06-Nov-18 11:45	09-Nov-18 10:30
SC51827-06	MW B (11')	Soil	06-Nov-18 11:50	09-Nov-18 10:30
SC51827-07	MW D (9')	Soil	06-Nov-18 15:30	09-Nov-18 10:30
SC51827-08	TB-Soil	Trip Blank	06-Nov-18 00:00	09-Nov-18 10:30
SC51827-09	MW-A	Ground Water	08-Nov-18 13:25	09-Nov-18 10:30
SC51827-10	MW-B	Ground Water	08-Nov-18 11:35	09-Nov-18 10:30
SC51827-11	MW-C	Ground Water	08-Nov-18 10:35	09-Nov-18 10:30
SC51827-12	MW-D	Ground Water	08-Nov-18 11:05	09-Nov-18 10:30
SC51827-13	TB-Ground Water	Trip Blank	08-Nov-18 00:00	09-Nov-18 10:30
SC51827-14	MW-A Sediment	Sediment	08-Nov-18 12:30	09-Nov-18 10:30
SC51827-15	MW-A LNAPL	LNAPL	08-Nov-18 13:55	09-Nov-18 10:30

CASE NARRATIVE:

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 2.1 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

VOA vials preserved with deionized water were received frozen upon custody transfer to laboratory representative.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

All VOC soils samples submitted and analyzed in methanol will have a minimum dilution factor of 50. This is the minimum amount of solvent allowed on the instrumentation without causing interference. Soils are run on a manual load instrument. 100ug of sample (MEOH) is spiked into 5ml DI water along with the surrogate and added directly onto the instrument. Additional dilution factors may be required to keep analyte concentration within instrument calibration range.

Method SW846 5035A is designed to use on samples containing low levels of VOCs, ranging from 0.5 to 200 ug/Kg. Target analytes that are less responsive to purge and trap may be present at concentrations over 200ug/Kg but may not be reportable in the methanol preserved vial (SW846 5030). This is the result of the inherent dilution factor required for the methanol preservation.

All volatile soil/product/solid samples should be collected in accordance method SW846 5035/5035A. Any sample with a result below 200ug/Kg that has not been collected in accordance with method 5035/5035A must be evaluated as potentially biased low.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW846 8260C

Calibration:

1810048

Analyte quantified by quadratic equation type calibration.

Bromoform

This affected the following samples:

1814950-BLK1
1814950-BS1
1814950-BSD1
MW A (4')
MW B (11')
MW B (9.5')
S822862-ICV1
S823199-CCV1
TB-Soil

1810070

Analyte quantified by quadratic equation type calibration.

Bromoform
Bromomethane
Carbon tetrachloride
cis-1,3-Dichloropropene
Dibromochloromethane
trans-1,3-Dichloropropene
Vinyl chloride

SW846 8260C

Calibration:

1810070

This affected the following samples:

S822956-ICV1

1811020

Analyte quantified by quadratic equation type calibration.

1,2-Dichlorobenzene
1,3-Dichlorobenzene
Bromoform
cis-1,3-Dichloropropene
Dibromochloromethane
trans-1,3-Dichloropropene
Vinyl chloride

This affected the following samples:

1814905-BLK1
1814905-BS1
1814905-BSD1
MW-A
MW-B
MW-C
MW-D
S823142-ICV1
S823188-CCV1
TB-Ground Water

Laboratory Control Samples:

1814905 BS/BSD

Bromomethane percent recoveries (135/128) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-A
MW-B
MW-C
MW-D
TB-Ground Water

1814913 BS/BSD

Bromoform percent recoveries (140/138) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-A LNAPL

Bromomethane percent recoveries (156/120) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-A LNAPL

Carbon tetrachloride percent recoveries (149/146) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-A LNAPL

Dibromochloromethane percent recoveries (130/133) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-A LNAPL

SW846 8260C

Laboratory Control Samples:

1814913 BS/BSD

Trichlorofluoromethane (Freon 11) percent recoveries (153/148) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-A LNAPL

1814951 BS/BSD

Bromoform percent recoveries (140/150) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (11')
MW A (13')
MW A (8')
MW-A Sediment

Carbon tetrachloride percent recoveries (145/149) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (11')
MW A (13')
MW A (8')
MW-A Sediment

Dibromochloromethane percent recoveries (135/143) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (11')
MW A (13')
MW A (8')
MW-A Sediment

Trichlorofluoromethane (Freon 11) percent recoveries (148/152) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (11')
MW A (13')
MW A (8')
MW-A Sediment

1815012 BS/BSD

Bromoform percent recoveries (142/141) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (11')
MW A (13')
MW A (4')
MW D (9')
MW-A Sediment

Bromomethane percent recoveries (167/155) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (11')
MW A (13')
MW A (4')
MW D (9')
MW-A Sediment

SW846 8260C

Laboratory Control Samples:

1815012 BS/BSD

Carbon tetrachloride percent recoveries (130/134) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (11')
MW A (13')
MW A (4')
MW D (9')
MW-A Sediment

Chloromethane percent recoveries (70/69) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW A (11')
MW A (13')
MW A (4')
MW D (9')
MW-A Sediment

1815015 BS/BSD

Bromomethane percent recoveries (158/158) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW-A LNAPL

Chloromethane percent recoveries (59/56) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially low bias:

MW-A LNAPL

1815084 BS/BSD

Bromoform percent recoveries (150/142) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (4')
TB-Soil

Bromomethane percent recoveries (181/169) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (4')
TB-Soil

Carbon tetrachloride percent recoveries (149/145) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (4')
TB-Soil

Dibromochloromethane percent recoveries (144/128) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (4')
TB-Soil

Trichlorofluoromethane (Freon 11) percent recoveries (152/146) are outside individual acceptance criteria (70-130), but within overall method allowances. All reported results of the following samples are considered to have a potentially high bias:

MW A (4')
TB-Soil

Samples:

SW846 8260C

Samples:

S823177-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

1,1,1-Trichloroethane (27.0%)
Dichlorodifluoromethane (Freon12) (24.0%)
Trichlorofluoromethane (Freon 11) (47.6%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Bromoform (37.8%)
Carbon tetrachloride (46.5%)
Dibromochloromethane (32.6%)

This affected the following samples:

1814913-BLK1
1814913-BS1
1814913-BSD1
MW-A LNAPL

S823188-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Bromomethane (38.4%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Vinyl chloride (25.2%)

This affected the following samples:

1814905-BLK1
1814905-BS1
1814905-BSD1
MW-A
MW-B
MW-C
MW-D
TB-Ground Water

S823197-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Trichlorofluoromethane (Freon 11) (52.3%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Bromoform (49.8%)
Bromomethane (25.6%)
Carbon tetrachloride (49.3%)
Dibromochloromethane (43.0%)

This affected the following samples:

1814951-BLK1
1814951-BS1
1814951-BSD1
MW A (11')
MW A (13')
MW A (8')
MW-A Sediment

S823199-CCV1

SW846 8260C

Samples:

S823199-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Carbon tetrachloride (29.3%)
Tetrachloroethene (29.2%)
Trichlorofluoromethane (Freon 11) (26.7%)

This affected the following samples:

1814950-BLK1
1814950-BS1
1814950-BSD1
MW A (4')
MW B (11')
MW B (9.5')
TB-Soil

S823230-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Chloromethane (-31.2%)
Trichlorofluoromethane (Freon 11) (29.0%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Bromoform (40.7%)
Bromomethane (54.8%)
Carbon tetrachloride (34.0%)
Dibromochloromethane (26.0%)

This affected the following samples:

1815012-BLK1
1815012-BS1
1815012-BSD1
MW A (11')
MW A (13')
MW A (4')
MW D (9')
MW-A Sediment

S823231-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Chloromethane (-38.7%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Bromoform (27.4%)
Bromomethane (62.4%)

This affected the following samples:

1815015-BLK1
1815015-BS1
1815015-BSD1
MW-A LNAPL

S823263-CCV1

SW846 8260C

Samples:

S823263-CCV1

Analyte percent difference is outside individual acceptance criteria (20), but within overall method allowances.

Chloromethane (-30.0%)
Trichlorofluoromethane (Freon 11) (45.6%)

Analyte percent drift is outside individual acceptance criteria (20), but within overall method allowances.

Bromoform (42.0%)
Bromomethane (69.0%)
Carbon tetrachloride (44.8%)
Dibromochloromethane (27.7%)

This affected the following samples:

1815084-BLK1
1815084-BS1
1815084-BSD1
MW A (4')
TB-Soil

SC51827-01 *MW A (4')*

Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogates with three required by program methods.

1,2-Dichloroethane-d4

SC51827-01RE1 *MW A (4')*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC51827-01RE2 *MW A (4')*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogates with three required by program methods.

1,2-Dichloroethane-d4

SC51827-02 *MW A (8')*

Reporting limits reflect SW846 5035A High Level extraction technique due to interference and/or QC issues using SW846 5035A Low Level extraction technique.

SC51827-03 *MW A (11')*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC51827-03RE1 *MW A (11')*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC51827-04 *MW A (13')*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC51827-04RE1 *MW A (13')*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SW846 8260C

Samples:

SC51827-07 *MW D (9')*

Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.

SC51827-09 *MW-A*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC51827-14 *MW-A Sediment*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC51827-14RE1 *MW-A Sediment*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC51827-15 *MW-A LNAPL*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

SC51827-15RE1 *MW-A LNAPL*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

Sample Acceptance Check Form

Client:	Day Environmental, Inc.
Project:	441 Chandler St - Jamestown, NY / 5529S-18
Work Order:	SC51827
Sample(s) received on:	11/9/2018

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
Were custody seals present?	☑	☐	☐
Were custody seals intact?	☑	☐	☐
Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
Were samples cooled on ice upon transfer to laboratory representative?	☑	☐	☐
Were sample containers received intact?	☑	☐	☐
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
Were samples accompanied by a Chain of Custody document?	☑	☐	☐
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☑	☐	☐
Did sample container labels agree with Chain of Custody document?	☑	☐	☐
Were samples received within method-specific holding times?	☑	☐	☐

Summary of Hits

Lab ID: SC51827-01 **Client ID:** MW A (4')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	7.4		4.8	µg/kg	SW846 8260C
Trichloroethene	238	E	4.8	µg/kg	SW846 8260C

Lab ID: SC51827-01RE1 **Client ID:** MW A (4')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	237	D	66.7	µg/kg	SW846 8260C
Trichloroethene	19000	D, E	133	µg/kg	SW846 8260C

Lab ID: SC51827-01RE2 **Client ID:** MW A (4')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	260	J, D	334	µg/kg	SW846 8260C
Trichloroethene	24500	D	334	µg/kg	SW846 8260C

Lab ID: SC51827-02 **Client ID:** MW A (8')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Trichloroethene	38.2	J, D	56.2	µg/kg	SW846 8260C

Lab ID: SC51827-03 **Client ID:** MW A (11')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethene	121	J, D	185	µg/kg	SW846 8260C
cis-1,2-Dichloroethene	12000	D	185	µg/kg	SW846 8260C
Trichloroethene	28600	D, E	185	µg/kg	SW846 8260C
Vinyl chloride	480	D	185	µg/kg	SW846 8260C

Lab ID: SC51827-03RE1 **Client ID:** MW A (11')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	11800	D	464	µg/kg	SW846 8260C
Trichloroethene	32400	D	927	µg/kg	SW846 8260C
Vinyl chloride	876	D	464	µg/kg	SW846 8260C

Lab ID: SC51827-04 **Client ID:** MW A (13')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	12600	D	205	µg/kg	SW846 8260C
Trichloroethene	177000	D, E	205	µg/kg	SW846 8260C
Vinyl chloride	193	J, D	205	µg/kg	SW846 8260C

Lab ID: SC51827-04RE1 **Client ID:** MW A (13')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	12000	D	2570	µg/kg	SW846 8260C
Trichloroethene	198000	D	5130	µg/kg	SW846 8260C

Lab ID: SC51827-05 **Client ID:** MW B (9.5')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Trichloroethene	10.4		10.1	µg/kg	SW846 8260C

Lab ID: SC51827-06 **Client ID:** MW B (11')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	1.8	J	4.2	µg/kg	SW846 8260C
Trichloroethene	4.8		4.2	µg/kg	SW846 8260C
Vinyl chloride	4.0	J	4.2	µg/kg	SW846 8260C

Lab ID: SC51827-07 **Client ID:** MW D (9')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Trichloroethene	108	D	81.0	µg/kg	SW846 8260C

Lab ID: SC51827-09 **Client ID:** MW-A

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	1310	D	500	µg/l	SW846 8260C
Trichloroethene	46900	D	500	µg/l	SW846 8260C

Lab ID: SC51827-10 **Client ID:** MW-B

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethane	0.8	J	1.0	µg/l	SW846 8260C
1,1-Dichloroethene	0.6	J	1.0	µg/l	SW846 8260C
cis-1,2-Dichloroethene	26.7		1.0	µg/l	SW846 8260C
trans-1,2-Dichloroethene	0.6	J	1.0	µg/l	SW846 8260C
Trichloroethene	42.5		1.0	µg/l	SW846 8260C
Vinyl chloride	15.6		1.0	µg/l	SW846 8260C

Lab ID: SC51827-11 **Client ID:** MW-C

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Trichloroethene	1.5		1.0	µg/l	SW846 8260C

Lab ID: SC51827-12 **Client ID:** MW-D

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	3.2		1.0	µg/l	SW846 8260C
Trichloroethene	0.9	J	1.0	µg/l	SW846 8260C
Vinyl chloride	5.5		1.0	µg/l	SW846 8260C

Lab ID: SC51827-14 **Client ID:** MW-A Sediment

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethene	1740	D	416	µg/kg	SW846 8260C
cis-1,2-Dichloroethene	153000	D, E	416	µg/kg	SW846 8260C
Tetrachloroethene	1090	D	416	µg/kg	SW846 8260C
trans-1,2-Dichloroethene	587	D	416	µg/kg	SW846 8260C
Trichloroethene	3320000	D, E	416	µg/kg	SW846 8260C
Vinyl chloride	2320	D	416	µg/kg	SW846 8260C

Lab ID: SC51827-14RE1 **Client ID:** MW-A Sediment

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Bromomethane	129000	J, D	208000	µg/kg	SW846 8260C
cis-1,2-Dichloroethene	163000	D	104000	µg/kg	SW846 8260C
Trichloroethene	10300000	D	208000	µg/kg	SW846 8260C

Lab ID: SC51827-15 **Client ID:** MW-A LNAPL

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	17800	D	4710	µg/kg	SW846 8260C
Trichloroethene	1710000	D, E	4710	µg/kg	SW846 8260C

Lab ID: SC51827-15RE1 **Client ID:** MW-A LNAPL

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Trichloroethene	1170000	D	47100	µg/kg	SW846 8260C

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW A (4') SC51827-01	5529S-18	Soil	06-Nov-18 10:08	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Prepared by method Volatiles													
	VOC Extraction	**Field extracted**		N/A			1	VOC Soil Extraction			BD	1814877	
Volatile Organic Halocarbons by SW846 8260													
Prepared by method SW846 5035A Soil (low level)							Initial weight: 8.5 g						
75-27-4	Bromodichloromethane	< 4.8	U	µg/kg dry	4.8	3.2	1	SW846 8260C	13-Nov-18	13-Nov-18	mp	1814950	X
75-25-2	Bromoform	< 4.8	U	µg/kg dry	4.8	4.6	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 9.6	U	µg/kg dry	9.6	4.3	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 4.8	U	µg/kg dry	4.8	3.9	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 4.8	U	µg/kg dry	4.8	1.5	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 9.6	U	µg/kg dry	9.6	2.7	1	"	"	"	"	"	X
67-66-3	Chloroform	< 4.8	U	µg/kg dry	4.8	2.6	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 9.6	U	µg/kg dry	9.6	2.0	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 4.8	U	µg/kg dry	4.8	3.2	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.8	U	µg/kg dry	4.8	1.2	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.8	U	µg/kg dry	4.8	1.0	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.8	U	µg/kg dry	4.8	1.4	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 9.6	U	µg/kg dry	9.6	1.8	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 4.8	U	µg/kg dry	4.8	1.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 4.8	U	µg/kg dry	4.8	1.7	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 4.8	U	µg/kg dry	4.8	2.5	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**7.4**		µg/kg dry	4.8	1.8	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 4.8	U	µg/kg dry	4.8	2.5	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 4.8	U	µg/kg dry	4.8	2.5	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 4.8	U	µg/kg dry	4.8	2.9	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 4.8	U	µg/kg dry	4.8	2.5	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 9.6	U	µg/kg dry	9.6	1.9	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 4.8	U	µg/kg dry	4.8	4.0	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 4.8	U	µg/kg dry	4.8	1.6	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 4.8	U	µg/kg dry	4.8	1.6	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 4.8	U	µg/kg dry	4.8	3.5	1	"	"	"	"	"	X
79-01-6	Trichloroethene	**238**	E	µg/kg dry	4.8	1.3	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 4.8	U	µg/kg dry	4.8	2.6	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 4.8	U	µg/kg dry	4.8	1.6	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*88*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*105*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*132*	SGCMS VOC		*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*118*			*70-130 %*			"	"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 16.73 g						
75-27-4	Bromodichloromethane	< 66.7	U, D	µg/kg dry	66.7	44.5	50	SW846 8260C	14-Nov-18	14-Nov-18	MP	1815012	X
75-25-2	Bromoform	< 66.7	U, D	µg/kg dry	66.7	63.7	50	"	"	"	"	"	X
74-83-9	Bromomethane	< 133	U, D	µg/kg dry	133	60.3	50	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW A (4')	5529S-18	Soil	06-Nov-18 10:08	09-Nov-18
SC51827-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
							Initial weight: 16.73 g						
56-23-5	Carbon tetrachloride	< 66.7	U, D	µg/kg dry	66.7	54.6	50	SW846 8260C	14-Nov-18	14-Nov-18	MP	1815012	X
108-90-7	Chlorobenzene	< 66.7	U, D	µg/kg dry	66.7	20.9	50	"	"	"	"	"	X
75-00-3	Chloroethane	< 133	U, D	µg/kg dry	133	37.0	50	"	"	"	"	"	X
67-66-3	Chloroform	< 66.7	U, D	µg/kg dry	66.7	35.8	50	"	"	"	"	"	X
74-87-3	Chloromethane	< 133	U, D	µg/kg dry	133	27.6	50	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 66.7	U, D	µg/kg dry	66.7	45.2	50	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 66.7	U, D	µg/kg dry	66.7	17.4	50	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 66.7	U, D	µg/kg dry	66.7	14.5	50	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 66.7	U, D	µg/kg dry	66.7	19.8	50	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 133	U, D	µg/kg dry	133	25.3	50	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 66.7	U, D	µg/kg dry	66.7	17.5	50	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 66.7	U, D	µg/kg dry	66.7	23.9	50	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 66.7	U, D	µg/kg dry	66.7	34.9	50	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**237**	D	µg/kg dry	66.7	24.8	50	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 66.7	U, D	µg/kg dry	66.7	35.4	50	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 66.7	U, D	µg/kg dry	66.7	35.0	50	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 66.7	U, D	µg/kg dry	66.7	40.2	50	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 66.7	U, D	µg/kg dry	66.7	35.0	50	"	"	"	"	"	X
75-09-2	Methylene chloride	< 133	U, D	µg/kg dry	133	26.5	50	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 66.7	U, D	µg/kg dry	66.7	56.5	50	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 66.7	U, D	µg/kg dry	66.7	22.8	50	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 66.7	U, D	µg/kg dry	66.7	22.2	50	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 66.7	U, D	µg/kg dry	66.7	48.4	50	"	"	"	"	"	X
79-01-6	Trichloroethene	**19,000**	D, E	µg/kg dry	133	107	50	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 66.7	U, D	µg/kg dry	66.7	36.0	50	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 66.7	U, D	µg/kg dry	66.7	22.6	50	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*115*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*104*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*130*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*114*			*70-130 %*			"	"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 16.73 g						
75-27-4	Bromodichloromethane	< 334	U, D	µg/kg dry	334	223	250	SW846 8260C	15-Nov-18	15-Nov-18	MP	1815084	X
75-25-2	Bromoform	< 334	U, D	µg/kg dry	334	318	250	"	"	"	"	"	X
74-83-9	Bromomethane	< 667	U, D	µg/kg dry	667	301	250	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 334	U, D	µg/kg dry	334	273	250	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 334	U, D	µg/kg dry	334	104	250	"	"	"	"	"	X
75-00-3	Chloroethane	< 667	U, D	µg/kg dry	667	185	250	"	"	"	"	"	X
67-66-3	Chloroform	< 334	U, D	µg/kg dry	334	179	250	"	"	"	"	"	X
74-87-3	Chloromethane	< 667	U, D	µg/kg dry	667	138	250	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 334	U, D	µg/kg dry	334	226	250	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW A (4') SC51827-01	5529S-18	Soil	06-Nov-18 10:08	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
						Initial weight: 16.73 g							
95-50-1	1,2-Dichlorobenzene	< 334	U, D	µg/kg dry	334	86.8	250	SW846 8260C	15-Nov-18	15-Nov-18	MP	1815084	X
541-73-1	1,3-Dichlorobenzene	< 334	U, D	µg/kg dry	334	72.4	250	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 334	U, D	µg/kg dry	334	98.8	250	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 667	U, D	µg/kg dry	667	126	250	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 334	U, D	µg/kg dry	334	87.4	250	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 334	U, D	µg/kg dry	334	119	250	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 334	U, D	µg/kg dry	334	175	250	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**260**	J, D	µg/kg dry	334	124	250	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 334	U, D	µg/kg dry	334	177	250	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 334	U, D	µg/kg dry	334	175	250	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 334	U, D	µg/kg dry	334	201	250	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 334	U, D	µg/kg dry	334	175	250	"	"	"	"	"	X
75-09-2	Methylene chloride	< 667	U, D	µg/kg dry	667	132	250	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 334	U, D	µg/kg dry	334	282	250	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 334	U, D	µg/kg dry	334	114	250	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 334	U, D	µg/kg dry	334	111	250	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 334	U, D	µg/kg dry	334	242	250	"	"	"	"	"	X
79-01-6	Trichloroethene	**24,500**	D	µg/kg dry	334	91.1	250	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 334	U, D	µg/kg dry	334	180	250	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 334	U, D	µg/kg dry	334	113	250	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*103*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*135*	SGCMS VOC		*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*115*			*70-130 %*			"	"	"	"	"	
General Chemistry Parameters													
	% Solids	**81.2**		%			1	SM2540 G (11) Mod.	09-Nov-18	09-Nov-18	BD	1814872	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW A (8') SC51827-02	5529S-18	Soil	06-Nov-18 10:20	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Prepared by method Volatiles													
	VOC Extraction	**Field extracted**		N/A			1	VOC Soil Extraction			BD	1814877	
Volatile Organic Halocarbons by SW846 8260			VOC8										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 18.28 g						
75-27-4	Bromodichloromethane	< 56.2	U, D	µg/kg dry	56.2	37.5	50	SW846 8260C	13-Nov-18	13-Nov-18	MP	1814951	X
75-25-2	Bromoform	< 56.2	U, D	µg/kg dry	56.2	53.6	50	"	"	"	"	"	X
74-83-9	Bromomethane	< 112	U, D	µg/kg dry	112	50.7	50	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 56.2	U, D	µg/kg dry	56.2	45.9	50	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 56.2	U, D	µg/kg dry	56.2	17.6	50	"	"	"	"	"	X
75-00-3	Chloroethane	< 112	U, D	µg/kg dry	112	31.2	50	"	"	"	"	"	X
67-66-3	Chloroform	< 56.2	U, D	µg/kg dry	56.2	30.2	50	"	"	"	"	"	X
74-87-3	Chloromethane	< 112	U, D	µg/kg dry	112	23.2	50	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 56.2	U, D	µg/kg dry	56.2	38.1	50	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 56.2	U, D	µg/kg dry	56.2	14.6	50	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 56.2	U, D	µg/kg dry	56.2	12.2	50	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 56.2	U, D	µg/kg dry	56.2	16.6	50	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 112	U, D	µg/kg dry	112	21.3	50	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 56.2	U, D	µg/kg dry	56.2	14.7	50	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 56.2	U, D	µg/kg dry	56.2	20.1	50	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 56.2	U, D	µg/kg dry	56.2	29.4	50	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 56.2	U, D	µg/kg dry	56.2	20.8	50	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 56.2	U, D	µg/kg dry	56.2	29.8	50	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 56.2	U, D	µg/kg dry	56.2	29.4	50	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 56.2	U, D	µg/kg dry	56.2	33.9	50	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 56.2	U, D	µg/kg dry	56.2	29.5	50	"	"	"	"	"	X
75-09-2	Methylene chloride	< 112	U, D	µg/kg dry	112	22.3	50	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 56.2	U, D	µg/kg dry	56.2	47.5	50	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 56.2	U, D	µg/kg dry	56.2	19.2	50	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 56.2	U, D	µg/kg dry	56.2	18.6	50	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 56.2	U, D	µg/kg dry	56.2	40.7	50	"	"	"	"	"	X
79-01-6	Trichloroethene	**38.2**	J, D	µg/kg dry	56.2	15.3	50	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 56.2	U, D	µg/kg dry	56.2	30.3	50	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 56.2	U, D	µg/kg dry	56.2	19.0	50	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*114*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*103*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*118*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*			*70-130 %*			"	"	"	"	"	
General Chemistry Parameters													
	% Solids	**85.7**		%			1	SM2540 G (11) Mod.	09-Nov-18	09-Nov-18	BD	1814872	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW A (11') SC51827-03	5529S-18	Soil	06-Nov-18 10:35	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Prepared by method Volatiles													
	VOC Extraction	**Field extracted**		N/A			1	VOC Soil Extraction			BD	1814877	
Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 22.76 g						
75-27-4	Bromodichloromethane	< 185	U, D	µg/kg dry	185	124	200	SW846 8260C	13-Nov-18	13-Nov-18	MP	1814951	X
75-25-2	Bromoform	< 185	U, D	µg/kg dry	185	177	200	"	"	"	"	"	X
74-83-9	Bromomethane	< 371	U, D	µg/kg dry	371	167	200	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 185	U, D	µg/kg dry	185	152	200	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 185	U, D	µg/kg dry	185	58.0	200	"	"	"	"	"	X
75-00-3	Chloroethane	< 371	U, D	µg/kg dry	371	103	200	"	"	"	"	"	X
67-66-3	Chloroform	< 185	U, D	µg/kg dry	185	99.6	200	"	"	"	"	"	X
74-87-3	Chloromethane	< 371	U, D	µg/kg dry	371	76.6	200	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 185	U, D	µg/kg dry	185	126	200	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 185	U, D	µg/kg dry	185	48.2	200	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 185	U, D	µg/kg dry	185	40.2	200	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 185	U, D	µg/kg dry	185	54.9	200	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 371	U, D	µg/kg dry	371	70.3	200	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 185	U, D	µg/kg dry	185	48.6	200	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 185	U, D	µg/kg dry	185	66.4	200	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	**121**	J, D	µg/kg dry	185	97.0	200	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**12,000**	D	µg/kg dry	185	68.8	200	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 185	U, D	µg/kg dry	185	98.3	200	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 185	U, D	µg/kg dry	185	97.2	200	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 185	U, D	µg/kg dry	185	112	200	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 185	U, D	µg/kg dry	185	97.4	200	"	"	"	"	"	X
75-09-2	Methylene chloride	< 371	U, D	µg/kg dry	371	73.6	200	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 185	U, D	µg/kg dry	185	157	200	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 185	U, D	µg/kg dry	185	63.4	200	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 185	U, D	µg/kg dry	185	61.6	200	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 185	U, D	µg/kg dry	185	134	200	"	"	"	"	"	X
79-01-6	Trichloroethene	**28,600**	D, E	µg/kg dry	185	50.6	200	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 185	U, D	µg/kg dry	185	100	200	"	"	"	"	"	X
75-01-4	Vinyl chloride	**480**	D	µg/kg dry	185	62.7	200	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*108*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*116*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*			*70-130 %*			"	"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 22.76 g						
75-27-4	Bromodichloromethane	< 464	U, D	µg/kg dry	464	309	500	SW846 8260C	14-Nov-18	14-Nov-18	MP	1815012	X
75-25-2	Bromoform	< 464	U, D	µg/kg dry	464	442	500	"	"	"	"	"	X
74-83-9	Bromomethane	< 927	U, D	µg/kg dry	927	419	500	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW A (11')	5529S-18	Soil	06-Nov-18 10:35	09-Nov-18
SC51827-03				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
						Initial weight: 22.76 g							
56-23-5	Carbon tetrachloride	< 464	U, D	µg/kg dry	464	379	500	SW846 8260C	14-Nov-18	14-Nov-18	MP	1815012	X
108-90-7	Chlorobenzene	< 464	U, D	µg/kg dry	464	145	500	"	"	"	"	"	X
75-00-3	Chloroethane	< 927	U, D	µg/kg dry	927	257	500	"	"	"	"	"	X
67-66-3	Chloroform	< 464	U, D	µg/kg dry	464	249	500	"	"	"	"	"	X
74-87-3	Chloromethane	< 927	U, D	µg/kg dry	927	191	500	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 464	U, D	µg/kg dry	464	314	500	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 464	U, D	µg/kg dry	464	121	500	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 464	U, D	µg/kg dry	464	101	500	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 464	U, D	µg/kg dry	464	137	500	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 927	U, D	µg/kg dry	927	176	500	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 464	U, D	µg/kg dry	464	121	500	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 464	U, D	µg/kg dry	464	166	500	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 464	U, D	µg/kg dry	464	242	500	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**11,800**	D	µg/kg dry	464	172	500	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 464	U, D	µg/kg dry	464	246	500	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 464	U, D	µg/kg dry	464	243	500	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 464	U, D	µg/kg dry	464	280	500	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 464	U, D	µg/kg dry	464	243	500	"	"	"	"	"	X
75-09-2	Methylene chloride	< 927	U, D	µg/kg dry	927	184	500	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 464	U, D	µg/kg dry	464	392	500	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 464	U, D	µg/kg dry	464	159	500	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 464	U, D	µg/kg dry	464	154	500	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 464	U, D	µg/kg dry	464	336	500	"	"	"	"	"	X
79-01-6	Trichloroethene	**32,400**	D	µg/kg dry	927	742	500	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 464	U, D	µg/kg dry	464	250	500	"	"	"	"	"	X
75-01-4	Vinyl chloride	**876**	D	µg/kg dry	464	157	500	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*101*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*130*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*116*			*70-130 %*			"	"	"	"	"	
General Chemistry Parameters													
	% Solids	**86.1**		%			1	SM2540 G (11) Mod.	09-Nov-18	09-Nov-18	BD	1814872	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW A (13') SC51827-04	5529S-18	Soil	06-Nov-18 10:50	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Prepared by method Volatiles													
	VOC Extraction	**Field extracted**		N/A			1	VOC Soil Extraction			BD	1814877	
Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 19.07 g						
75-27-4	Bromodichloromethane	< 205	U, D	µg/kg dry	205	137	200	SW846 8260C	13-Nov-18	13-Nov-18	MP	1814951	X
75-25-2	Bromoform	< 205	U, D	µg/kg dry	205	196	200	"	"	"	"	"	X
74-83-9	Bromomethane	< 411	U, D	µg/kg dry	411	185	200	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 205	U, D	µg/kg dry	205	168	200	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 205	U, D	µg/kg dry	205	64.3	200	"	"	"	"	"	X
75-00-3	Chloroethane	< 411	U, D	µg/kg dry	411	114	200	"	"	"	"	"	X
67-66-3	Chloroform	< 205	U, D	µg/kg dry	205	110	200	"	"	"	"	"	X
74-87-3	Chloromethane	< 411	U, D	µg/kg dry	411	84.8	200	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 205	U, D	µg/kg dry	205	139	200	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 205	U, D	µg/kg dry	205	53.4	200	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 205	U, D	µg/kg dry	205	44.6	200	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 205	U, D	µg/kg dry	205	60.8	200	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 411	U, D	µg/kg dry	411	77.8	200	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 205	U, D	µg/kg dry	205	53.8	200	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 205	U, D	µg/kg dry	205	73.5	200	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 205	U, D	µg/kg dry	205	107	200	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**12,600**	D	µg/kg dry	205	76.2	200	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 205	U, D	µg/kg dry	205	109	200	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 205	U, D	µg/kg dry	205	108	200	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 205	U, D	µg/kg dry	205	124	200	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 205	U, D	µg/kg dry	205	108	200	"	"	"	"	"	X
75-09-2	Methylene chloride	< 411	U, D	µg/kg dry	411	81.5	200	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 205	U, D	µg/kg dry	205	174	200	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 205	U, D	µg/kg dry	205	70.2	200	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 205	U, D	µg/kg dry	205	68.2	200	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 205	U, D	µg/kg dry	205	149	200	"	"	"	"	"	X
79-01-6	Trichloroethene	**177,000**	D, E	µg/kg dry	205	56.1	200	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 205	U, D	µg/kg dry	205	111	200	"	"	"	"	"	X
75-01-4	Vinyl chloride	**193**	J, D	µg/kg dry	205	69.4	200	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*106*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*118*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*			*70-130 %*			"	"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 19.07 g						
75-27-4	Bromodichloromethane	< 2570	U, D	µg/kg dry	2570	1710	2500	SW846 8260C	14-Nov-18	14-Nov-18	MP	1815012	X
75-25-2	Bromoform	< 2570	U, D	µg/kg dry	2570	2450	2500	"	"	"	"	"	X
74-83-9	Bromomethane	< 5130	U, D	µg/kg dry	5130	2320	2500	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW A (13')	5529S-18	Soil	06-Nov-18 10:50	09-Nov-18
SC51827-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
						Initial weight: 19.07 g							
56-23-5	Carbon tetrachloride	< 2570	U, D	µg/kg dry	2570	2100	2500	SW846 8260C	14-Nov-18	14-Nov-18	MP	1815012	X
108-90-7	Chlorobenzene	< 2570	U, D	µg/kg dry	2570	804	2500	"	"	"	"	"	X
75-00-3	Chloroethane	< 5130	U, D	µg/kg dry	5130	1420	2500	"	"	"	"	"	X
67-66-3	Chloroform	< 2570	U, D	µg/kg dry	2570	1380	2500	"	"	"	"	"	X
74-87-3	Chloromethane	< 5130	U, D	µg/kg dry	5130	1060	2500	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 2570	U, D	µg/kg dry	2570	1740	2500	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 2570	U, D	µg/kg dry	2570	667	2500	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 2570	U, D	µg/kg dry	2570	557	2500	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 2570	U, D	µg/kg dry	2570	760	2500	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 5130	U, D	µg/kg dry	5130	973	2500	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 2570	U, D	µg/kg dry	2570	673	2500	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 2570	U, D	µg/kg dry	2570	919	2500	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 2570	U, D	µg/kg dry	2570	1340	2500	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**12,000**	D	µg/kg dry	2570	952	2500	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 2570	U, D	µg/kg dry	2570	1360	2500	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 2570	U, D	µg/kg dry	2570	1350	2500	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 2570	U, D	µg/kg dry	2570	1550	2500	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 2570	U, D	µg/kg dry	2570	1350	2500	"	"	"	"	"	X
75-09-2	Methylene chloride	< 5130	U, D	µg/kg dry	5130	1020	2500	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 2570	U, D	µg/kg dry	2570	2170	2500	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 2570	U, D	µg/kg dry	2570	878	2500	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 2570	U, D	µg/kg dry	2570	852	2500	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 2570	U, D	µg/kg dry	2570	1860	2500	"	"	"	"	"	X
79-01-6	Trichloroethene	**198,000**	D	µg/kg dry	5130	4110	2500	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 2570	U, D	µg/kg dry	2570	1380	2500	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 2570	U, D	µg/kg dry	2570	868	2500	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*103*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*130*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*117*			*70-130 %*			"	"	"	"	"	
General Chemistry Parameters													
	% Solids	**88.1**		%			1	SM2540 G (11) Mod.	09-Nov-18	09-Nov-18	BD	1814872	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW B (9.5') SC51827-05	5529S-18	Soil	06-Nov-18 11:45	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Prepared by method Volatiles													
	VOC Extraction	**Field extracted**		N/A			1	VOC Soil Extraction			BD	1814877	
Volatile Organic Halocarbons by SW846 8260													
Prepared by method SW846 5035A Soil (low level)							Initial weight: 4.51 g						
75-27-4	Bromodichloromethane	< 10.1	U	µg/kg dry	10.1	6.7	1	SW846 8260C	13-Nov-18	13-Nov-18	mp	1814950	X
75-25-2	Bromoform	< 10.1	U	µg/kg dry	10.1	9.6	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 20.2	U	µg/kg dry	20.2	9.1	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 10.1	U	µg/kg dry	10.1	8.2	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 10.1	U	µg/kg dry	10.1	3.2	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 20.2	U	µg/kg dry	20.2	5.6	1	"	"	"	"	"	X
67-66-3	Chloroform	< 10.1	U	µg/kg dry	10.1	5.4	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 20.2	U	µg/kg dry	20.2	4.2	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 10.1	U	µg/kg dry	10.1	6.8	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 10.1	U	µg/kg dry	10.1	2.6	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 10.1	U	µg/kg dry	10.1	2.2	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 10.1	U	µg/kg dry	10.1	3.0	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 20.2	U	µg/kg dry	20.2	3.8	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 10.1	U	µg/kg dry	10.1	2.6	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 10.1	U	µg/kg dry	10.1	3.6	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 10.1	U	µg/kg dry	10.1	5.3	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 10.1	U	µg/kg dry	10.1	3.7	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 10.1	U	µg/kg dry	10.1	5.3	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 10.1	U	µg/kg dry	10.1	5.3	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 10.1	U	µg/kg dry	10.1	6.1	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 10.1	U	µg/kg dry	10.1	5.3	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 20.2	U	µg/kg dry	20.2	4.0	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 10.1	U	µg/kg dry	10.1	8.5	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 10.1	U	µg/kg dry	10.1	3.4	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 10.1	U	µg/kg dry	10.1	3.3	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 10.1	U	µg/kg dry	10.1	7.3	1	"	"	"	"	"	X
79-01-6	Trichloroethene	**10.4**		µg/kg dry	10.1	2.8	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 10.1	U	µg/kg dry	10.1	5.4	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 10.1	U	µg/kg dry	10.1	3.4	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*85*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*102*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*122*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*109*			*70-130 %*			"	"	"	"	"	
General Chemistry Parameters													
	% Solids	**69.9**		%			1	SM2540 G (11) Mod.	09-Nov-18	09-Nov-18	BD	1814872	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW B (11') SC51827-06	5529S-18	Soil	06-Nov-18 11:50	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Prepared by method Volatiles													
	VOC Extraction	**Field extracted**		N/A			1	VOC Soil Extraction			BD	1814877	
Volatile Organic Halocarbons by SW846 8260													
Prepared by method SW846 5035A Soil (low level)							Initial weight: 7.24 g						
75-27-4	Bromodichloromethane	< 4.2	U	µg/kg dry	4.2	2.8	1	SW846 8260C	13-Nov-18	13-Nov-18	mp	1814950	X
75-25-2	Bromoform	< 4.2	U	µg/kg dry	4.2	4.0	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 8.4	U	µg/kg dry	8.4	3.8	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 4.2	U	µg/kg dry	4.2	3.4	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 4.2	U	µg/kg dry	4.2	1.3	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 8.4	U	µg/kg dry	8.4	2.3	1	"	"	"	"	"	X
67-66-3	Chloroform	< 4.2	U	µg/kg dry	4.2	2.3	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 8.4	U	µg/kg dry	8.4	1.7	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 4.2	U	µg/kg dry	4.2	2.9	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4.2	U	µg/kg dry	4.2	1.1	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4.2	U	µg/kg dry	4.2	0.9	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4.2	U	µg/kg dry	4.2	1.2	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 8.4	U	µg/kg dry	8.4	1.6	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 4.2	U	µg/kg dry	4.2	1.1	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 4.2	U	µg/kg dry	4.2	1.5	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 4.2	U	µg/kg dry	4.2	2.2	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**1.8**	J	µg/kg dry	4.2	1.6	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 4.2	U	µg/kg dry	4.2	2.2	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 4.2	U	µg/kg dry	4.2	2.2	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 4.2	U	µg/kg dry	4.2	2.5	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 4.2	U	µg/kg dry	4.2	2.2	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 8.4	U	µg/kg dry	8.4	1.7	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 4.2	U	µg/kg dry	4.2	3.6	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 4.2	U	µg/kg dry	4.2	1.4	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 4.2	U	µg/kg dry	4.2	1.4	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 4.2	U	µg/kg dry	4.2	3.0	1	"	"	"	"	"	X
79-01-6	Trichloroethene	**4.8**		µg/kg dry	4.2	1.1	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 4.2	U	µg/kg dry	4.2	2.3	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	**4.0**	J	µg/kg dry	4.2	1.4	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*93*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*108*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*121*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*			*70-130 %*			"	"	"	"	"	
General Chemistry Parameters													
	% Solids	**91.8**		%			1	SM2540 G (11) Mod.	09-Nov-18	09-Nov-18	BD	1814872	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW D (9') SC51827-07	5529S-18	Soil	06-Nov-18 15:30	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Prepared by method Volatiles													
	VOC Extraction	**Field extracted**		N/A			1	VOC Soil Extraction			BD	1814877	
Volatile Organic Halocarbons by SW846 8260			R05										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 28.33 g						
75-27-4	Bromodichloromethane	< 40.5	U, D	µg/kg dry	40.5	27.0	50	SW846 8260C	14-Nov-18	14-Nov-18	MP	1815012	X
75-25-2	Bromoform	< 40.5	U, D	µg/kg dry	40.5	38.7	50	"	"	"	"	"	X
74-83-9	Bromomethane	< 81.0	U, D	µg/kg dry	81.0	36.6	50	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 40.5	U, D	µg/kg dry	40.5	33.1	50	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 40.5	U, D	µg/kg dry	40.5	12.7	50	"	"	"	"	"	X
75-00-3	Chloroethane	< 81.0	U, D	µg/kg dry	81.0	22.5	50	"	"	"	"	"	X
67-66-3	Chloroform	< 40.5	U, D	µg/kg dry	40.5	21.8	50	"	"	"	"	"	X
74-87-3	Chloromethane	< 81.0	U, D	µg/kg dry	81.0	16.7	50	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 40.5	U, D	µg/kg dry	40.5	27.5	50	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 40.5	U, D	µg/kg dry	40.5	10.5	50	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 40.5	U, D	µg/kg dry	40.5	8.8	50	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 40.5	U, D	µg/kg dry	40.5	12.0	50	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 81.0	U, D	µg/kg dry	81.0	15.4	50	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 40.5	U, D	µg/kg dry	40.5	10.6	50	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 40.5	U, D	µg/kg dry	40.5	14.5	50	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 40.5	U, D	µg/kg dry	40.5	21.2	50	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 40.5	U, D	µg/kg dry	40.5	15.0	50	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 40.5	U, D	µg/kg dry	40.5	21.5	50	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 40.5	U, D	µg/kg dry	40.5	21.2	50	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 40.5	U, D	µg/kg dry	40.5	24.4	50	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 40.5	U, D	µg/kg dry	40.5	21.3	50	"	"	"	"	"	X
75-09-2	Methylene chloride	< 81.0	U, D	µg/kg dry	81.0	16.1	50	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 40.5	U, D	µg/kg dry	40.5	34.3	50	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 40.5	U, D	µg/kg dry	40.5	13.9	50	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 40.5	U, D	µg/kg dry	40.5	13.5	50	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 40.5	U, D	µg/kg dry	40.5	29.4	50	"	"	"	"	"	X
79-01-6	Trichloroethene	**108**	D	µg/kg dry	81.0	64.8	50	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 40.5	U, D	µg/kg dry	40.5	21.8	50	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 40.5	U, D	µg/kg dry	40.5	13.7	50	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*119*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*105*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*128*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*112*			*70-130 %*			"	"	"	"	"	
General Chemistry Parameters													
	% Solids	**84.5**		%			1	SM2540 G (11) Mod.	09-Nov-18	09-Nov-18	BD	1814872	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-Soil	5529S-18	Trip Blank	06-Nov-18 00:00	09-Nov-18
SC51827-08				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Halocarbons by SW846 8260													
Prepared by method SW846 5035A Soil (low level)													
75-27-4	Bromodichloromethane	< 5.0	U	µg/kg wet	5.0	3.3	1	SW846 8260C	13-Nov-18	13-Nov-18	mp	1814950	X
75-25-2	Bromoform	< 5.0	U	µg/kg wet	5.0	4.8	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 10.0	U	µg/kg wet	10.0	4.5	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 5.0	U	µg/kg wet	5.0	4.1	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 5.0	U	µg/kg wet	5.0	1.6	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 10.0	U	µg/kg wet	10.0	2.8	1	"	"	"	"	"	X
67-66-3	Chloroform	< 5.0	U	µg/kg wet	5.0	2.7	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 10.0	U	µg/kg wet	10.0	2.1	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 5.0	U	µg/kg wet	5.0	3.4	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 5.0	U	µg/kg wet	5.0	1.3	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 5.0	U	µg/kg wet	5.0	1.1	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 5.0	U	µg/kg wet	5.0	1.5	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 10.0	U	µg/kg wet	10.0	1.9	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 5.0	U	µg/kg wet	5.0	1.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 5.0	U	µg/kg wet	5.0	1.8	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 5.0	U	µg/kg wet	5.0	2.6	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 5.0	U	µg/kg wet	5.0	1.9	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 5.0	U	µg/kg wet	5.0	2.6	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 5.0	U	µg/kg wet	5.0	2.6	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 5.0	U	µg/kg wet	5.0	3.0	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 5.0	U	µg/kg wet	5.0	2.6	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 10.0	U	µg/kg wet	10.0	2.0	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 5.0	U	µg/kg wet	5.0	4.2	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 5.0	U	µg/kg wet	5.0	1.7	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 5.0	U	µg/kg wet	5.0	1.7	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 5.0	U	µg/kg wet	5.0	3.6	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 5.0	U	µg/kg wet	5.0	1.4	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 5.0	U	µg/kg wet	5.0	2.7	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 5.0	U	µg/kg wet	5.0	1.7	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*95*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*106*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*121*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*			*70-130 %*			"	"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260													
Prepared by method SW846 5035A Soil (high level)													
75-27-4	Bromodichloromethane	< 50.0	U, D	µg/kg wet	50.0	33.4	50	SW846 8260C	15-Nov-18	15-Nov-18	MP	1815084	X
75-25-2	Bromoform	< 50.0	U, D	µg/kg wet	50.0	47.7	50	"	"	"	"	"	X
74-83-9	Bromomethane	< 100	U, D	µg/kg wet	100	45.2	50	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 50.0	U, D	µg/kg wet	50.0	40.9	50	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 50.0	U, D	µg/kg wet	50.0	15.6	50	"	"	"	"	"	X
75-00-3	Chloroethane	< 100	U, D	µg/kg wet	100	27.8	50	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-Soil	5529S-18	Trip Blank	06-Nov-18 00:00	09-Nov-18
SC51827-08				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Halocarbons by SW846 8260													
67-66-3	Chloroform	< 50.0	U, D	µg/kg wet	50.0	26.8	50	SW846 8260C	15-Nov-18	15-Nov-18	MP	1815084	X
74-87-3	Chloromethane	< 100	U, D	µg/kg wet	100	20.6	50	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 50.0	U, D	µg/kg wet	50.0	33.9	50	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 50.0	U, D	µg/kg wet	50.0	13.0	50	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 50.0	U, D	µg/kg wet	50.0	10.8	50	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 50.0	U, D	µg/kg wet	50.0	14.8	50	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 100	U, D	µg/kg wet	100	19.0	50	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 50.0	U, D	µg/kg wet	50.0	13.1	50	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 50.0	U, D	µg/kg wet	50.0	17.9	50	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 50.0	U, D	µg/kg wet	50.0	26.2	50	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 50.0	U, D	µg/kg wet	50.0	18.6	50	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 50.0	U, D	µg/kg wet	50.0	26.5	50	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 50.0	U, D	µg/kg wet	50.0	26.2	50	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 50.0	U, D	µg/kg wet	50.0	30.2	50	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 50.0	U, D	µg/kg wet	50.0	26.2	50	"	"	"	"	"	X
75-09-2	Methylene chloride	< 100	U, D	µg/kg wet	100	19.8	50	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 50.0	U, D	µg/kg wet	50.0	42.3	50	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 50.0	U, D	µg/kg wet	50.0	17.1	50	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 50.0	U, D	µg/kg wet	50.0	16.6	50	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 50.0	U, D	µg/kg wet	50.0	36.2	50	"	"	"	"	"	X
79-01-6	Trichloroethene	< 50.0	U, D	µg/kg wet	50.0	13.6	50	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 50.0	U, D	µg/kg wet	50.0	27.0	50	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 50.0	U, D	µg/kg wet	50.0	16.9	50	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*115*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*103*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*129*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*112*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-A	5529S-18	Ground Water	08-Nov-18 13:25	09-Nov-18
SC51827-09				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5030 Water MS													
75-27-4	Bromodichloromethane	< 250	U, D	µg/l	250	146	500	SW846 8260C	12-Nov-18	13-Nov-18	MP	1814905	X
75-25-2	Bromoform	< 500	U, D	µg/l	500	121	500	"	"	"	"	"	X
74-83-9	Bromomethane	< 1000	U, D	µg/l	1000	223	500	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 500	U, D	µg/l	500	196	500	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 500	U, D	µg/l	500	150	500	"	"	"	"	"	X
75-00-3	Chloroethane	< 1000	U, D	µg/l	1000	202	500	"	"	"	"	"	X
67-66-3	Chloroform	< 500	U, D	µg/l	500	143	500	"	"	"	"	"	X
74-87-3	Chloromethane	< 1000	U, D	µg/l	1000	180	500	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 250	U, D	µg/l	250	146	500	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 500	U, D	µg/l	500	122	500	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 500	U, D	µg/l	500	150	500	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 500	U, D	µg/l	500	136	500	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 1000	U, D	µg/l	1000	172	500	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 500	U, D	µg/l	500	146	500	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 500	U, D	µg/l	500	90.5	500	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 500	U, D	µg/l	500	157	500	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**1,310**	D	µg/l	500	198	500	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 500	U, D	µg/l	500	190	500	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 500	U, D	µg/l	500	144	500	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 250	U, D	µg/l	250	164	500	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 250	U, D	µg/l	250	153	500	"	"	"	"	"	X
75-09-2	Methylene chloride	< 1000	U, D	µg/l	1000	192	500	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 250	U, D	µg/l	250	128	500	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 500	U, D	µg/l	500	156	500	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 500	U, D	µg/l	500	122	500	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 500	U, D	µg/l	500	154	500	"	"	"	"	"	X
79-01-6	Trichloroethene	**46,900**	D	µg/l	500	178	500	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 500	U, D	µg/l	500	138	500	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 500	U, D	µg/l	500	201	500	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*88*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*108*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-B	5529S-18	Ground Water	08-Nov-18 11:35	09-Nov-18
SC51827-10				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Halocarbons by SW846 8260													
Prepared by method SW846 5030 Water MS													
75-27-4	Bromodichloromethane	< 0.5	U	µg/l	0.5	0.3	1	SW846 8260C	12-Nov-18	13-Nov-18	MP	1814905	X
75-25-2	Bromoform	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.0	U	µg/l	2.0	0.3	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	**0.8**	J	µg/l	1.0	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	**0.6**	J	µg/l	1.0	0.3	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**26.7**		µg/l	1.0	0.4	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	**0.6**	J	µg/l	1.0	0.4	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
79-01-6	Trichloroethene	**42.5**		µg/l	1.0	0.4	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	**15.6**		µg/l	1.0	0.4	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*89*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*110*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*108*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-C SC51827-11	5529S-18	Ground Water	08-Nov-18 10:35	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Halocarbons by SW846 8260 Prepared by method SW846 5030 Water MS													
75-27-4	Bromodichloromethane	< 0.5	U	µg/l	0.5	0.3	1	SW846 8260C	12-Nov-18	13-Nov-18	MP	1814905	X
75-25-2	Bromoform	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.0	U	µg/l	2.0	0.3	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
79-01-6	Trichloroethene	**1.5**		µg/l	1.0	0.4	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*91*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*94*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*103*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*78*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-D SC51827-12	5529S-18	Ground Water	08-Nov-18 11:05	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Volatile Organic Halocarbons by SW846 8260 Prepared by method SW846 5030 Water MS													
75-27-4	Bromodichloromethane	< 0.5	U	µg/l	0.5	0.3	1	SW846 8260C	12-Nov-18	13-Nov-18	MP	1814905	X
75-25-2	Bromoform	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.0	U	µg/l	2.0	0.3	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**3.2**		µg/l	1.0	0.4	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
79-01-6	Trichloroethene	**0.9**	J	µg/l	1.0	0.4	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	**5.5**		µg/l	1.0	0.4	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*90*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*98*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*108*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-Ground Water	5529S-18	Trip Blank	08-Nov-18 00:00	09-Nov-18
SC51827-13				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Volatile Organic Halocarbons by SW846 8260													
Prepared by method SW846 5030 Water MS													
75-27-4	Bromodichloromethane	< 0.5	U	µg/l	0.5	0.3	1	SW846 8260C	12-Nov-18	13-Nov-18	MP	1814905	X
75-25-2	Bromoform	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
74-83-9	Bromomethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-00-3	Chloroethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
67-66-3	Chloroform	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
74-87-3	Chloromethane	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 2.0	U	µg/l	2.0	0.3	1	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
75-09-2	Methylene chloride	< 2.0	U	µg/l	2.0	0.4	1	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.5	U	µg/l	0.5	0.3	1	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 1.0	U	µg/l	1.0	0.2	1	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
79-01-6	Trichloroethene	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 1.0	U	µg/l	1.0	0.3	1	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 1.0	U	µg/l	1.0	0.4	1	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*90*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*106*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-A Sediment SC51827-14	5529S-18	Sediment	08-Nov-18 12:30	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Prepared by method Volatiles													
	VOC Extraction	**Lab extracted**		N/A			1	VOC Soil Extraction	09-Nov-18		BD	1814877	
Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 15.96 g						
75-27-4	Bromodichloromethane	< 416	U, D	µg/kg dry	416	278	200	SW846 8260C	13-Nov-18	13-Nov-18	MP	1814951	X
75-25-2	Bromoform	< 416	U, D	µg/kg dry	416	397	200	"	"	"	"	"	X
74-83-9	Bromomethane	< 832	U, D	µg/kg dry	832	376	200	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 416	U, D	µg/kg dry	416	340	200	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 416	U, D	µg/kg dry	416	130	200	"	"	"	"	"	X
75-00-3	Chloroethane	< 832	U, D	µg/kg dry	832	231	200	"	"	"	"	"	X
67-66-3	Chloroform	< 416	U, D	µg/kg dry	416	224	200	"	"	"	"	"	X
74-87-3	Chloromethane	< 832	U, D	µg/kg dry	832	172	200	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 416	U, D	µg/kg dry	416	282	200	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 416	U, D	µg/kg dry	416	108	200	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 416	U, D	µg/kg dry	416	90.3	200	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 416	U, D	µg/kg dry	416	123	200	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 832	U, D	µg/kg dry	832	158	200	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 416	U, D	µg/kg dry	416	109	200	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 416	U, D	µg/kg dry	416	149	200	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	**1,740**	D	µg/kg dry	416	218	200	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**153,000**	D, E	µg/kg dry	416	154	200	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	**587**	D	µg/kg dry	416	221	200	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 416	U, D	µg/kg dry	416	218	200	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 416	U, D	µg/kg dry	416	251	200	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 416	U, D	µg/kg dry	416	219	200	"	"	"	"	"	X
75-09-2	Methylene chloride	< 832	U, D	µg/kg dry	832	165	200	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 416	U, D	µg/kg dry	416	352	200	"	"	"	"	"	X
127-18-4	Tetrachloroethene	**1,090**	D	µg/kg dry	416	142	200	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 416	U, D	µg/kg dry	416	138	200	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 416	U, D	µg/kg dry	416	302	200	"	"	"	"	"	X
79-01-6	Trichloroethene	**3,320,000**	D, E	µg/kg dry	416	114	200	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 416	U, D	µg/kg dry	416	224	200	"	"	"	"	"	X
75-01-4	Vinyl chloride	**2,320**	D	µg/kg dry	416	141	200	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*105*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*98*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*112*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*103*			*70-130 %*			"	"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 15.96 g						
75-27-4	Bromodichloromethane	< 104000	U, D	µg/kg dry	104000	69400	50000	SW846 8260C	14-Nov-18	14-Nov-18	MP	1815012	X
75-25-2	Bromoform	< 104000	U, D	µg/kg dry	104000	99300	50000	"	"	"	"	"	X
74-83-9	Bromomethane	**129,000**	J, D	µg/kg dry	208000	94000	50000	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-A Sediment SC51827-14	5529S-18	Sediment	08-Nov-18 12:30	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
							Initial weight: 15.96 g						
56-23-5	Carbon tetrachloride	< 104000	U, D	µg/kg dry	104000	85100	50000	SW846 8260C	14-Nov-18	14-Nov-18	MP	1815012	X
108-90-7	Chlorobenzene	< 104000	U, D	µg/kg dry	104000	32600	50000	"	"	"	"	"	X
75-00-3	Chloroethane	< 208000	U, D	µg/kg dry	208000	57800	50000	"	"	"	"	"	X
67-66-3	Chloroform	< 104000	U, D	µg/kg dry	104000	55900	50000	"	"	"	"	"	X
74-87-3	Chloromethane	< 208000	U, D	µg/kg dry	208000	43000	50000	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 104000	U, D	µg/kg dry	104000	70600	50000	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 104000	U, D	µg/kg dry	104000	27100	50000	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 104000	U, D	µg/kg dry	104000	22600	50000	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 104000	U, D	µg/kg dry	104000	30800	50000	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 208000	U, D	µg/kg dry	208000	39400	50000	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 104000	U, D	µg/kg dry	104000	27300	50000	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 104000	U, D	µg/kg dry	104000	37300	50000	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 104000	U, D	µg/kg dry	104000	54400	50000	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**163,000**	D	µg/kg dry	104000	38600	50000	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 104000	U, D	µg/kg dry	104000	55200	50000	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 104000	U, D	µg/kg dry	104000	54500	50000	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 104000	U, D	µg/kg dry	104000	62700	50000	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 104000	U, D	µg/kg dry	104000	54600	50000	"	"	"	"	"	X
75-09-2	Methylene chloride	< 208000	U, D	µg/kg dry	208000	41300	50000	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 104000	U, D	µg/kg dry	104000	88000	50000	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 104000	U, D	µg/kg dry	104000	35600	50000	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 104000	U, D	µg/kg dry	104000	34500	50000	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 104000	U, D	µg/kg dry	104000	75400	50000	"	"	"	"	"	X
79-01-6	Trichloroethene	**10,300,000**	D	µg/kg dry	208000	166000	50000	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 104000	U, D	µg/kg dry	104000	56100	50000	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 104000	U, D	µg/kg dry	104000	35200	50000	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*106*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*100*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*116*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*107*			*70-130 %*			"	"	"	"	"	
General Chemistry Parameters													
	% Solids	**63.0**		%			1	SM2540 G (11) Mod.	09-Nov-18	09-Nov-18	BD	1814872	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-A LNAPL SC51827-15	5529S-18	LNAPL	08-Nov-18 13:55	09-Nov-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Volatile Organic Compounds													
Prepared by method Volatiles													
	VOC Extraction	**Lab extracted**		N/A			1	VOC Soil Extraction	09-Nov-18		BD	1814877	
Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 5.31 g						
75-27-4	Bromodichloromethane	< 4710	U, D	µg/kg	4710	3140	5000	SW846 8260C	12-Nov-18	12-Nov-18	MP	1814913	X
75-25-2	Bromoform	< 4710	U, D	µg/kg	4710	4490	5000	"	"	"	"	"	X
74-83-9	Bromomethane	< 9420	U, D	µg/kg	9420	4250	5000	"	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 4710	U, D	µg/kg	4710	3850	5000	"	"	"	"	"	X
108-90-7	Chlorobenzene	< 4710	U, D	µg/kg	4710	1470	5000	"	"	"	"	"	X
75-00-3	Chloroethane	< 9420	U, D	µg/kg	9420	2610	5000	"	"	"	"	"	X
67-66-3	Chloroform	< 4710	U, D	µg/kg	4710	2530	5000	"	"	"	"	"	X
74-87-3	Chloromethane	< 9420	U, D	µg/kg	9420	1940	5000	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 4710	U, D	µg/kg	4710	3190	5000	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 4710	U, D	µg/kg	4710	1220	5000	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 4710	U, D	µg/kg	4710	1020	5000	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 4710	U, D	µg/kg	4710	1390	5000	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 9420	U, D	µg/kg	9420	1780	5000	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 4710	U, D	µg/kg	4710	1230	5000	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 4710	U, D	µg/kg	4710	1690	5000	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 4710	U, D	µg/kg	4710	2460	5000	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**17,800**	D	µg/kg	4710	1750	5000	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 4710	U, D	µg/kg	4710	2500	5000	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 4710	U, D	µg/kg	4710	2470	5000	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 4710	U, D	µg/kg	4710	2840	5000	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 4710	U, D	µg/kg	4710	2470	5000	"	"	"	"	"	X
75-09-2	Methylene chloride	< 9420	U, D	µg/kg	9420	1870	5000	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 4710	U, D	µg/kg	4710	3980	5000	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 4710	U, D	µg/kg	4710	1610	5000	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 4710	U, D	µg/kg	4710	1560	5000	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 4710	U, D	µg/kg	4710	3410	5000	"	"	"	"	"	X
79-01-6	Trichloroethene	**1,710,000**	D, E	µg/kg	4710	1290	5000	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 4710	U, D	µg/kg	4710	2540	5000	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 4710	U, D	µg/kg	4710	1590	5000	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*106*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*100*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*125*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*110*			*70-130 %*			"	"	"	"	"	
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
Prepared by method SW846 5035A Soil (high level)							Initial weight: 5.31 g						
75-27-4	Bromodichloromethane	< 47100	U, D	µg/kg	47100	31400	50000	SW846 8260C	14-Nov-18	15-Nov-18	MP	1815015	X
75-25-2	Bromoform	< 47100	U, D	µg/kg	47100	44900	50000	"	"	"	"	"	X
74-83-9	Bromomethane	< 94200	U, D	µg/kg	94200	61200	50000	"	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-A LNAPL SC51827-15	5529S-18	LNAPL	08-Nov-18 13:55	09-Nov-18

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Volatile Organic Compounds													
Re-analysis of Volatile Organic Halocarbons by SW846 8260			GS1										
						Initial weight: 5.31 g							
56-23-5	Carbon tetrachloride	< 47100	U, D	µg/kg	47100	38500	50000	SW846 8260C	14-Nov-18	15-Nov-18	MP	1815015	X
108-90-7	Chlorobenzene	< 47100	U, D	µg/kg	47100	14700	50000	"	"	"	"	"	X
75-00-3	Chloroethane	< 94200	U, D	µg/kg	94200	26100	50000	"	"	"	"	"	X
67-66-3	Chloroform	< 47100	U, D	µg/kg	47100	38100	50000	"	"	"	"	"	X
74-87-3	Chloromethane	< 94200	U, D	µg/kg	94200	19400	50000	"	"	"	"	"	X
124-48-1	Dibromochloromethane	< 47100	U, D	µg/kg	47100	31900	50000	"	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 47100	U, D	µg/kg	47100	12200	50000	"	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 47100	U, D	µg/kg	47100	10200	50000	"	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 47100	U, D	µg/kg	47100	13900	50000	"	"	"	"	"	X
75-71-8	Dichlorodifluoromethane (Freon12)	< 94200	U, D	µg/kg	94200	17800	50000	"	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 47100	U, D	µg/kg	47100	12300	50000	"	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 47100	U, D	µg/kg	47100	16900	50000	"	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 47100	U, D	µg/kg	47100	24600	50000	"	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	< 47100	U, D	µg/kg	47100	17500	50000	"	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 47100	U, D	µg/kg	47100	25000	50000	"	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 47100	U, D	µg/kg	47100	24700	50000	"	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 47100	U, D	µg/kg	47100	28400	50000	"	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 47100	U, D	µg/kg	47100	24700	50000	"	"	"	"	"	X
75-09-2	Methylene chloride	< 94200	U, D	µg/kg	94200	18700	50000	"	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 47100	U, D	µg/kg	47100	39800	50000	"	"	"	"	"	X
127-18-4	Tetrachloroethene	< 47100	U, D	µg/kg	47100	16100	50000	"	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 47100	U, D	µg/kg	47100	15600	50000	"	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 47100	U, D	µg/kg	47100	34100	50000	"	"	"	"	"	X
79-01-6	Trichloroethene	**1,170,000**	D	µg/kg	47100	28200	50000	"	"	"	"	"	X
75-69-4	Trichlorofluoromethane (Freon 11)	< 47100	U, D	µg/kg	47100	25400	50000	"	"	"	"	"	X
75-01-4	Vinyl chloride	< 47100	U, D	µg/kg	47100	15900	50000	"	"	"	"	"	X
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*106*			*70-130 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*70-130 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*109*			*70-130 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*106*			*70-130 %*			"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1814905 - SW846 5030 Water MS										
Blank (1814905-BLK1)					Prepared & Analyzed: 12-Nov-18					
Bromodichloromethane	< 0.5	U	µg/l	0.5						
Bromoform	< 1.0	U	µg/l	1.0						
Bromomethane	< 2.0	U	µg/l	2.0						
Carbon tetrachloride	< 1.0	U	µg/l	1.0						
Chlorobenzene	< 1.0	U	µg/l	1.0						
Chloroethane	< 2.0	U	µg/l	2.0						
Chloroform	< 1.0	U	µg/l	1.0						
Chloromethane	< 2.0	U	µg/l	2.0						
Dibromochloromethane	< 0.5	U	µg/l	0.5						
1,2-Dichlorobenzene	< 1.0	U	µg/l	1.0						
1,3-Dichlorobenzene	< 1.0	U	µg/l	1.0						
1,4-Dichlorobenzene	< 1.0	U	µg/l	1.0						
Dichlorodifluoromethane (Freon12)	< 2.0	U	µg/l	2.0						
1,1-Dichloroethane	< 1.0	U	µg/l	1.0						
1,2-Dichloroethane	< 1.0	U	µg/l	1.0						
1,1-Dichloroethene	< 1.0	U	µg/l	1.0						
cis-1,2-Dichloroethene	< 1.0	U	µg/l	1.0						
trans-1,2-Dichloroethene	< 1.0	U	µg/l	1.0						
1,2-Dichloropropane	< 1.0	U	µg/l	1.0						
cis-1,3-Dichloropropene	< 0.5	U	µg/l	0.5						
trans-1,3-Dichloropropene	< 0.5	U	µg/l	0.5						
Methylene chloride	< 2.0	U	µg/l	2.0						
1,1,2,2-Tetrachloroethane	< 0.5	U	µg/l	0.5						
Tetrachloroethene	< 1.0	U	µg/l	1.0						
1,1,1-Trichloroethane	< 1.0	U	µg/l	1.0						
1,1,2-Trichloroethane	< 1.0	U	µg/l	1.0						
Trichloroethene	< 1.0	U	µg/l	1.0						
Trichlorofluoromethane (Freon 11)	< 1.0	U	µg/l	1.0						
Vinyl chloride	< 1.0	U	µg/l	1.0						
Surrogate: 4-Bromofluorobenzene	*45.2*		µg/l		*50.0*		*90*	*70-130*		
Surrogate: Toluene-d8	*49.4*		µg/l		*50.0*		*99*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*53.6*		µg/l		*50.0*		*107*	*70-130*		
Surrogate: Dibromofluoromethane	*52.8*		µg/l		*50.0*		*106*	*70-130*		
LCS (1814905-BS1)					Prepared & Analyzed: 12-Nov-18					
Bromodichloromethane	**19.6**		µg/l		20.0		98	70-130		
Bromoform	**19.6**		µg/l		20.0		98	70-130		
Bromomethane	**27.1**	QM9	µg/l		20.0		135	70-130		
Carbon tetrachloride	**18.4**		µg/l		20.0		92	70-130		
Chlorobenzene	**21.4**		µg/l		20.0		107	70-130		
Chloroethane	**21.4**		µg/l		20.0		107	70-130		
Chloroform	**21.6**		µg/l		20.0		108	70-130		
Chloromethane	**20.5**		µg/l		20.0		102	70-130		
Dibromochloromethane	**20.4**		µg/l		20.0		102	70-130		
1,2-Dichlorobenzene	**20.5**		µg/l		20.0		103	70-130		
1,3-Dichlorobenzene	**22.7**		µg/l		20.0		113	70-130		
1,4-Dichlorobenzene	**21.1**		µg/l		20.0		105	70-130		
Dichlorodifluoromethane (Freon12)	**22.7**		µg/l		20.0		113	70-130		
1,1-Dichloroethane	**21.4**		µg/l		20.0		107	70-130		
1,2-Dichloroethane	**21.8**		µg/l		20.0		109	70-130		
1,1-Dichloroethene	**21.9**		µg/l		20.0		109	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1814905 - SW846 5030 Water MS										
LCS (1814905-BS1)					Prepared & Analyzed: 12-Nov-18					
cis-1,2-Dichloroethene	**21.5**		µg/l		20.0		107	70-130		
trans-1,2-Dichloroethene	**21.7**		µg/l		20.0		108	70-130		
1,2-Dichloropropane	**22.0**		µg/l		20.0		110	70-130		
cis-1,3-Dichloropropene	**19.6**		µg/l		20.0		98	70-130		
trans-1,3-Dichloropropene	**19.1**		µg/l		20.0		95	70-130		
Methylene chloride	**21.0**		µg/l		20.0		105	70-130		
1,1,2,2-Tetrachloroethane	**21.6**		µg/l		20.0		108	70-130		
Tetrachloroethene	**22.4**		µg/l		20.0		112	70-130		
1,1,1-Trichloroethane	**21.6**		µg/l		20.0		108	70-130		
1,1,2-Trichloroethane	**22.0**		µg/l		20.0		110	70-130		
Trichloroethene	**21.4**		µg/l		20.0		107	70-130		
Trichlorofluoromethane (Freon 11)	**22.4**		µg/l		20.0		112	70-130		
Vinyl chloride	**24.4**		µg/l		20.0		122	70-130		
Surrogate: 4-Bromofluorobenzene	*52.3*		µg/l		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*51.3*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.6*		µg/l		*50.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*51.2*		µg/l		*50.0*		*102*	*70-130*		
LCS Dup (1814905-BSD1)					Prepared & Analyzed: 12-Nov-18					
Bromodichloromethane	**17.8**		µg/l		20.0		89	70-130	10	20
Bromoform	**19.7**		µg/l		20.0		99	70-130	0.8	20
Bromomethane	**25.7**		µg/l		20.0		128	70-130	5	20
Carbon tetrachloride	**17.4**		µg/l		20.0		87	70-130	6	20
Chlorobenzene	**19.9**		µg/l		20.0		99	70-130	7	20
Chloroethane	**19.0**		µg/l		20.0		95	70-130	12	20
Chloroform	**20.4**		µg/l		20.0		102	70-130	6	20
Chloromethane	**19.2**		µg/l		20.0		96	70-130	6	20
Dibromochloromethane	**19.8**		µg/l		20.0		99	70-130	3	20
1,2-Dichlorobenzene	**19.9**		µg/l		20.0		99	70-130	3	20
1,3-Dichlorobenzene	**19.0**		µg/l		20.0		95	70-130	17	20
1,4-Dichlorobenzene	**19.8**		µg/l		20.0		99	70-130	6	20
Dichlorodifluoromethane (Freon12)	**20.9**		µg/l		20.0		105	70-130	8	20
1,1-Dichloroethane	**20.1**		µg/l		20.0		101	70-130	6	20
1,2-Dichloroethane	**21.3**		µg/l		20.0		107	70-130	2	20
1,1-Dichloroethene	**19.7**		µg/l		20.0		99	70-130	10	20
cis-1,2-Dichloroethene	**20.4**		µg/l		20.0		102	70-130	5	20
trans-1,2-Dichloroethene	**19.7**		µg/l		20.0		99	70-130	10	20
1,2-Dichloropropane	**21.3**		µg/l		20.0		107	70-130	3	20
cis-1,3-Dichloropropene	**18.6**		µg/l		20.0		93	70-130	5	20
trans-1,3-Dichloropropene	**18.1**		µg/l		20.0		90	70-130	5	20
Methylene chloride	**20.1**		µg/l		20.0		100	70-130	5	20
1,1,2,2-Tetrachloroethane	**21.2**		µg/l		20.0		106	70-130	2	20
Tetrachloroethene	**20.4**		µg/l		20.0		102	70-130	9	20
1,1,1-Trichloroethane	**19.6**		µg/l		20.0		98	70-130	10	20
1,1,2-Trichloroethane	**21.7**		µg/l		20.0		109	70-130	1	20
Trichloroethene	**20.4**		µg/l		20.0		102	70-130	4	20
Trichlorofluoromethane (Freon 11)	**20.7**		µg/l		20.0		104	70-130	8	20
Vinyl chloride	**22.4**		µg/l		20.0		112	70-130	9	20
Surrogate: 4-Bromofluorobenzene	*51.1*		µg/l		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*51.4*		µg/l		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.2*		µg/l		*50.0*		*100*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1814905 - SW846 5030 Water MS										
LCS Dup (1814905-BSD1)					Prepared & Analyzed: 12-Nov-18					
Surrogate: Dibromofluoromethane	*50.7*		µg/l		*50.0*		*101*	*70-130*		
Batch 1814913 - SW846 5035A Soil (high level)										
Blank (1814913-BLK1)					Prepared & Analyzed: 12-Nov-18					
Bromodichloromethane	< 50.0	U, D	µg/kg	50.0						
Bromoform	< 50.0	U, D	µg/kg	50.0						
Bromomethane	< 100	U, D	µg/kg	100						
Carbon tetrachloride	< 50.0	U, D	µg/kg	50.0						
Chlorobenzene	< 50.0	U, D	µg/kg	50.0						
Chloroethane	< 100	U, D	µg/kg	100						
Chloroform	< 50.0	U, D	µg/kg	50.0						
Chloromethane	< 100	U, D	µg/kg	100						
Dibromochloromethane	< 50.0	U, D	µg/kg	50.0						
1,2-Dichlorobenzene	< 50.0	U, D	µg/kg	50.0						
1,3-Dichlorobenzene	< 50.0	U, D	µg/kg	50.0						
1,4-Dichlorobenzene	< 50.0	U, D	µg/kg	50.0						
Dichlorodifluoromethane (Freon12)	< 100	U, D	µg/kg	100						
1,1-Dichloroethane	< 50.0	U, D	µg/kg	50.0						
1,2-Dichloroethane	< 50.0	U, D	µg/kg	50.0						
1,1-Dichloroethene	< 50.0	U, D	µg/kg	50.0						
cis-1,2-Dichloroethene	< 50.0	U, D	µg/kg	50.0						
trans-1,2-Dichloroethene	< 50.0	U, D	µg/kg	50.0						
1,2-Dichloropropane	< 50.0	U, D	µg/kg	50.0						
cis-1,3-Dichloropropene	< 50.0	U, D	µg/kg	50.0						
trans-1,3-Dichloropropene	< 50.0	U, D	µg/kg	50.0						
Methylene chloride	< 100	U, D	µg/kg	100						
1,1,2,2-Tetrachloroethane	< 50.0	U, D	µg/kg	50.0						
Tetrachloroethene	< 50.0	U, D	µg/kg	50.0						
1,1,1-Trichloroethane	< 50.0	U, D	µg/kg	50.0						
1,1,2-Trichloroethane	< 50.0	U, D	µg/kg	50.0						
Trichloroethene	< 50.0	U, D	µg/kg	50.0						
Trichlorofluoromethane (Freon 11)	< 50.0	U, D	µg/kg	50.0						
Vinyl chloride	< 50.0	U, D	µg/kg	50.0						
Surrogate: 4-Bromofluorobenzene	*52.0*		µg/kg		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*51.3*		µg/kg		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*62.3*		µg/kg		*50.0*		*125*	*70-130*		
Surrogate: Dibromofluoromethane	*55.8*		µg/kg		*50.0*		*112*	*70-130*		
LCS (1814913-BS1)					Prepared & Analyzed: 12-Nov-18					
Bromodichloromethane	**25.6**	D	µg/kg		20.0		128	70-130		
Bromoform	**28.0**	QC2, D	µg/kg		20.0		140	70-130		
Bromomethane	**31.2**	D	µg/kg		20.0		156	70-130		
Carbon tetrachloride	**29.8**	QC2, D	µg/kg		20.0		149	70-130		
Chlorobenzene	**19.4**	D	µg/kg		20.0		97	70-130		
Chloroethane	**24.4**	D	µg/kg		20.0		122	70-130		
Chloroform	**23.0**	D	µg/kg		20.0		115	70-130		
Chloromethane	**21.1**	D	µg/kg		20.0		105	70-130		
Dibromochloromethane	**26.0**	D	µg/kg		20.0		130	70-130		
1,2-Dichlorobenzene	**21.0**	D	µg/kg		20.0		105	70-130		
1,3-Dichlorobenzene	**21.0**	D	µg/kg		20.0		105	70-130		
1,4-Dichlorobenzene	**20.1**	D	µg/kg		20.0		101	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1814913 - SW846 5035A Soil (high level)										
LCS (1814913-BS1)					Prepared & Analyzed: 12-Nov-18					
Dichlorodifluoromethane (Freon12)	**25.9**	D	µg/kg		20.0		129	70-130		
1,1-Dichloroethane	**20.8**	D	µg/kg		20.0		104	70-130		
1,2-Dichloroethane	**25.5**	D	µg/kg		20.0		127	70-130		
1,1-Dichloroethene	**24.0**	D	µg/kg		20.0		120	70-130		
cis-1,2-Dichloroethene	**20.2**	D	µg/kg		20.0		101	70-130		
trans-1,2-Dichloroethene	**19.9**	D	µg/kg		20.0		100	70-130		
1,2-Dichloropropane	**19.0**	D	µg/kg		20.0		95	70-130		
cis-1,3-Dichloropropene	**20.5**	D	µg/kg		20.0		102	70-130		
trans-1,3-Dichloropropene	**21.1**	D	µg/kg		20.0		105	70-130		
Methylene chloride	**24.2**	D	µg/kg		20.0		121	70-130		
1,1,2,2-Tetrachloroethane	**18.8**	D	µg/kg		20.0		94	70-130		
Tetrachloroethene	**22.3**	D	µg/kg		20.0		112	70-130		
1,1,1-Trichloroethane	**25.1**	D	µg/kg		20.0		126	70-130		
1,1,2-Trichloroethane	**20.0**	D	µg/kg		20.0		100	70-130		
Trichloroethene	**18.1**	D	µg/kg		20.0		91	70-130		
Trichlorofluoromethane (Freon 11)	**30.7**	QC2, D	µg/kg		20.0		153	70-130		
Vinyl chloride	**25.8**	D	µg/kg		20.0		129	70-130		
Surrogate: 4-Bromofluorobenzene	*50.7*		µg/kg		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*52.0*		µg/kg		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*61.9*		µg/kg		*50.0*		*124*	*70-130*		
Surrogate: Dibromofluoromethane	*55.1*		µg/kg		*50.0*		*110*	*70-130*		
LCS Dup (1814913-BSD1)					Prepared & Analyzed: 12-Nov-18					
Bromodichloromethane	**23.8**	D	µg/kg		20.0		119	70-130	7	30
Bromoform	**27.6**	QC2, D	µg/kg		20.0		138	70-130	2	30
Bromomethane	**23.9**	D	µg/kg		20.0		120	70-130	26	30
Carbon tetrachloride	**29.3**	QC2, D	µg/kg		20.0		146	70-130	2	30
Chlorobenzene	**18.4**	D	µg/kg		20.0		92	70-130	5	30
Chloroethane	**23.0**	D	µg/kg		20.0		115	70-130	6	30
Chloroform	**22.3**	D	µg/kg		20.0		112	70-130	3	30
Chloromethane	**20.7**	D	µg/kg		20.0		103	70-130	2	30
Dibromochloromethane	**26.5**	QM9, D	µg/kg		20.0		133	70-130	2	30
1,2-Dichlorobenzene	**19.9**	D	µg/kg		20.0		100	70-130	6	30
1,3-Dichlorobenzene	**19.6**	D	µg/kg		20.0		98	70-130	7	30
1,4-Dichlorobenzene	**19.0**	D	µg/kg		20.0		95	70-130	6	30
Dichlorodifluoromethane (Freon12)	**24.8**	D	µg/kg		20.0		124	70-130	4	30
1,1-Dichloroethane	**20.2**	D	µg/kg		20.0		101	70-130	3	30
1,2-Dichloroethane	**23.8**	D	µg/kg		20.0		119	70-130	7	30
1,1-Dichloroethene	**23.5**	D	µg/kg		20.0		117	70-130	2	30
cis-1,2-Dichloroethene	**19.5**	D	µg/kg		20.0		98	70-130	3	30
trans-1,2-Dichloroethene	**19.6**	D	µg/kg		20.0		98	70-130	2	30
1,2-Dichloropropane	**18.2**	D	µg/kg		20.0		91	70-130	5	30
cis-1,3-Dichloropropene	**20.0**	D	µg/kg		20.0		100	70-130	2	30
trans-1,3-Dichloropropene	**20.5**	D	µg/kg		20.0		103	70-130	3	30
Methylene chloride	**23.6**	D	µg/kg		20.0		118	70-130	3	30
1,1,2,2-Tetrachloroethane	**18.7**	D	µg/kg		20.0		94	70-130	0.3	30
Tetrachloroethene	**21.5**	D	µg/kg		20.0		108	70-130	4	30
1,1,1-Trichloroethane	**25.4**	D	µg/kg		20.0		127	70-130	1	30
1,1,2-Trichloroethane	**19.8**	D	µg/kg		20.0		99	70-130	1	30
Trichloroethene	**18.0**	D	µg/kg		20.0		90	70-130	0.5	30
Trichlorofluoromethane (Freon 11)	**29.5**	QC2, D	µg/kg		20.0		148	70-130	4	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1814913 - SW846 5035A Soil (high level)										
LCS Dup (1814913-BSD1)						Prepared & Analyzed: 12-Nov-18				
Vinyl chloride	**23.1**	D	µg/kg		20.0		116	70-130	11	30
Surrogate: 4-Bromofluorobenzene	*50.6*		µg/kg		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*51.8*		µg/kg		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*63.8*		µg/kg		*50.0*		*128*	*70-130*		
Surrogate: Dibromofluoromethane	*56.0*		µg/kg		*50.0*		*112*	*70-130*		
Batch 1814950 - SW846 5035A Soil (low level)										
Blank (1814950-BLK1)						Prepared & Analyzed: 13-Nov-18				
Bromodichloromethane	< 5.0	U	µg/kg wet	5.0						
Bromoform	< 5.0	U	µg/kg wet	5.0						
Bromomethane	< 10.0	U	µg/kg wet	10.0						
Carbon tetrachloride	< 5.0	U	µg/kg wet	5.0						
Chlorobenzene	< 5.0	U	µg/kg wet	5.0						
Chloroethane	< 10.0	U	µg/kg wet	10.0						
Chloroform	< 5.0	U	µg/kg wet	5.0						
Chloromethane	< 10.0	U	µg/kg wet	10.0						
Dibromochloromethane	< 5.0	U	µg/kg wet	5.0						
1,2-Dichlorobenzene	< 5.0	U	µg/kg wet	5.0						
1,3-Dichlorobenzene	< 5.0	U	µg/kg wet	5.0						
1,4-Dichlorobenzene	< 5.0	U	µg/kg wet	5.0						
Dichlorodifluoromethane (Freon12)	< 10.0	U	µg/kg wet	10.0						
1,1-Dichloroethane	< 5.0	U	µg/kg wet	5.0						
1,2-Dichloroethane	< 5.0	U	µg/kg wet	5.0						
1,1-Dichloroethene	< 5.0	U	µg/kg wet	5.0						
cis-1,2-Dichloroethene	< 5.0	U	µg/kg wet	5.0						
trans-1,2-Dichloroethene	< 5.0	U	µg/kg wet	5.0						
1,2-Dichloropropane	< 5.0	U	µg/kg wet	5.0						
cis-1,3-Dichloropropene	< 5.0	U	µg/kg wet	5.0						
trans-1,3-Dichloropropene	< 5.0	U	µg/kg wet	5.0						
Methylene chloride	< 10.0	U	µg/kg wet	10.0						
1,1,2,2-Tetrachloroethane	< 5.0	U	µg/kg wet	5.0						
Tetrachloroethene	< 5.0	U	µg/kg wet	5.0						
1,1,1-Trichloroethane	< 5.0	U	µg/kg wet	5.0						
1,1,2-Trichloroethane	< 5.0	U	µg/kg wet	5.0						
Trichloroethene	< 5.0	U	µg/kg wet	5.0						
Trichlorofluoromethane (Freon 11)	< 5.0	U	µg/kg wet	5.0						
Vinyl chloride	< 5.0	U	µg/kg wet	5.0						
Surrogate: 4-Bromofluorobenzene	*46.7*		µg/kg		*50.0*		*93*	*70-130*		
Surrogate: Toluene-d8	*53.4*		µg/kg		*50.0*		*107*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*64.1*		µg/kg		*50.0*		*128*	*70-130*		
Surrogate: Dibromofluoromethane	*55.1*		µg/kg		*50.0*		*110*	*70-130*		
LCS (1814950-BS1)						Prepared & Analyzed: 13-Nov-18				
Bromodichloromethane	**23.9**		µg/kg		20.0		119	70-130		
Bromoform	**22.2**		µg/kg		20.0		111	70-130		
Bromomethane	**19.3**		µg/kg		20.0		96	70-130		
Carbon tetrachloride	**25.9**		µg/kg		20.0		129	70-130		
Chlorobenzene	**20.5**		µg/kg		20.0		102	70-130		
Chloroethane	**19.8**		µg/kg		20.0		99	70-130		
Chloroform	**22.1**		µg/kg		20.0		111	70-130		
Chloromethane	**23.2**		µg/kg		20.0		116	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1814950 - SW846 5035A Soil (low level)										
LCS (1814950-BS1)					Prepared & Analyzed: 13-Nov-18					
Dibromochloromethane	**23.9**		µg/kg		20.0		119	70-130		
1,2-Dichlorobenzene	**19.8**		µg/kg		20.0		99	70-130		
1,3-Dichlorobenzene	**21.9**		µg/kg		20.0		110	70-130		
1,4-Dichlorobenzene	**20.1**		µg/kg		20.0		101	70-130		
Dichlorodifluoromethane (Freon12)	**21.4**		µg/kg		20.0		107	70-130		
1,1-Dichloroethane	**22.6**		µg/kg		20.0		113	70-130		
1,2-Dichloroethane	**22.8**		µg/kg		20.0		114	70-130		
1,1-Dichloroethene	**22.3**		µg/kg		20.0		112	70-130		
cis-1,2-Dichloroethene	**22.0**		µg/kg		20.0		110	70-130		
trans-1,2-Dichloroethene	**22.5**		µg/kg		20.0		112	70-130		
1,2-Dichloropropane	**22.8**		µg/kg		20.0		114	70-130		
cis-1,3-Dichloropropene	**20.9**		µg/kg		20.0		105	70-130		
trans-1,3-Dichloropropene	**21.1**		µg/kg		20.0		106	70-130		
Methylene chloride	**20.2**		µg/kg		20.0		101	70-130		
1,1,2,2-Tetrachloroethane	**22.1**		µg/kg		20.0		110	70-130		
Tetrachloroethene	**25.8**		µg/kg		20.0		129	70-130		
1,1,1-Trichloroethane	**23.8**		µg/kg		20.0		119	70-130		
1,1,2-Trichloroethane	**23.1**		µg/kg		20.0		115	70-130		
Trichloroethene	**23.6**		µg/kg		20.0		118	70-130		
Trichlorofluoromethane (Freon 11)	**25.3**		µg/kg		20.0		127	70-130		
Vinyl chloride	**19.4**		µg/kg		20.0		97	70-130		
Surrogate: 4-Bromofluorobenzene	*50.4*		µg/kg		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*53.1*		µg/kg		*50.0*		*106*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*52.4*		µg/kg		*50.0*		*105*	*70-130*		
Surrogate: Dibromofluoromethane	*53.3*		µg/kg		*50.0*		*107*	*70-130*		
LCS Dup (1814950-BSD1)					Prepared & Analyzed: 13-Nov-18					
Bromodichloromethane	**22.9**		µg/kg		20.0		114	70-130	4	30
Bromoform	**23.3**		µg/kg		20.0		116	70-130	5	30
Bromomethane	**22.0**		µg/kg		20.0		110	70-130	13	30
Carbon tetrachloride	**25.2**		µg/kg		20.0		126	70-130	3	30
Chlorobenzene	**20.5**		µg/kg		20.0		102	70-130	0.1	30
Chloroethane	**19.1**		µg/kg		20.0		95	70-130	4	30
Chloroform	**22.0**		µg/kg		20.0		110	70-130	0.4	30
Chloromethane	**23.7**		µg/kg		20.0		118	70-130	2	30
Dibromochloromethane	**22.9**		µg/kg		20.0		114	70-130	4	30
1,2-Dichlorobenzene	**20.5**		µg/kg		20.0		102	70-130	3	30
1,3-Dichlorobenzene	**23.1**		µg/kg		20.0		115	70-130	5	30
1,4-Dichlorobenzene	**20.7**		µg/kg		20.0		103	70-130	3	30
Dichlorodifluoromethane (Freon12)	**23.4**		µg/kg		20.0		117	70-130	9	30
1,1-Dichloroethane	**22.6**		µg/kg		20.0		113	70-130	0.4	30
1,2-Dichloroethane	**22.4**		µg/kg		20.0		112	70-130	2	30
1,1-Dichloroethene	**20.9**		µg/kg		20.0		105	70-130	6	30
cis-1,2-Dichloroethene	**22.8**		µg/kg		20.0		114	70-130	4	30
trans-1,2-Dichloroethene	**22.5**		µg/kg		20.0		113	70-130	0.2	30
1,2-Dichloropropane	**23.0**		µg/kg		20.0		115	70-130	0.7	30
cis-1,3-Dichloropropene	**21.2**		µg/kg		20.0		106	70-130	1	30
trans-1,3-Dichloropropene	**20.8**		µg/kg		20.0		104	70-130	2	30
Methylene chloride	**20.0**		µg/kg		20.0		100	70-130	1	30
1,1,2,2-Tetrachloroethane	**21.5**		µg/kg		20.0		108	70-130	3	30
Tetrachloroethene	**25.1**		µg/kg		20.0		125	70-130	3	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1814950 - SW846 5035A Soil (low level)										
LCS Dup (1814950-BSD1)					Prepared & Analyzed: 13-Nov-18					
1,1,1-Trichloroethane	**24.0**		µg/kg		20.0		120	70-130	1	30
1,1,2-Trichloroethane	**22.5**		µg/kg		20.0		113	70-130	2	30
Trichloroethene	**23.7**		µg/kg		20.0		119	70-130	0.8	30
Trichlorofluoromethane (Freon 11)	**25.5**		µg/kg		20.0		127	70-130	0.6	30
Vinyl chloride	**18.3**		µg/kg		20.0		91	70-130	6	30
Surrogate: 4-Bromofluorobenzene	*51.2*		µg/kg		*50.0*		*102*	*70-130*		
Surrogate: Toluene-d8	*52.0*		µg/kg		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*50.7*		µg/kg		*50.0*		*101*	*70-130*		
Surrogate: Dibromofluoromethane	*51.8*		µg/kg		*50.0*		*104*	*70-130*		
Batch 1814951 - SW846 5035A Soil (high level)										
Blank (1814951-BLK1)					Prepared & Analyzed: 13-Nov-18					
Bromodichloromethane	< 1.0	U	µg/kg wet	1.0						
Bromoform	< 1.0	U	µg/kg wet	1.0						
Bromomethane	< 2.0	U	µg/kg wet	2.0						
Carbon tetrachloride	< 1.0	U	µg/kg wet	1.0						
Chlorobenzene	< 1.0	U	µg/kg wet	1.0						
Chloroethane	< 2.0	U	µg/kg wet	2.0						
Chloroform	< 1.0	U	µg/kg wet	1.0						
Chloromethane	< 2.0	U	µg/kg wet	2.0						
Dibromochloromethane	< 1.0	U	µg/kg wet	1.0						
1,2-Dichlorobenzene	< 1.0	U	µg/kg wet	1.0						
1,3-Dichlorobenzene	< 1.0	U	µg/kg wet	1.0						
1,4-Dichlorobenzene	< 1.0	U	µg/kg wet	1.0						
Dichlorodifluoromethane (Freon12)	< 2.0	U	µg/kg wet	2.0						
1,1-Dichloroethane	< 1.0	U	µg/kg wet	1.0						
1,2-Dichloroethane	< 1.0	U	µg/kg wet	1.0						
1,1-Dichloroethene	< 1.0	U	µg/kg wet	1.0						
cis-1,2-Dichloroethene	< 1.0	U	µg/kg wet	1.0						
trans-1,2-Dichloroethene	< 1.0	U	µg/kg wet	1.0						
1,2-Dichloropropane	< 1.0	U	µg/kg wet	1.0						
cis-1,3-Dichloropropene	< 1.0	U	µg/kg wet	1.0						
trans-1,3-Dichloropropene	< 1.0	U	µg/kg wet	1.0						
Methylene chloride	< 2.0	U	µg/kg wet	2.0						
1,1,2,2-Tetrachloroethane	< 1.0	U	µg/kg wet	1.0						
Tetrachloroethene	< 1.0	U	µg/kg wet	1.0						
1,1,1-Trichloroethane	< 1.0	U	µg/kg wet	1.0						
1,1,2-Trichloroethane	< 1.0	U	µg/kg wet	1.0						
Trichloroethene	< 1.0	U	µg/kg wet	1.0						
Trichlorofluoromethane (Freon 11)	< 1.0	U	µg/kg wet	1.0						
Vinyl chloride	< 1.0	U	µg/kg wet	1.0						
Surrogate: 4-Bromofluorobenzene	*52.9*		µg/kg		*50.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*51.6*		µg/kg		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*63.5*		µg/kg		*50.0*		*127*	*70-130*		
Surrogate: Dibromofluoromethane	*57.1*		µg/kg		*50.0*		*114*	*70-130*		
LCS (1814951-BS1)					Prepared & Analyzed: 13-Nov-18					
Bromodichloromethane	**25.2**		µg/kg		20.0		126	70-130		
Bromoform	**27.9**	QC2	µg/kg		20.0		140	70-130		
Bromomethane	**22.2**		µg/kg		20.0		111	70-130		
Carbon tetrachloride	**29.1**	QC2	µg/kg		20.0		145	70-130		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1814951 - SW846 5035A Soil (high level)										
LCS (1814951-BS1)					Prepared & Analyzed: 13-Nov-18					
Chlorobenzene	**19.2**		µg/kg		20.0		96	70-130		
Chloroethane	**23.4**		µg/kg		20.0		117	70-130		
Chloroform	**22.9**		µg/kg		20.0		115	70-130		
Chloromethane	**21.8**		µg/kg		20.0		109	70-130		
Dibromochloromethane	**27.1**	QC2	µg/kg		20.0		135	70-130		
1,2-Dichlorobenzene	**20.7**		µg/kg		20.0		103	70-130		
1,3-Dichlorobenzene	**21.2**		µg/kg		20.0		106	70-130		
1,4-Dichlorobenzene	**19.6**		µg/kg		20.0		98	70-130		
Dichlorodifluoromethane (Freon12)	**25.4**		µg/kg		20.0		127	70-130		
1,1-Dichloroethane	**20.2**		µg/kg		20.0		101	70-130		
1,2-Dichloroethane	**25.3**		µg/kg		20.0		127	70-130		
1,1-Dichloroethene	**23.6**		µg/kg		20.0		118	70-130		
cis-1,2-Dichloroethene	**20.0**		µg/kg		20.0		100	70-130		
trans-1,2-Dichloroethene	**18.8**		µg/kg		20.0		94	70-130		
1,2-Dichloropropane	**18.7**		µg/kg		20.0		94	70-130		
cis-1,3-Dichloropropene	**19.7**		µg/kg		20.0		99	70-130		
trans-1,3-Dichloropropene	**20.3**		µg/kg		20.0		102	70-130		
Methylene chloride	**23.8**		µg/kg		20.0		119	70-130		
1,1,2,2-Tetrachloroethane	**19.1**		µg/kg		20.0		95	70-130		
Tetrachloroethene	**21.5**		µg/kg		20.0		107	70-130		
1,1,1-Trichloroethane	**25.3**		µg/kg		20.0		127	70-130		
1,1,2-Trichloroethane	**20.0**		µg/kg		20.0		100	70-130		
Trichloroethene	**19.0**		µg/kg		20.0		95	70-130		
Trichlorofluoromethane (Freon 11)	**29.6**	QC2	µg/kg		20.0		148	70-130		
Vinyl chloride	**24.8**		µg/kg		20.0		124	70-130		
Surrogate: 4-Bromofluorobenzene	*51.6*		µg/kg		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*51.8*		µg/kg		*50.0*		*104*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*64.2*		µg/kg		*50.0*		*128*	*70-130*		
Surrogate: Dibromofluoromethane	*56.6*		µg/kg		*50.0*		*113*	*70-130*		
LCS Dup (1814951-BSD1)					Prepared & Analyzed: 13-Nov-18					
Bromodichloromethane	**24.0**		µg/kg		20.0		120	70-130	5	30
Bromoform	**30.0**	QC2	µg/kg		20.0		150	70-130	7	30
Bromomethane	**25.1**		µg/kg		20.0		126	70-130	12	30
Carbon tetrachloride	**29.9**	QC2	µg/kg		20.0		149	70-130	3	30
Chlorobenzene	**20.5**		µg/kg		20.0		102	70-130	6	30
Chloroethane	**23.7**		µg/kg		20.0		118	70-130	1	30
Chloroform	**23.4**		µg/kg		20.0		117	70-130	2	30
Chloromethane	**20.1**		µg/kg		20.0		101	70-130	8	30
Dibromochloromethane	**28.6**	QC2	µg/kg		20.0		143	70-130	5	30
1,2-Dichlorobenzene	**21.8**		µg/kg		20.0		109	70-130	5	30
1,3-Dichlorobenzene	**22.1**		µg/kg		20.0		110	70-130	4	30
1,4-Dichlorobenzene	**20.6**		µg/kg		20.0		103	70-130	5	30
Dichlorodifluoromethane (Freon12)	**23.9**		µg/kg		20.0		120	70-130	6	30
1,1-Dichloroethane	**21.0**		µg/kg		20.0		105	70-130	4	30
1,2-Dichloroethane	**24.0**		µg/kg		20.0		120	70-130	6	30
1,1-Dichloroethene	**22.9**		µg/kg		20.0		114	70-130	3	30
cis-1,2-Dichloroethene	**20.6**		µg/kg		20.0		103	70-130	3	30
trans-1,2-Dichloroethene	**19.7**		µg/kg		20.0		98	70-130	5	30
1,2-Dichloropropane	**19.3**		µg/kg		20.0		97	70-130	3	30
cis-1,3-Dichloropropene	**20.8**		µg/kg		20.0		104	70-130	5	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1814951 - SW846 5035A Soil (high level)										
LCS Dup (1814951-BSD1)					Prepared & Analyzed: 13-Nov-18					
trans-1,3-Dichloropropene	**21.1**		µg/kg		20.0		105	70-130	4	30
Methylene chloride	**22.8**		µg/kg		20.0		114	70-130	4	30
1,1,2,2-Tetrachloroethane	**20.1**		µg/kg		20.0		101	70-130	5	30
Tetrachloroethene	**22.1**		µg/kg		20.0		111	70-130	3	30
1,1,1-Trichloroethane	**23.7**		µg/kg		20.0		119	70-130	7	30
1,1,2-Trichloroethane	**20.9**		µg/kg		20.0		105	70-130	4	30
Trichloroethene	**18.8**		µg/kg		20.0		94	70-130	0.7	30
Trichlorofluoromethane (Freon 11)	**30.5**	QC2	µg/kg		20.0		152	70-130	3	30
Vinyl chloride	**23.9**		µg/kg		20.0		120	70-130	4	30
Surrogate: 4-Bromofluorobenzene	*51.8*		µg/kg		*50.0*		*104*	*70-130*		
Surrogate: Toluene-d8	*50.8*		µg/kg		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*63.6*		µg/kg		*50.0*		*127*	*70-130*		
Surrogate: Dibromofluoromethane	*56.4*		µg/kg		*50.0*		*113*	*70-130*		
Batch 1815012 - SW846 5035A Soil (high level)										
Blank (1815012-BLK1)					Prepared & Analyzed: 14-Nov-18					
Bromodichloromethane	< 50.0	U, D	µg/kg wet	50.0						
Bromoform	< 50.0	U, D	µg/kg wet	50.0						
Bromomethane	< 100	U, D	µg/kg wet	100						
Carbon tetrachloride	< 50.0	U, D	µg/kg wet	50.0						
Chlorobenzene	< 50.0	U, D	µg/kg wet	50.0						
Chloroethane	< 100	U, D	µg/kg wet	100						
Chloroform	< 50.0	U, D	µg/kg wet	50.0						
Chloromethane	< 100	U, D	µg/kg wet	100						
Dibromochloromethane	< 50.0	U, D	µg/kg wet	50.0						
1,2-Dichlorobenzene	< 50.0	U, D	µg/kg wet	50.0						
1,3-Dichlorobenzene	< 50.0	U, D	µg/kg wet	50.0						
1,4-Dichlorobenzene	< 50.0	U, D	µg/kg wet	50.0						
Dichlorodifluoromethane (Freon12)	< 100	U, D	µg/kg wet	100						
1,1-Dichloroethane	< 50.0	U, D	µg/kg wet	50.0						
1,2-Dichloroethane	< 50.0	U, D	µg/kg wet	50.0						
1,1-Dichloroethene	< 50.0	U, D	µg/kg wet	50.0						
cis-1,2-Dichloroethene	< 50.0	U, D	µg/kg wet	50.0						
trans-1,2-Dichloroethene	< 50.0	U, D	µg/kg wet	50.0						
1,2-Dichloropropane	< 50.0	U, D	µg/kg wet	50.0						
cis-1,3-Dichloropropene	< 50.0	U, D	µg/kg wet	50.0						
trans-1,3-Dichloropropene	< 50.0	U, D	µg/kg wet	50.0						
Methylene chloride	< 100	U, D	µg/kg wet	100						
1,1,2,2-Tetrachloroethane	< 50.0	U, D	µg/kg wet	50.0						
Tetrachloroethene	< 50.0	U, D	µg/kg wet	50.0						
1,1,1-Trichloroethane	< 50.0	U, D	µg/kg wet	50.0						
1,1,2-Trichloroethane	< 50.0	U, D	µg/kg wet	50.0						
Trichloroethene	< 100	U, D	µg/kg wet	100						
Trichlorofluoromethane (Freon 11)	< 50.0	U, D	µg/kg wet	50.0						
Vinyl chloride	< 50.0	U, D	µg/kg wet	50.0						
Surrogate: 4-Bromofluorobenzene	*51.6*		µg/kg		*50.0*		*103*	*70-130*		
Surrogate: Toluene-d8	*50.7*		µg/kg		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*62.4*		µg/kg		*50.0*		*125*	*70-130*		
Surrogate: Dibromofluoromethane	*55.5*		µg/kg		*50.0*		*111*	*70-130*		
LCS (1815012-BS1)					Prepared & Analyzed: 14-Nov-18					

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1815012 - SW846 5035A Soil (high level)										
LCS (1815012-BS1)					Prepared & Analyzed: 14-Nov-18					
Bromodichloromethane	**24.0**	D	µg/kg		20.0		120	70-130		
Bromoform	**28.3**	QC2, D	µg/kg		20.0		142	70-130		
Bromomethane	**33.4**	QM9, D	µg/kg		20.0		167	70-130		
Carbon tetrachloride	**26.0**	D	µg/kg		20.0		130	70-130		
Chlorobenzene	**20.1**	D	µg/kg		20.0		100	70-130		
Chloroethane	**21.9**	D	µg/kg		20.0		110	70-130		
Chloroform	**22.0**	D	µg/kg		20.0		110	70-130		
Chloromethane	**14.0**	D	µg/kg		20.0		70	70-130		
Dibromochloromethane	**26.0**	D	µg/kg		20.0		130	70-130		
1,2-Dichlorobenzene	**20.7**	D	µg/kg		20.0		104	70-130		
1,3-Dichlorobenzene	**20.8**	D	µg/kg		20.0		104	70-130		
1,4-Dichlorobenzene	**20.0**	D	µg/kg		20.0		100	70-130		
Dichlorodifluoromethane (Freon12)	**20.9**	D	µg/kg		20.0		104	70-130		
1,1-Dichloroethane	**20.0**	D	µg/kg		20.0		100	70-130		
1,2-Dichloroethane	**23.1**	D	µg/kg		20.0		116	70-130		
1,1-Dichloroethene	**22.6**	D	µg/kg		20.0		113	70-130		
cis-1,2-Dichloroethene	**20.1**	D	µg/kg		20.0		101	70-130		
trans-1,2-Dichloroethene	**19.7**	D	µg/kg		20.0		99	70-130		
1,2-Dichloropropane	**18.5**	D	µg/kg		20.0		92	70-130		
cis-1,3-Dichloropropene	**19.5**	D	µg/kg		20.0		98	70-130		
trans-1,3-Dichloropropene	**19.2**	D	µg/kg		20.0		96	70-130		
Methylene chloride	**20.1**	D	µg/kg		20.0		101	70-130		
1,1,2,2-Tetrachloroethane	**18.7**	D	µg/kg		20.0		93	70-130		
Tetrachloroethene	**21.6**	D	µg/kg		20.0		108	70-130		
1,1,1-Trichloroethane	**24.0**	D	µg/kg		20.0		120	70-130		
1,1,2-Trichloroethane	**19.5**	D	µg/kg		20.0		97	70-130		
Trichloroethene	**20.2**	D	µg/kg		20.0		101	70-130		
Trichlorofluoromethane (Freon 11)	**25.8**	D	µg/kg		20.0		129	70-130		
Vinyl chloride	**23.0**	D	µg/kg		20.0		115	70-130		
Surrogate: 4-Bromofluorobenzene	*50.2*		µg/kg		*50.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*50.4*		µg/kg		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*57.6*		µg/kg		*50.0*		*115*	*70-130*		
Surrogate: Dibromofluoromethane	*54.2*		µg/kg		*50.0*		*108*	*70-130*		
LCS Dup (1815012-BSD1)					Prepared & Analyzed: 14-Nov-18					
Bromodichloromethane	**23.6**	D	µg/kg		20.0		118	70-130	2	30
Bromoform	**28.1**	QC2, D	µg/kg		20.0		141	70-130	0.6	30
Bromomethane	**31.0**	D	µg/kg		20.0		155	70-130	8	30
Carbon tetrachloride	**26.8**	QM9, D	µg/kg		20.0		134	70-130	3	30
Chlorobenzene	**20.1**	D	µg/kg		20.0		101	70-130	0.1	30
Chloroethane	**21.6**	D	µg/kg		20.0		108	70-130	2	30
Chloroform	**22.2**	D	µg/kg		20.0		111	70-130	0.8	30
Chloromethane	**13.8**	D	µg/kg		20.0		69	70-130	2	30
Dibromochloromethane	**25.2**	D	µg/kg		20.0		126	70-130	3	30
1,2-Dichlorobenzene	**21.0**	D	µg/kg		20.0		105	70-130	1	30
1,3-Dichlorobenzene	**21.0**	D	µg/kg		20.0		105	70-130	1	30
1,4-Dichlorobenzene	**19.8**	D	µg/kg		20.0		99	70-130	1	30
Dichlorodifluoromethane (Freon12)	**21.0**	D	µg/kg		20.0		105	70-130	0.6	30
1,1-Dichloroethane	**20.1**	D	µg/kg		20.0		101	70-130	0.6	30
1,2-Dichloroethane	**23.6**	D	µg/kg		20.0		118	70-130	2	30
1,1-Dichloroethene	**22.8**	D	µg/kg		20.0		114	70-130	1	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1815012 - SW846 5035A Soil (high level)										
LCS Dup (1815012-BSD1)						Prepared & Analyzed: 14-Nov-18				
cis-1,2-Dichloroethene	**20.3**	D	µg/kg		20.0		102	70-130	1	30
trans-1,2-Dichloroethene	**19.5**	D	µg/kg		20.0		97	70-130	1	30
1,2-Dichloropropane	**19.1**	D	µg/kg		20.0		95	70-130	3	30
cis-1,3-Dichloropropene	**19.5**	D	µg/kg		20.0		98	70-130	0.05	30
trans-1,3-Dichloropropene	**19.4**	D	µg/kg		20.0		97	70-130	1	30
Methylene chloride	**23.6**	D	µg/kg		20.0		118	70-130	16	30
1,1,2,2-Tetrachloroethane	**19.3**	D	µg/kg		20.0		96	70-130	3	30
Tetrachloroethene	**21.9**	D	µg/kg		20.0		110	70-130	1	30
1,1,1-Trichloroethane	**23.6**	D	µg/kg		20.0		118	70-130	2	30
1,1,2-Trichloroethane	**19.9**	D	µg/kg		20.0		100	70-130	2	30
Trichloroethene	**19.5**	D	µg/kg		20.0		97	70-130	3	30
Trichlorofluoromethane (Freon 11)	**25.8**	D	µg/kg		20.0		129	70-130	0.1	30
Vinyl chloride	**23.0**	D	µg/kg		20.0		115	70-130	0	30
Surrogate: 4-Bromofluorobenzene	*50.3*		µg/kg		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*50.5*		µg/kg		*50.0*		*101*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*57.8*		µg/kg		*50.0*		*116*	*70-130*		
Surrogate: Dibromofluoromethane	*55.2*		µg/kg		*50.0*		*110*	*70-130*		
Batch 1815015 - SW846 5035A Soil (high level)										
Blank (1815015-BLK1)						Prepared & Analyzed: 14-Nov-18				
Bromodichloromethane	< 50.0	U, D	µg/kg	50.0						
Bromoform	< 50.0	U, D	µg/kg	50.0						
Bromomethane	< 100	U, D	µg/kg	100						
Carbon tetrachloride	< 50.0	U, D	µg/kg	50.0						
Chlorobenzene	< 50.0	U, D	µg/kg	50.0						
Chloroethane	< 100	U, D	µg/kg	100						
Chloroform	< 50.0	U, D	µg/kg	50.0						
Chloromethane	< 100	U, D	µg/kg	100						
Dibromochloromethane	< 50.0	U, D	µg/kg	50.0						
1,2-Dichlorobenzene	< 50.0	U, D	µg/kg	50.0						
1,3-Dichlorobenzene	< 50.0	U, D	µg/kg	50.0						
1,4-Dichlorobenzene	< 50.0	U, D	µg/kg	50.0						
Dichlorodifluoromethane (Freon12)	< 100	U, D	µg/kg	100						
1,1-Dichloroethane	< 50.0	U, D	µg/kg	50.0						
1,2-Dichloroethane	< 50.0	U, D	µg/kg	50.0						
1,1-Dichloroethene	< 50.0	U, D	µg/kg	50.0						
cis-1,2-Dichloroethene	< 50.0	U, D	µg/kg	50.0						
trans-1,2-Dichloroethene	< 50.0	U, D	µg/kg	50.0						
1,2-Dichloropropane	< 50.0	U, D	µg/kg	50.0						
cis-1,3-Dichloropropene	< 50.0	U, D	µg/kg	50.0						
trans-1,3-Dichloropropene	< 50.0	U, D	µg/kg	50.0						
Methylene chloride	< 100	U, D	µg/kg	100						
1,1,2,2-Tetrachloroethane	< 50.0	U, D	µg/kg	50.0						
Tetrachloroethene	< 50.0	U, D	µg/kg	50.0						
1,1,1-Trichloroethane	< 50.0	U, D	µg/kg	50.0						
1,1,2-Trichloroethane	< 50.0	U, D	µg/kg	50.0						
Trichloroethene	< 50.0	U, D	µg/kg	50.0						
Trichlorofluoromethane (Freon 11)	< 50.0	U, D	µg/kg	50.0						
Vinyl chloride	< 50.0	U, D	µg/kg	50.0						
Surrogate: 4-Bromofluorobenzene	*52.5*		µg/kg		*50.0*		*105*	*70-130*		
Surrogate: Toluene-d8	*49.7*		µg/kg		*50.0*		*99*	*70-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1815015 - SW846 5035A Soil (high level)										
Blank (1815015-BLK1)						Prepared & Analyzed: 14-Nov-18				
Surrogate: 1,2-Dichloroethane-d4	*53.2*		µg/kg		*50.0*		*106*	*70-130*		
Surrogate: Dibromofluoromethane	*52.6*		µg/kg		*50.0*		*105*	*70-130*		
LCS (1815015-BS1)						Prepared: 14-Nov-18 Analyzed: 15-Nov-18				
Bromodichloromethane	**22.7**	D	µg/kg		20.0		114	70-130		
Bromoform	**25.9**	D	µg/kg		20.0		129	70-130		
Bromomethane	**31.7**	D	µg/kg		20.0		158	70-130		
Carbon tetrachloride	**23.5**	D	µg/kg		20.0		117	70-130		
Chlorobenzene	**20.3**	D	µg/kg		20.0		102	70-130		
Chloroethane	**20.3**	D	µg/kg		20.0		101	70-130		
Chloroform	**21.4**	D	µg/kg		20.0		107	70-130		
Chloromethane	**11.8**	D	µg/kg		20.0		59	70-130		
Dibromochloromethane	**24.4**	D	µg/kg		20.0		122	70-130		
1,2-Dichlorobenzene	**20.8**	D	µg/kg		20.0		104	70-130		
1,3-Dichlorobenzene	**20.3**	D	µg/kg		20.0		101	70-130		
1,4-Dichlorobenzene	**20.0**	D	µg/kg		20.0		100	70-130		
Dichlorodifluoromethane (Freon12)	**17.0**	D	µg/kg		20.0		85	70-130		
1,1-Dichloroethane	**19.9**	D	µg/kg		20.0		100	70-130		
1,2-Dichloroethane	**21.7**	D	µg/kg		20.0		109	70-130		
1,1-Dichloroethene	**22.1**	D	µg/kg		20.0		110	70-130		
cis-1,2-Dichloroethene	**20.0**	D	µg/kg		20.0		100	70-130		
trans-1,2-Dichloroethene	**19.7**	D	µg/kg		20.0		99	70-130		
1,2-Dichloropropane	**18.7**	D	µg/kg		20.0		94	70-130		
cis-1,3-Dichloropropene	**17.8**	D	µg/kg		20.0		89	70-130		
trans-1,3-Dichloropropene	**16.7**	D	µg/kg		20.0		84	70-130		
Methylene chloride	**19.9**	D	µg/kg		20.0		99	70-130		
1,1,2,2-Tetrachloroethane	**18.7**	D	µg/kg		20.0		94	70-130		
Tetrachloroethene	**21.1**	D	µg/kg		20.0		106	70-130		
1,1,1-Trichloroethane	**22.1**	D	µg/kg		20.0		111	70-130		
1,1,2-Trichloroethane	**19.6**	D	µg/kg		20.0		98	70-130		
Trichloroethene	**18.2**	D	µg/kg		20.0		91	70-130		
Trichlorofluoromethane (Freon 11)	**23.2**	D	µg/kg		20.0		116	70-130		
Vinyl chloride	**20.3**	D	µg/kg		20.0		102	70-130		
Surrogate: 4-Bromofluorobenzene	*49.6*		µg/kg		*50.0*		*99*	*70-130*		
Surrogate: Toluene-d8	*49.9*		µg/kg		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*54.2*		µg/kg		*50.0*		*108*	*70-130*		
Surrogate: Dibromofluoromethane	*53.4*		µg/kg		*50.0*		*107*	*70-130*		
LCS Dup (1815015-BSD1)						Prepared: 14-Nov-18 Analyzed: 15-Nov-18				
Bromodichloromethane	**21.9**	D	µg/kg		20.0		110	70-130	3	30
Bromoform	**26.0**	D	µg/kg		20.0		130	70-130	0.4	30
Bromomethane	**31.5**	D	µg/kg		20.0		158	70-130	0.5	30
Carbon tetrachloride	**23.2**	D	µg/kg		20.0		116	70-130	1	30
Chlorobenzene	**19.7**	D	µg/kg		20.0		98	70-130	3	30
Chloroethane	**19.5**	D	µg/kg		20.0		97	70-130	4	30
Chloroform	**20.8**	D	µg/kg		20.0		104	70-130	3	30
Chloromethane	**11.1**	D	µg/kg		20.0		56	70-130	6	30
Dibromochloromethane	**23.8**	D	µg/kg		20.0		119	70-130	3	30
1,2-Dichlorobenzene	**20.6**	D	µg/kg		20.0		103	70-130	0.8	30
1,3-Dichlorobenzene	**20.1**	D	µg/kg		20.0		100	70-130	0.9	30
1,4-Dichlorobenzene	**19.7**	D	µg/kg		20.0		99	70-130	1	30
Dichlorodifluoromethane (Freon12)	**16.7**	D	µg/kg		20.0		83	70-130	2	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1815015 - SW846 5035A Soil (high level)										
LCS Dup (1815015-BSD1)					Prepared: 14-Nov-18 Analyzed: 15-Nov-18					
1,1-Dichloroethane	**19.4**	D	µg/kg		20.0		97	70-130	2	30
1,2-Dichloroethane	**21.2**	D	µg/kg		20.0		106	70-130	3	30
1,1-Dichloroethene	**21.2**	D	µg/kg		20.0		106	70-130	4	30
cis-1,2-Dichloroethene	**19.5**	D	µg/kg		20.0		98	70-130	2	30
trans-1,2-Dichloroethene	**19.3**	D	µg/kg		20.0		96	70-130	2	30
1,2-Dichloropropane	**18.2**	D	µg/kg		20.0		91	70-130	3	30
cis-1,3-Dichloropropene	**17.6**	D	µg/kg		20.0		88	70-130	1	30
trans-1,3-Dichloropropene	**16.6**	D	µg/kg		20.0		83	70-130	0.7	30
Methylene chloride	**19.1**	D	µg/kg		20.0		95	70-130	4	30
1,1,2,2-Tetrachloroethane	**18.7**	D	µg/kg		20.0		93	70-130	0.2	30
Tetrachloroethene	**20.4**	D	µg/kg		20.0		102	70-130	3	30
1,1,1-Trichloroethane	**21.2**	D	µg/kg		20.0		106	70-130	4	30
1,1,2-Trichloroethane	**19.1**	D	µg/kg		20.0		95	70-130	3	30
Trichloroethene	**17.6**	D	µg/kg		20.0		88	70-130	3	30
Trichlorofluoromethane (Freon 11)	**22.7**	D	µg/kg		20.0		114	70-130	2	30
Vinyl chloride	**19.5**	D	µg/kg		20.0		98	70-130	4	30
Surrogate: 4-Bromofluorobenzene	*50.4*		µg/kg		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*50.2*		µg/kg		*50.0*		*100*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*54.3*		µg/kg		*50.0*		*109*	*70-130*		
Surrogate: Dibromofluoromethane	*52.9*		µg/kg		*50.0*		*106*	*70-130*		
Batch 1815084 - SW846 5035A Soil (high level)										
Blank (1815084-BLK1)					Prepared & Analyzed: 15-Nov-18					
Bromodichloromethane	< 50.0	U, D	µg/kg wet	50.0						
Bromoform	< 50.0	U, D	µg/kg wet	50.0						
Bromomethane	< 100	U, D	µg/kg wet	100						
Carbon tetrachloride	< 50.0	U, D	µg/kg wet	50.0						
Chlorobenzene	< 50.0	U, D	µg/kg wet	50.0						
Chloroethane	< 100	U, D	µg/kg wet	100						
Chloroform	< 50.0	U, D	µg/kg wet	50.0						
Chloromethane	< 100	U, D	µg/kg wet	100						
Dibromochloromethane	< 50.0	U, D	µg/kg wet	50.0						
1,2-Dichlorobenzene	< 50.0	U, D	µg/kg wet	50.0						
1,3-Dichlorobenzene	< 50.0	U, D	µg/kg wet	50.0						
1,4-Dichlorobenzene	< 50.0	U, D	µg/kg wet	50.0						
Dichlorodifluoromethane (Freon12)	< 100	U, D	µg/kg wet	100						
1,1-Dichloroethane	< 50.0	U, D	µg/kg wet	50.0						
1,2-Dichloroethane	< 50.0	U, D	µg/kg wet	50.0						
1,1-Dichloroethene	< 50.0	U, D	µg/kg wet	50.0						
cis-1,2-Dichloroethene	< 50.0	U, D	µg/kg wet	50.0						
trans-1,2-Dichloroethene	< 50.0	U, D	µg/kg wet	50.0						
1,2-Dichloropropane	< 50.0	U, D	µg/kg wet	50.0						
cis-1,3-Dichloropropene	< 50.0	U, D	µg/kg wet	50.0						
trans-1,3-Dichloropropene	< 50.0	U, D	µg/kg wet	50.0						
Methylene chloride	< 100	U, D	µg/kg wet	100						
1,1,2,2-Tetrachloroethane	< 50.0	U, D	µg/kg wet	50.0						
Tetrachloroethene	< 50.0	U, D	µg/kg wet	50.0						
1,1,1-Trichloroethane	< 50.0	U, D	µg/kg wet	50.0						
1,1,2-Trichloroethane	< 50.0	U, D	µg/kg wet	50.0						
Trichloroethene	< 50.0	U, D	µg/kg wet	50.0						
Trichlorofluoromethane (Freon 11)	< 50.0	U, D	µg/kg wet	50.0						

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1815084 - SW846 5035A Soil (high level)										
Blank (1815084-BLK1)						Prepared & Analyzed: 15-Nov-18				
Vinyl chloride	< 50.0	U, D	µg/kg wet	50.0						
Surrogate: 4-Bromofluorobenzene	*52.9*		µg/kg		*50.0*		*106*	*70-130*		
Surrogate: Toluene-d8	*51.0*		µg/kg		*50.0*		*102*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*63.4*		µg/kg		*50.0*		*127*	*70-130*		
Surrogate: Dibromofluoromethane	*56.6*		µg/kg		*50.0*		*113*	*70-130*		
LCS (1815084-BS1)						Prepared & Analyzed: 15-Nov-18				
Bromodichloromethane	**25.5**	D	µg/kg		20.0		127	70-130		
Bromoform	**30.0**	QC2, D	µg/kg		20.0		150	70-130		
Bromomethane	**36.2**	QC2, D	µg/kg		20.0		181	70-130		
Carbon tetrachloride	**29.8**	QC2, D	µg/kg		20.0		149	70-130		
Chlorobenzene	**19.9**	D	µg/kg		20.0		99	70-130		
Chloroethane	**22.7**	D	µg/kg		20.0		114	70-130		
Chloroform	**24.1**	D	µg/kg		20.0		120	70-130		
Chloromethane	**14.1**	D	µg/kg		20.0		70	70-130		
Dibromochloromethane	**28.7**	QM9, D	µg/kg		20.0		144	70-130		
1,2-Dichlorobenzene	**21.7**	D	µg/kg		20.0		109	70-130		
1,3-Dichlorobenzene	**21.1**	D	µg/kg		20.0		106	70-130		
1,4-Dichlorobenzene	**21.1**	D	µg/kg		20.0		105	70-130		
Dichlorodifluoromethane (Freon12)	**23.3**	D	µg/kg		20.0		116	70-130		
1,1-Dichloroethane	**21.2**	D	µg/kg		20.0		106	70-130		
1,2-Dichloroethane	**25.5**	D	µg/kg		20.0		128	70-130		
1,1-Dichloroethene	**23.8**	D	µg/kg		20.0		119	70-130		
cis-1,2-Dichloroethene	**20.9**	D	µg/kg		20.0		104	70-130		
trans-1,2-Dichloroethene	**20.0**	D	µg/kg		20.0		100	70-130		
1,2-Dichloropropane	**19.4**	D	µg/kg		20.0		97	70-130		
cis-1,3-Dichloropropene	**20.8**	D	µg/kg		20.0		104	70-130		
trans-1,3-Dichloropropene	**21.2**	D	µg/kg		20.0		106	70-130		
Methylene chloride	**21.8**	D	µg/kg		20.0		109	70-130		
1,1,2,2-Tetrachloroethane	**19.9**	D	µg/kg		20.0		99	70-130		
Tetrachloroethene	**22.2**	D	µg/kg		20.0		111	70-130		
1,1,1-Trichloroethane	**25.3**	D	µg/kg		20.0		127	70-130		
1,1,2-Trichloroethane	**21.2**	D	µg/kg		20.0		106	70-130		
Trichloroethene	**19.0**	D	µg/kg		20.0		95	70-130		
Trichlorofluoromethane (Freon 11)	**30.4**	QC2, D	µg/kg		20.0		152	70-130		
Vinyl chloride	**25.6**	D	µg/kg		20.0		128	70-130		
Surrogate: 4-Bromofluorobenzene	*50.2*		µg/kg		*50.0*		*100*	*70-130*		
Surrogate: Toluene-d8	*51.6*		µg/kg		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*63.8*		µg/kg		*50.0*		*128*	*70-130*		
Surrogate: Dibromofluoromethane	*57.3*		µg/kg		*50.0*		*115*	*70-130*		
LCS Dup (1815084-BSD1)						Prepared & Analyzed: 15-Nov-18				
Bromodichloromethane	**24.0**	D	µg/kg		20.0		120	70-130	6	30
Bromoform	**28.4**	QC2, D	µg/kg		20.0		142	70-130	5	30
Bromomethane	**33.8**	QC2, D	µg/kg		20.0		169	70-130	7	30
Carbon tetrachloride	**29.0**	QC2, D	µg/kg		20.0		145	70-130	3	30
Chlorobenzene	**19.5**	D	µg/kg		20.0		97	70-130	2	30
Chloroethane	**22.1**	D	µg/kg		20.0		111	70-130	2	30
Chloroform	**23.0**	D	µg/kg		20.0		115	70-130	5	30
Chloromethane	**14.0**	D	µg/kg		20.0		70	70-130	0.6	30
Dibromochloromethane	**25.5**	D	µg/kg		20.0		128	70-130	12	30
1,2-Dichlorobenzene	**20.8**	D	µg/kg		20.0		104	70-130	4	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW846 8260C										
Batch 1815084 - SW846 5035A Soil (high level)										
LCS Dup (1815084-BSD1)					Prepared & Analyzed: 15-Nov-18					
1,3-Dichlorobenzene	**20.6**	D	µg/kg		20.0		103	70-130	2	30
1,4-Dichlorobenzene	**20.3**	D	µg/kg		20.0		101	70-130	4	30
Dichlorodifluoromethane (Freon12)	**22.5**	D	µg/kg		20.0		113	70-130	3	30
1,1-Dichloroethane	**20.3**	D	µg/kg		20.0		101	70-130	4	30
1,2-Dichloroethane	**23.9**	D	µg/kg		20.0		120	70-130	6	30
1,1-Dichloroethene	**23.2**	D	µg/kg		20.0		116	70-130	3	30
cis-1,2-Dichloroethene	**20.1**	D	µg/kg		20.0		101	70-130	4	30
trans-1,2-Dichloroethene	**19.0**	D	µg/kg		20.0		95	70-130	6	30
1,2-Dichloropropane	**18.4**	D	µg/kg		20.0		92	70-130	5	30
cis-1,3-Dichloropropene	**19.8**	D	µg/kg		20.0		99	70-130	5	30
trans-1,3-Dichloropropene	**20.0**	D	µg/kg		20.0		100	70-130	6	30
Methylene chloride	**20.7**	D	µg/kg		20.0		103	70-130	5	30
1,1,2,2-Tetrachloroethane	**18.4**	D	µg/kg		20.0		92	70-130	8	30
Tetrachloroethene	**21.3**	D	µg/kg		20.0		107	70-130	4	30
1,1,1-Trichloroethane	**23.8**	D	µg/kg		20.0		119	70-130	6	30
1,1,2-Trichloroethane	**19.8**	D	µg/kg		20.0		99	70-130	7	30
Trichloroethene	**18.4**	D	µg/kg		20.0		92	70-130	3	30
Trichlorofluoromethane (Freon 11)	**29.1**	QC2, D	µg/kg		20.0		146	70-130	4	30
Vinyl chloride	**23.8**	D	µg/kg		20.0		119	70-130	7	30
Surrogate: 4-Bromofluorobenzene	*50.4*		µg/kg		*50.0*		*101*	*70-130*		
Surrogate: Toluene-d8	*51.5*		µg/kg		*50.0*		*103*	*70-130*		
Surrogate: 1,2-Dichloroethane-d4	*63.3*		µg/kg		*50.0*		*127*	*70-130*		
Surrogate: Dibromofluoromethane	*56.6*		µg/kg		*50.0*		*113*	*70-130*		

The following list indicates the date and time low-level VOC soil/sediment samples were placed in the freezer at the lab:

SC51827-01	*MW A (4')*	11/9/2018 10:30 AM
SC51827-02	*MW A (8')*	11/9/2018 10:30 AM
SC51827-03	*MW A (11')*	11/9/2018 10:30 AM
SC51827-04	*MW A (13')*	11/9/2018 10:30 AM
SC51827-05	*MW B (9.5')*	11/9/2018 10:30 AM
SC51827-06	*MW B (11')*	11/9/2018 10:30 AM
SC51827-07	*MW D (9')*	11/9/2018 10:30 AM
SC51827-14	*MW-A Sediment*	11/9/2018 6:07 PM
SC51827-15	*MW-A LNAPL*	11/9/2018 6:07 PM

Notes and Definitions

D	Data reported from a dilution
E	This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
J	Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
QC2	Analyte out of acceptance range in QC spike but no reportable concentration present in sample.
QM9	The spike recovery for this QC sample is outside the established control limits. The sample results for the QC batch were accepted based on LCS/LCSD or SRM recoveries within the control limits.
R05	Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.
SGCMSVOC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogates with three required by program methods.
U	Analyte included in the analysis, but not detected at or above the MDL.
VOC8	Reporting limits reflect SW846 5035A High Level extraction technique due to interference and/or QC issues using SW846 5035A Low Level extraction technique.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

SC51827

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CHAIN OF CUSTODY RECORD

Page 1 of 2

Special Handling:

- ☐ Standard TAT - 7 to 10 business days
- ☒ Rush TAT - Date Needed: COB 11/14/18

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Day Environmental, Inc
1563 Lyell Avenue
Rochester NY 14606

Telephone #: 585 454 0210
Project Mgr: C. Hampton

Invoice To: SAME

P.O No.: _____ Quote #: _____

Project No: 5529s-18
Site Name: 441 Chandler St.
Location: Jamestown State: NY
Sampler(s): C. Hampton

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=_____ 12=_____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=_____ X2=_____ X3=_____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	List Preservative Code below: 7,9		2						Check if chlorinated
										Analysis: Halocarbons x 8260		Halocarbons x 8260						
SC51827-01	MW A (4')	11/6/18	10:08	SO	G	3		1		X								X
02	MW A (8')	11/6/18	10:20	SO	G	3		1		X								X
03	MW A (11')	11/6/18	10:35	SO	G	3		1		X								X
04	MW A (13')	11/6/18	10:50	SO	G	3		1		X								X
05	MW B (9.5')	11/6/18	11:45	SO	G	3		1		X								X
06	MW B (11')	11/6/18	11:50	SO	G	3		1		X								X
07	MW D (9')	11/6/18	15:30	SO	G	3		1		X								X
08	TB-Soil	—	—	—	—	3				X								☐
09	MW-A	11/8/18	13:25	GW	G	3						X						X
10	MW-B	11/8/18	11:35	GW	G	3						X						X

Samples Frozen 11/6/18 @ 19:30

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☒ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
Charles Hampton	Fed Ex	11/8/18	15:45
Heidi	A Pruner	11/9/18	1030

Temp °C: Observed 2.1 | Correction Factor 0 | Corrected 2.1 | IR ID # 01

☒ EDD format: Equis (NYSDEC)
☒ E-mail to: Champton@daymail.net

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

SC51827

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CHAIN OF CUSTODY RECORD

Page 2 of 2

Special Handling:

☐ Standard TAT - 7 to 10 business days

☒ Rush TAT - Date Needed: COB 11/14/18

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Day Environmental, Inc
1563 Lyell Avenue
Rochester, NY 14606

Telephone #: 585 454 0210
Project Mgr: C. Hampton

Invoice To: SAME

P.O No.: _____ Quote #: _____

Project No: 5529 S-18
Site Name: 441 Chandler St.
Location: Jamestown State: NY
Sampler(s): C. Hampton

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= None 12= _____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= Sediment X2= LNAPL X3= _____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	List Preservative Code below: 2		11						Check if chlorinated
										Halocarbons x 8260		Halocarbons x 8260						
SC51827-11	MW-C	11/8/18	10:35	G	GW	3				X								X
12	MW-D	11/8/18	11:05	G	GW	3				X								X
13	TB - Groundwater	—	—	—	—	2				X								☐
14	MW-A Sediment	11/8/18	12:30	G	X_1			1				X						X
15	MW-A LNAPL	11/8/18	13:55	G	X_2	1						X						X
																		☐
																		☐
																		☐
																		☐
																		☐
																		☐

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☒ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:	Temp °C
~~FedEx 11/8/18~~				Observed 2.1
Charles Hampton	Fed Ex	11/8/18	15:45	Correction Factor 0
FedEx	[signature]	11/9/18	10 30	Corrected 2.1
				IR ID # 01

☒ EDD format: NYSDEC EQuIS
☒ E-mail to: Champton@daymail.net

Condition upon receipt: Custody Seals: ☐ ~~Present~~ ☒ Intact ☐ Broken
☐ Ambient ☒ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

ORIGIN ID:EHTA (585) 454-0210
ATTN: CHARLES HAMPTON
DAY ENVIRONMENTAL, INC.
1563 LYELL AVE.

ROCHESTER, NY 14606
UNITED STATES US

SHIP DATE: 30OCT18
ACTWGT: 40.00 LB MAN
CAD: 0654830/CAFE3210

551C1/38F2/104F

TO ROBERT BRISTOL
EUROFINS SPECTRUM ANALYTICAL, INC.
830 SILVER STREET

AGAWAM MA 01001
(413) 789-9018
REF: # 45840

RMA:

FedEx Express

FedEx
TRK# 0221 4663 8817 3639

FRI - 09 NOV 10:30A
PRIORITY OVERNIGHT

EB EHTA

01001
MA-US BDL

EXP 08/19

#5108604 11/08 552J3/C3B2/DCA5

RI 745 4
ST 21 10:30 A
3639
11.09

Batch Summary

1814872

General Chemistry Parameters

SC51827-01 (MW A (4'))
SC51827-02 (MW A (8'))
SC51827-03 (MW A (11'))
SC51827-04 (MW A (13'))
SC51827-05 (MW B (9.5'))
SC51827-06 (MW B (11'))
SC51827-07 (MW D (9'))
SC51827-14 (MW-A Sediment)

1814905

Volatile Organic Compounds

1814905-BLK1
1814905-BS1
1814905-BSD1
SC51827-09 (MW-A)
SC51827-10 (MW-B)
SC51827-11 (MW-C)
SC51827-12 (MW-D)
SC51827-13 (TB-Ground Water)

1814913

Volatile Organic Compounds

1814913-BLK1
1814913-BS1
1814913-BSD1
SC51827-15 (MW-A LNAPL)

1814950

Volatile Organic Compounds

1814950-BLK1
1814950-BS1
1814950-BSD1
SC51827-01 (MW A (4'))
SC51827-05 (MW B (9.5'))
SC51827-06 (MW B (11'))
SC51827-08 (TB-Soil)

1814951

Volatile Organic Compounds

1814951-BLK1
1814951-BS1
1814951-BSD1
SC51827-02 (MW A (8'))
SC51827-03 (MW A (11'))
SC51827-04 (MW A (13'))
SC51827-14 (MW-A Sediment)

1815012

Volatile Organic Compounds

1815012-BLK1
1815012-BS1
1815012-BSD1
SC51827-01RE1 (MW A (4'))
SC51827-03RE1 (MW A (11'))
SC51827-04RE1 (MW A (13'))
SC51827-07 (MW D (9'))
SC51827-14RE1 (MW-A Sediment)

1815015

Volatile Organic Compounds

1815015-BLK1
1815015-BS1
1815015-BSD1
SC51827-15RE1 (MW-A LNAPL)

1815084

Volatile Organic Compounds

1815084-BLK1
1815084-BS1
1815084-BSD1
SC51827-01RE2 (MW A (4'))
SC51827-08RE1 (TB-Soil)

S822862

Volatile Organic Compounds

S822862-CAL1
S822862-CAL2
S822862-CAL3
S822862-CAL4
S822862-CAL5
S822862-CAL6
S822862-CAL7
S822862-CAL8
S822862-CAL9
S822862-ICV1
S822862-LCV1
S822862-LCV2
S822862-LCV3
S822862-TUN1

S822956

Volatile Organic Compounds

S822956-CAL1
S822956-CAL2
S822956-CAL3
S822956-CAL4
S822956-CAL5
S822956-CAL6
S822956-CAL7
S822956-CAL8
S822956-CAL9
S822956-ICV1
S822956-LCV1
S822956-LCV2
S822956-TUN1

S823142

Volatile Organic Compounds

S823142-CAL1
S823142-CAL2
S823142-CAL3
S823142-CAL4
S823142-CAL5
S823142-CAL6
S823142-CAL7
S823142-CAL8
S823142-CAL9
S823142-ICV1
S823142-LCV1
S823142-LCV2
S823142-LCV3
S823142-TUN1

S823177

Volatile Organic Compounds

S823177-CCV1
S823177-TUN1

S823188

Volatile Organic Compounds

S823188-CCV1
S823188-TUN1

S823197

Volatile Organic Compounds

S823197-CCV1
S823197-TUN1

S823199

Volatile Organic Compounds

S823199-CCV1
S823199-TUN1

S823230

Volatile Organic Compounds

S823230-CCV1
S823230-TUN1

S823231

Volatile Organic Compounds

S823231-CCV1
S823231-TUN1

S823263

Volatile Organic Compounds

S823263-CCV1
S823263-TUN1

EUROFINS SPECTRUM ANALYTICAL
LABORATORY REPORT
SC52856

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
21-Jan-19 14:58

Laboratory Report
SC52856

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, NY 14606
Attn: Charles Hampton

Project: 415+441 Chandler St - Jamestown, NY
Project #: 5529S-18

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2972/2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00348
USDA # P330-15-00375
Vermont # VT-11393

Authorized by:

Dawn Wojcik
Laboratory Director

Dawn E Wojcik

Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 151 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our 'Quality' web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC52856

Project: 415+441 Chandler St - Jamestown, NY

Project Number: 5529S-18

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC52856-01	TB-01 (11')	Soil	19-Dec-18 14:50	28-Dec-18 10:36
SC52856-02	TB-01 (12.5')	Soil	19-Dec-18 15:10	28-Dec-18 10:36
SC52856-03	TB-02 (11.5')	Soil	19-Dec-18 10:15	28-Dec-18 10:36
SC52856-04	TB-03 (9')	Soil	20-Dec-18 08:20	28-Dec-18 10:36
SC52856-05	TB-04 (11.5')	Soil	20-Dec-18 07:50	28-Dec-18 10:36
SC52856-06	TB-04 (12.9')	Soil	20-Dec-18 08:00	28-Dec-18 10:36
SC52856-07	TB-05 (12.5')	Soil	19-Dec-18 16:45	28-Dec-18 10:36
SC52856-08	TB-10 (4')	Soil	18-Dec-18 12:00	28-Dec-18 10:36
SC52856-09	TB-10 (4-5')	Soil	18-Dec-18 12:05	28-Dec-18 10:36
SC52856-10	TB-19 (7-8')	Soil	17-Dec-18 10:35	28-Dec-18 10:36
SC52856-11	TB-21 (5-6')	Soil	17-Dec-18 15:30	28-Dec-18 10:36
SC52856-12	TB-22 (13')	Soil	20-Dec-18 10:45	28-Dec-18 10:36
SC52856-13	MW-A	Ground Water	27-Dec-18 09:53	28-Dec-18 10:36
SC52856-14	MW-B	Ground Water	27-Dec-18 11:09	28-Dec-18 10:36
SC52856-15	MW-C	Ground Water	27-Dec-18 08:40	28-Dec-18 10:36
SC52856-16	MW-D	Ground Water	27-Dec-18 10:00	28-Dec-18 10:36
SC52856-17	MW-E	Ground Water	27-Dec-18 08:56	28-Dec-18 10:36
SC52856-18	MW-F	Ground Water	27-Dec-18 10:30	28-Dec-18 10:36
SC52856-19	MW-G	Ground Water	27-Dec-18 08:17	28-Dec-18 10:36
SC52856-20	MW-H	Ground Water	27-Dec-18 07:25	28-Dec-18 10:36
SC52856-21	MW-I	Ground Water	27-Dec-18 11:25	28-Dec-18 10:36
SC52856-22	MW-J	Ground Water	26-Dec-18 13:44	28-Dec-18 10:36
SC52856-23	MW-K	Ground Water	27-Dec-18 11:20	28-Dec-18 10:36
SC52856-24	MW-L	Ground Water	26-Dec-18 17:10	28-Dec-18 10:36
SC52856-25	MW-N	Ground Water	26-Dec-18 16:22	28-Dec-18 10:36
SC52856-26	MW-O	Ground Water	26-Dec-18 10:01	28-Dec-18 10:36
SC52856-27	MW-P	Ground Water	26-Dec-18 11:06	28-Dec-18 10:36
SC52856-28	MW-Q	Ground Water	26-Dec-18 11:05	28-Dec-18 10:36
SC52856-29	MW-R	Ground Water	26-Dec-18 12:35	28-Dec-18 10:36
SC52856-30	MW-S	Ground Water	26-Dec-18 12:31	28-Dec-18 10:36
SC52856-31	MW-T	Ground Water	26-Dec-18 14:15	28-Dec-18 10:36
SC52856-32	TB-11 (GW)	Ground Water	26-Dec-18 16:20	28-Dec-18 10:36
SC52856-33	TB-18 (GW)	Ground Water	26-Dec-18 10:15	28-Dec-18 10:36
SC52856-34	Trip Blank 12/27/18	Trip Blank	27-Dec-18 00:00	28-Dec-18 10:36
SC52856-35	Trip Blank 12/27/18	Trip Blank	27-Dec-18 00:00	28-Dec-18 10:36

CASE NARRATIVE:

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 1.1 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

VOA vials preserved with deionized water were received frozen upon custody transfer to laboratory representative.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

All VOC soils samples submitted and analyzed in methanol will have a minimum dilution factor of 50. This is the minimum amount of solvent allowed on the instrumentation without causing interference. Soils are run on a manual load instrument. 100ug of sample (MEOH) is spiked into 5ml DI water along with the surrogate and added directly onto the instrument. Additional dilution factors may be required to keep analyte concentration within instrument calibration range.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW8260C

CC21270-LCSD

This parameter is outside laboratory lcs/lcsd specified recovery limits.

trans-1,4-dichloro-2-butene

CC21618-MS

This parameter is outside laboratory ms/msd specified recovery limits.

Acetone
Methylacetate
Trichloroethene

CC21618-MSD

This parameter is outside laboratory ms/msd specified recovery limits.

Acetone
Methylacetate
Trichloroethene

SW8270D

Laboratory Control Samples:

CC21515-LCS

This parameter is outside laboratory rpd specified recovery limits.

% Nitrobenzene-d5
2,4-Dinitrophenol
Benzaldehyde
Di-n-octylphthalate

CC21618-LCS

This parameter is outside laboratory lcs/lcsd specified recovery limits.

2,4-Dinitrophenol
Benzaldehyde

SW8270D

CC21515-LCSD

This parameter is outside laboratory rpd specified recovery limits.

2,4-Dinitrophenol
Benzaldehyde
Di-n-octylphthalate

CC21618-LCSD

This parameter is outside laboratory lcs/lcsd specified recovery limits.

2,4-Dinitrophenol
Benzaldehyde

CC21618-MS

This parameter is outside laboratory ms/msd specified recovery limits.

Hexachlorocyclopentadiene

This parameter is outside laboratory rpd specified recovery limits.

2,4-Dinitrophenol
4,6-Dinitro-2-methylphenol

CC21618-MSD

This parameter is outside laboratory ms/msd specified recovery limits.

Benzaldehyde
Hexachlorocyclopentadiene

This parameter is outside laboratory rpd specified recovery limits.

2,4-Dinitrophenol
4,6-Dinitro-2-methylphenol

SW8270D (SIM)

Laboratory Control Samples:

CC21515-LCS

This parameter is outside laboratory lcs/lcsd specified recovery limits.

Hexachlorocyclopentadiene

This parameter is outside laboratory rpd specified recovery limits.

% Nitrobenzene-d5

CC21515-LCSD

This parameter is outside laboratory rpd specified recovery limits.

% Nitrobenzene-d5

SW8270D MOD(SIM)

Laboratory Control Samples:

CC20774-LCS

This parameter is outside laboratory lcs/lcsd specified recovery limits.

Naphthalene

SW8270D MOD(SIM)

Laboratory Control Samples:

CC20774-LCS

This parameter is outside laboratory rpd specified recovery limits.

Acenaphthylene
Benzo(a)pyrene
Benzo(ghi)perylene
Benzo(k)fluoranthene
Indeno(1,2,3-cd)pyrene
Pyrene

CC20774-LCSD

This parameter is outside laboratory lcs/lcsd specified recovery limits.

Naphthalene

This parameter is outside laboratory rpd specified recovery limits.

Acenaphthylene
Benzo(a)pyrene
Benzo(ghi)perylene
Benzo(k)fluoranthene
Indeno(1,2,3-cd)pyrene
Pyrene

SW-846 6010C

Samples:

SC52856-15 *MW-C*

Estimated value

Lead

SC52856-16 *MW-D*

Estimated value

Cadmium

SC52856-20 *MW-H*

Estimated value

Arsenic

SC52856-27 *MW-P*

Estimated value

Arsenic

SC52856-31 *MW-T*

Estimated value

Arsenic
Lead

SW-846 8260C

Laboratory Control Samples:

LCSL07QL190071AA

SW-846 8260C

Laboratory Control Samples:

LCSL07QL190071AA

Estimated value

Ethanol

LCSL14QL190082AA

Estimated value

Ethanol

Samples:

SC52856-13 *MW-A*

Estimated value

trans-1,2-Dichloroethene

SC52856-14 *MW-B*

Estimated value

1,1-Dichloroethane
1,1-Dichloroethene
trans-1,2-Dichloroethene

SC52856-15 *MW-C*

Estimated value

Trichloroethene

SC52856-16 *MW-D*

Estimated value

1H-Indene, 2,3-dihydro-1,6-d
1H-Indene, 2,3-dihydro-4,7-d
2,2-Dimethylindene, 2,3-dihy
3-Phenylbut-1-ene
Benzene
Benzene, 1,2,4,5-tetramethyl
Benzene, pentamethyl-
cis-1,2-Dichloroethene
Cyclohexane
Isopropylbenzene
Methylcyclohexane
Naphthalene, 1,2,3,4-tetr
Naphthalene, 1,2,3,4-tetra
Naphthalene, 1,2,3,4-tetrah
Naphthalene, 1,2,3,4-tetrahy
Naphthalene, 1,2,3,4-tetrahy1
Naphthalene, 1-methyl-
n-Butylbenzene
n-Propylbenzene
sec-Butylbenzene
Total VOC TICs
trans-1,2-Dichloroethene
Unknown
Unknown aromatic
Unknown aromatic1

SC52856-17 *MW-E*

SW-846 8260C

Samples:

SC52856-17 *MW-E*

Estimated value

Chloroethane

SC52856-18 *MW-F*

Estimated value

1,1-Dichloroethene
Chloroethane
trans-1,2-Dichloroethene

SC52856-20 *MW-H*

Estimated value

cis-1,2-Dichloroethene
Vinyl Chloride

SC52856-21 *MW-I*

Estimated value

Vinyl Chloride

SC52856-22 *MW-J*

Estimated value

Trichloroethene
Vinyl Chloride

SC52856-23 *MW-K*

Estimated value

1H-Indene, 2,3-dihydro-1,1,3
1H-Indene, 2,3-dihydro-1,6-d
1H-Indene, 2,3-dihydro-4,7-d
1H-Indene, 2,3-dihydro-5,6-d
cis-1,2-Dichloroethene
Naphthalene, 1,2,3,4-tetra
sec-Butylbenzene
Total VOC TICs
Trichloroethene
Unknown aromatic
Unknown aromatic1

SC52856-24 *MW-L*

Estimated value

Acetone
cis-1,2-Dichloroethene
Trichloroethene
Vinyl Chloride

SC52856-26 *MW-O*

Estimated value

Vinyl Chloride

SC52856-27 *MW-P*

SW-846 8260C

Samples:

SC52856-27 *MW-P*

Estimated value

Acetone

SC52856-28 *MW-Q*

Estimated value

1,1-Dichloroethane

SC52856-29 *MW-R*

Estimated value

1,1,2-Trichloroethane
Methylcyclohexane

SC52856-31 *MW-T*

Estimated value

Acetone
cis-1,2-Dichloroethene
Vinyl Chloride

SC52856-32 *TB-11 (GW)*

Estimated value

cis-1,2-Dichloroethene
Trichloroethene

SC52856-33 *TB-18 (GW)*

Estimated value

1,1-Dichloroethane
trans-1,2-Dichloroethene

LCSL07YL190071AA

Estimated value

Ethanol

LCSL14YL190082AA

Estimated value

Ethanol

Sample Acceptance Check Form

Client:	Day Environmental, Inc.
Project:	415+441 Chandler St - Jamestown, NY / 5529S-18
Work Order:	SC52856
Sample(s) received on:	12/28/2018

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
Were custody seals present?	☑	☐	☐
Were custody seals intact?	☑	☐	☐
Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
Were samples cooled on ice upon transfer to laboratory representative?	☑	☐	☐
Were sample containers received intact?	☑	☐	☐
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
Were samples accompanied by a Chain of Custody document?	☑	☐	☐
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☑	☐	☐
Did sample container labels agree with Chain of Custody document?	☑	☐	☐
Were samples received within method-specific holding times?	☑	☐	☐

Summary of Hits

Lab ID: SC52856-01 **Client ID:** TB-01 (11')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	34000	J	46000	ug/Kg	SW8260C

Lab ID: SC52856-01RE1 **Client ID:** TB-01 (11')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Trichloroethene	4400000		160000	ug/Kg	SW8260C

Lab ID: SC52856-02RE1 **Client ID:** TB-01 (12.5')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	260	J	660	ug/Kg	SW8260C
Trichloroethene	10000		660	ug/Kg	SW8260C

Lab ID: SC52856-03 **Client ID:** TB-02 (11.5')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethene	110	J	240	ug/Kg	SW8260C
trans-1,2-Dichloroethene	49	J	240	ug/Kg	SW8260C
Vinyl chloride	1500		240	ug/Kg	SW8260C

Lab ID: SC52856-03RE1 **Client ID:** TB-02 (11.5')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	17000		9600	ug/Kg	SW8260C
Trichloroethene	81000		9600	ug/Kg	SW8260C

Lab ID: SC52856-04 **Client ID:** TB-03 (9')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	0.37	J	2.5	ug/Kg	SW8260C
Trichloroethene	0.87	J	2.5	ug/Kg	SW8260C

Lab ID: SC52856-05 **Client ID:** TB-04 (11.5')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethene	70	J	190	ug/Kg	SW8260C
trans-1,2-Dichloroethene	50	J	190	ug/Kg	SW8260C
Vinyl chloride	1700		190	ug/Kg	SW8260C

Lab ID: SC52856-05RE1 **Client ID:** TB-04 (11.5')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	22000		2000	ug/Kg	SW8260C
Trichloroethene	29000		2000	ug/Kg	SW8260C

Lab ID: SC52856-06 **Client ID:** TB-04 (12.9')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	3600		210	ug/Kg	SW8260C
Trichloroethene	1500		210	ug/Kg	SW8260C
Vinyl chloride	420		210	ug/Kg	SW8260C

Lab ID: SC52856-07 **Client ID:** TB-05 (12.5')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	2900		200	ug/Kg	SW8260C
Tetrachloroethene	67	J	200	ug/Kg	SW8260C
trans-1,2-Dichloroethene	22	J	200	ug/Kg	SW8260C
Vinyl chloride	21	J	200	ug/Kg	SW8260C

Lab ID: SC52856-07RE1 **Client ID:** TB-05 (12.5')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Trichloroethene	100000		4000	ug/Kg	SW8260C

Lab ID: SC52856-08 **Client ID:** TB-10 (4')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
n-Butylbenzene	250		59	ug/Kg	SW8260C
sec-Butylbenzene	160		59	ug/Kg	SW8260C

Lab ID: SC52856-11 **Client ID:** TB-21 (5-6')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Benz(a)anthracene	360		330	ug/Kg	SW8270D
Chrysene	540		330	ug/Kg	SW8270D
Pyrene	200	J	330	ug/Kg	SW8270D

Lab ID: SC52856-12 **Client ID:** TB-22 (13')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethene	1.9	J	2.4	ug/Kg	SW8260C
trans-1,2-Dichloroethene	1.3	J	2.4	ug/Kg	SW8260C

Lab ID: SC52856-12RE1 **Client ID:** TB-22 (13')

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	2900		140	ug/Kg	SW8260C
Trichloroethene	1400		140	ug/Kg	SW8260C
Vinyl chloride	25	J	140	ug/Kg	SW8260C

Lab ID: SC52856-13 **Client ID:** MW-A

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethene	230		100	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	20000		100	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	52	J.	100	ug/l	SW-846 8260C
Trichloroethene	82000		1000	ug/l	SW-846 8260C
Vinyl Chloride	1500		100	ug/l	SW-846 8260C

Lab ID: SC52856-14 **Client ID:** MW-B

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethane	0.7	J.	1	ug/l	SW-846 8260C
1,1-Dichloroethene	0.3	J.	1	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	44		1	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	0.3	J.	1	ug/l	SW-846 8260C
Trichloroethene	3		1	ug/l	SW-846 8260C
Vinyl Chloride	36		1	ug/l	SW-846 8260C

Lab ID: SC52856-15 **Client ID:** MW-C

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Fluoranthene	1.6	J	4.7	ug/L	SW8270D
Fluorene	1.8	J	4.7	ug/L	SW8270D
Phenanthrene	2.9	J	3.3	ug/L	SW8270D
Acenaphthene	1.0		0.47	ug/L	SW8270D (SIM)
Anthracene	0.70		0.47	ug/L	SW8270D (SIM)
Benz(a)anthracene	0.28		0.02	ug/L	SW8270D (SIM)
Benzo(a)pyrene	0.18		0.02	ug/L	SW8270D (SIM)
Benzo(b)fluoranthene	0.16		0.02	ug/L	SW8270D (SIM)
Benzo(k)fluoranthene	0.16		0.02	ug/L	SW8270D (SIM)
Chrysene	0.30		0.02	ug/L	SW8270D (SIM)
Fluoranthene	1.4		0.47	ug/L	SW8270D (SIM)
Fluorene	1.9		0.47	ug/L	SW8270D (SIM)
Indeno(1,2,3-cd)pyrene	0.14		0.02	ug/L	SW8270D (SIM)
Phenanthrene	2.8		0.47	ug/L	SW8270D (SIM)
Pyrene	0.94		0.47	ug/L	SW8270D (SIM)
Barium	0.312		0.0050	mg/l	SW-846 6010C
Lead	0.0074	J.	0.0150	mg/l	SW-846 6010C
Trichloroethene	0.8	J.	1	ug/l	SW-846 8260C

Lab ID: SC52856-16 **Client ID:** MW-D

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Acenaphthene	1.5	J	4.8	ug/L	SW8270D
Acenaphthene	1.3		0.48	ug/L	SW8270D (SIM)
Fluorene	0.76		0.48	ug/L	SW8270D (SIM)
Phenanthrene	0.80		0.48	ug/L	SW8270D (SIM)
Arsenic	0.134		0.0500	mg/l	SW-846 6010C
Barium	0.217		0.0050	mg/l	SW-846 6010C
Cadmium	0.0013	J.	0.0050	mg/l	SW-846 6010C
Benzene	0.7	J.	1	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	0.8	J.	1	ug/l	SW-846 8260C
Cyclohexane	3	J.	5	ug/l	SW-846 8260C
Isopropylbenzene	1	J.	5	ug/l	SW-846 8260C
Methylcyclohexane	4	J.	5	ug/l	SW-846 8260C
n-Butylbenzene	0.9	J.	5	ug/l	SW-846 8260C
n-Propylbenzene	0.3	J.	5	ug/l	SW-846 8260C
sec-Butylbenzene	2	J.	5	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	0.3	J.	1	ug/l	SW-846 8260C
Vinyl Chloride	6		1	ug/l	SW-846 8260C

Lab ID: SC52856-17 **Client ID:** MW-E

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Chloroethane	340	J.	1000	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	32000		1000	ug/l	SW-846 8260C
Trichloroethene	780000		5000	ug/l	SW-846 8260C
Vinyl Chloride	1100		1000	ug/l	SW-846 8260C

Lab ID: SC52856-18 **Client ID:** MW-F

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethene	500	J.	500	ug/l	SW-846 8260C
Chloroethane	150	J.	500	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	140000		500	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	240	J.	500	ug/l	SW-846 8260C
Trichloroethene	230000		2000	ug/l	SW-846 8260C
Vinyl Chloride	6200		500	ug/l	SW-846 8260C

Lab ID: SC52856-19 **Client ID:** MW-G

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	2		1	ug/l	SW-846 8260C
Vinyl Chloride	3		1	ug/l	SW-846 8260C

Lab ID: SC52856-20 **Client ID:** MW-H

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	0.0180	J.	0.0500	mg/l	SW-846 6010C
Barium	0.549		0.0050	mg/l	SW-846 6010C
cis-1,2-Dichloroethene	0.8	J.	1	ug/l	SW-846 8260C
Vinyl Chloride	0.5	J.	1	ug/l	SW-846 8260C

Lab ID: SC52856-21 **Client ID:** MW-I

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	8		1	ug/l	SW-846 8260C
Trichloroethene	61		1	ug/l	SW-846 8260C
Vinyl Chloride	0.8	J.	1	ug/l	SW-846 8260C

Lab ID: SC52856-22 **Client ID:** MW-J

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	3		1	ug/l	SW-846 8260C
Trichloroethene	0.5	J.	1	ug/l	SW-846 8260C
Vinyl Chloride	0.6	J.	1	ug/l	SW-846 8260C

Lab ID: SC52856-23 **Client ID:** MW-K

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Diethyl phthalate	2.2	J	4.8	ug/L	SW8270D
Acenaphthene	1.0		0.48	ug/L	SW8270D (SIM)
Fluorene	0.82		0.48	ug/L	SW8270D (SIM)
Phenanthrene	0.58		0.48	ug/L	SW8270D (SIM)
Barium	0.151		0.0050	mg/l	SW-846 6010C
cis-1,2-Dichloroethene	0.2	J.	1	ug/l	SW-846 8260C
sec-Butylbenzene	0.2	J.	5	ug/l	SW-846 8260C
Trichloroethene	0.4	J.	1	ug/l	SW-846 8260C

Lab ID: SC52856-24 **Client ID:** MW-L

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Acetone	1	J.	20	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	0.4	J.	1	ug/l	SW-846 8260C
Trichloroethene	0.7	J.	1	ug/l	SW-846 8260C
Vinyl Chloride	0.3	J.	1	ug/l	SW-846 8260C

Lab ID: SC52856-25 **Client ID:** MW-N

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Phenanthrene	0.58		0.49	ug/L	SW8270D MOD(SIM)

Lab ID: SC52856-26 **Client ID:** MW-O

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Barium	0.274		0.0050	mg/l	SW-846 6010C
Vinyl Chloride	0.2	J.	1	ug/l	SW-846 8260C

Lab ID: SC52856-27 **Client ID:** MW-P

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	0.0225	J.	0.0500	mg/l	SW-846 6010C
Barium	0.157		0.0050	mg/l	SW-846 6010C
Acetone	1	J.	20	ug/l	SW-846 8260C

Lab ID: SC52856-28 **Client ID:** MW-Q

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	0.0721		0.0500	mg/l	SW-846 6010C
Barium	0.309		0.0050	mg/l	SW-846 6010C
1,1-Dichloroethane	0.2	J.	1	ug/l	SW-846 8260C

Lab ID: SC52856-29 **Client ID:** MW-R

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Barium	0.268		0.0050	mg/l	SW-846 6010C
1,1,2-Trichloroethane	2	J.	5	ug/l	SW-846 8260C
1,1-Dichloroethene	38		5	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	3500		50	ug/l	SW-846 8260C
Methylcyclohexane	1	J.	25	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	12		5	ug/l	SW-846 8260C
Trichloroethene	1100		5	ug/l	SW-846 8260C
Vinyl Chloride	840		5	ug/l	SW-846 8260C

Lab ID: SC52856-30 **Client ID:** MW-S

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Barium	0.142		0.0050	mg/l	SW-846 6010C

Lab ID: SC52856-31 **Client ID:** MW-T

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Arsenic	0.0371	J.	0.0500	mg/l	SW-846 6010C
Barium	0.256		0.0050	mg/l	SW-846 6010C
Lead	0.0092	J.	0.0150	mg/l	SW-846 6010C
Acetone	2	J.	20	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	0.4	J.	1	ug/l	SW-846 8260C
Vinyl Chloride	0.3	J.	1	ug/l	SW-846 8260C

Lab ID: SC52856-32 **Client ID:** TB-11 (GW)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	0.3	J.	1	ug/l	SW-846 8260C
Trichloroethene	0.5	J.	1	ug/l	SW-846 8260C

Lab ID: SC52856-33 **Client ID:** TB-18 (GW)

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethane	0.6	J.	1	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	13		1	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	0.4	J.	1	ug/l	SW-846 8260C
Trichloroethene	2		1	ug/l	SW-846 8260C
Vinyl Chloride	8		1	ug/l	SW-846 8260C

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-01 (11') SC52856-01	5529S-18	Soil	19-Dec-18 14:50	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
10061-02-6	trans-1,3-Dichloropropene	< 46000		ug/Kg	46000	4600	10000	SW8260C	19-Dec-18 14:50	31-Dec-18 21:05	CT007	461826A	
74-95-3	Dibromomethane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
75-09-2	Methylene chloride	< 46000		ug/Kg	46000	46000	10000	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 91000		ug/Kg	91000	23000	10000	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
75-01-4	Vinyl chloride	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloroprop ane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
108-86-1	Bromobenzene	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
75-25-2	Bromoform	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
74-83-9	Bromomethane	< 46000		ug/Kg	46000	18000	10000	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
108-90-7	Chlorobenzene	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
75-00-3	Chloroethane	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
67-66-3	Chloroform	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
74-87-3	Chloromethane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**34,000**	J	ug/Kg	46000	4600	10000	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 46000		ug/Kg	46000	9100	10000	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 46000		ug/Kg	46000	4600	10000	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*96*			*70-130 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-01 (11') SC52856-01	5529S-18	Soil	19-Dec-18 14:50	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
460-00-4	*% Bromofluorobenzene*	*98*			*70-130 %*			SW8260C	19-Dec-18 14:50	-Dec-18 21:	CT007	461826A	
2037-26-5	*% Toluene-d8*	*100*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*92*			*70-130 %*			"	"	"	"	"	
Re-analysis of Subcontracted Analyses Prepared by method SW8260C													
79-01-6	Trichloroethene	**4,400,000**		ug/Kg	160000	16000	50000	SW8260C	19-Dec-18 14:50	02-Jan-19 11:43	CT007	461964A	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	**87**		%			1	SW846-%Solid	19-Dec-18 14:50	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-01 (12.5') SC52856-02	5529S-18	Soil	19-Dec-18 15:10	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
96-12-8	1,2-Dibromo-3-chloropropane	< 160		ug/Kg	160	33	50	SW8260C	19-Dec-18 15:10	30-Dec-18 14:20	CT007	461716A	
74-83-9	Bromomethane	< 160		ug/Kg	160	65	50	"	"	"	"	"	
75-25-2	Bromoform	< 160		ug/Kg	160	33	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
108-86-1	Bromobenzene	< 160		ug/Kg	160	16	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 160		ug/Kg	160	16	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 160		ug/Kg	160	16	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 160		ug/Kg	160	16	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 160		ug/Kg	160	16	50	"	"	"	"	"	
108-90-7	Chlorobenzene	< 160		ug/Kg	160	16	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 160		ug/Kg	160	16	50	"	"	"	"	"	
75-00-3	Chloroethane	< 160		ug/Kg	160	16	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 160		ug/Kg	160	16	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 160		ug/Kg	160	16	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 160		ug/Kg	160	16	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 160		ug/Kg	160	16	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 160		ug/Kg	160	16	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 160		ug/Kg	160	33	50	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 160		ug/Kg	160	16	50	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-butene	< 330		ug/Kg	330	81	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 160		ug/Kg	160	16	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 160		ug/Kg	160	16	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 160		ug/Kg	160	33	50	"	"	"	"	"	
75-09-2	Methylene chloride	< 160		ug/Kg	160	160	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 160		ug/Kg	160	16	50	"	"	"	"	"	
74-95-3	Dibromomethane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 160		ug/Kg	160	16	50	"	"	"	"	"	
74-87-3	Chloromethane	< 160		ug/Kg	160	33	50	"	"	"	"	"	
67-66-3	Chloroform	< 160		ug/Kg	160	16	50	"	"	"	"	"	
75-01-4	Vinyl chloride	< 160		ug/Kg	160	16	50	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	*% Toluene-d8*	*107*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*96*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*98*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-01 (12.5') SC52856-02	5529S-18	Soil	19-Dec-18 15:10	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*96*			*70-130 %*			SW8260C	19-Dec-18 15:10	-Dec-18 14:	CT007	461716A	
Re-analysis of Subcontracted Analyses													
Prepared by method SW8260C													
79-01-6	Trichloroethene	**10,000**		ug/Kg	660	66	200	SW8260C	19-Dec-18 15:10	31-Dec-18 21:26	CT007	461826A	
156-59-2	cis-1,2-Dichloroethene	**260**	J	ug/Kg	660	66	200	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	*% Toluene-d8*	*99*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*94*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*97*			*70-130 %*			"	"	"	"	"	
2199-69-1	*% 1,2-dichlorobenzene-d4*	*98*			*70-130 %*			"	"	"	"	"	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	**93**		%			1	SW846-%Solid	19-Dec-18 15:10	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-02 (11.5')	5529S-18	Soil	19-Dec-18 10:15	28-Dec-18
SC52856-03				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
10061-02-6	trans-1,3-Dichloropropene	< 240		ug/Kg	240	24	50	SW8260C	19-Dec-18 10:15	30-Dec-18 13:59	CT007	461716A	
75-01-4	Vinyl chloride	**1,500**		ug/Kg	240	24	50	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 240		ug/Kg	240	24	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	**49**	J	ug/Kg	240	24	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 240		ug/Kg	240	24	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 240		ug/Kg	240	24	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	**110**	J	ug/Kg	240	24	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-butene	< 480		ug/Kg	480	120	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 240		ug/Kg	240	24	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 240		ug/Kg	240	24	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 240		ug/Kg	240	48	50	"	"	"	"	"	
75-09-2	Methylene chloride	< 240		ug/Kg	240	240	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 240		ug/Kg	240	24	50	"	"	"	"	"	
74-95-3	Dibromomethane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 240		ug/Kg	240	24	50	"	"	"	"	"	
74-87-3	Chloromethane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
67-66-3	Chloroform	< 240		ug/Kg	240	24	50	"	"	"	"	"	
75-00-3	Chloroethane	< 240		ug/Kg	240	24	50	"	"	"	"	"	
108-90-7	Chlorobenzene	< 240		ug/Kg	240	24	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 240		ug/Kg	240	48	50	"	"	"	"	"	
75-25-2	Bromoform	< 240		ug/Kg	240	48	50	"	"	"	"	"	
108-86-1	Bromobenzene	< 240		ug/Kg	240	24	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 240		ug/Kg	240	24	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 240		ug/Kg	240	24	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 240		ug/Kg	240	24	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 240		ug/Kg	240	48	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 240		ug/Kg	240	24	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 240		ug/Kg	240	24	50	"	"	"	"	"	
74-83-9	Bromomethane	< 240		ug/Kg	240	96	50	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	*% Toluene-d8*	*117*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*95*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-02 (11.5') SC52856-03	5529S-18	Soil	19-Dec-18 10:15	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
460-00-4	% Bromofluorobenzene	97			70-130 %			SW8260C	19-Dec-18 10:15	-Dec-18 13:	CT007	461716A	
2199-69-1	% 1,2-dichlorobenzene-d4	97			70-130 %			"	"	"	"	"	
Re-analysis of Subcontracted Analyses Prepared by method SW8260C													
79-01-6	Trichloroethene	**81,000**		ug/Kg	9600	960	2000	SW8260C	19-Dec-18 10:15	31-Dec-18 21:47	CT007	461826A	
156-59-2	cis-1,2-Dichloroethene	**17,000**		ug/Kg	9600	960	2000	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	% Toluene-d8	99			70-130 %			"	"	"	"	"	
1868-53-7	% Dibromofluoromethane	95			70-130 %			"	"	"	"	"	
460-00-4	% Bromofluorobenzene	97			70-130 %			"	"	"	"	"	
2199-69-1	% 1,2-dichlorobenzene-d4	98			70-130 %			"	"	"	"	"	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	**89**		%			1	SW846-%Solid	19-Dec-18 10:15	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-03 (9')	5529S-18	Soil	20-Dec-18 08:20	28-Dec-18
SC52856-04				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
75-69-4	Trichlorofluoromethane	< 2.5		ug/Kg	2.5	0.49	1	SW8260C	20-Dec-18 08:20	31-Dec-18 22:29	CT007	461826A	
95-50-1	1,2-Dichlorobenzene	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
67-66-3	Chloroform	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
79-01-6	Trichloroethene	**0.87**	J	ug/Kg	2.5	0.25	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-butene	< 4.9		ug/Kg	4.9	1.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.5		ug/Kg	2.5	2.5	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.5		ug/Kg	2.5	0.99	1	"	"	"	"	"	
75-25-2	Bromoform	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 2.5		ug/Kg	2.5	0.49	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 2.5		ug/Kg	2.5	0.25	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**0.37**	J	ug/Kg	2.5	0.25	1	"	"	"	"	"	

Surrogate recoveries:

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-03 (9') SC52856-04	5529S-18	Soil	20-Dec-18 08:20	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
1868-53-7	% Dibromofluoromethane	99			70-130 %			SW8260C	20-Dec-18 08:20	-Dec-18 22:	CT007	461826A	
2037-26-5	% Toluene-d8	97			70-130 %			"	"	"	"	"	
460-00-4	% Bromofluorobenzene	97			70-130 %			"	"	"	"	"	
2199-69-1	% 1,2-dichlorobenzene-d4	99			70-130 %			"	"	"	"	"	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	95		%			1	SW846-%Solid	"	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-04 (11.5')	5529S-18	Soil	20-Dec-18 07:50	28-Dec-18
SC52856-05				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
563-58-6	1,1-Dichloropropene	< 190		ug/Kg	190	19	50	SW8260C	20-Dec-18 07:50	31-Dec-18 22:50	CT007	461826A	
75-25-2	Bromoform	< 190		ug/Kg	190	39	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
108-86-1	Bromobenzene	< 190		ug/Kg	190	19	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 190		ug/Kg	190	19	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 190		ug/Kg	190	19	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 190		ug/Kg	190	19	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 190		ug/Kg	190	19	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 190		ug/Kg	190	19	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 190		ug/Kg	190	19	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 190		ug/Kg	190	19	50	"	"	"	"	"	
108-90-7	Chlorobenzene	< 190		ug/Kg	190	19	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	**70**	J	ug/Kg	190	19	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 190		ug/Kg	190	19	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 190		ug/Kg	190	19	50	"	"	"	"	"	
75-01-4	Vinyl chloride	**1,700**		ug/Kg	190	19	50	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 190		ug/Kg	190	19	50	"	"	"	"	"	
74-83-9	Bromomethane	< 190		ug/Kg	190	78	50	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-butene	< 390		ug/Kg	390	97	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 190		ug/Kg	190	39	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	**50**	J	ug/Kg	190	19	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 190		ug/Kg	190	39	50	"	"	"	"	"	
75-09-2	Methylene chloride	< 190		ug/Kg	190	190	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 190		ug/Kg	190	19	50	"	"	"	"	"	
74-95-3	Dibromomethane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 190		ug/Kg	190	19	50	"	"	"	"	"	
74-87-3	Chloromethane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
67-66-3	Chloroform	< 190		ug/Kg	190	19	50	"	"	"	"	"	
75-00-3	Chloroethane	< 190		ug/Kg	190	19	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 190		ug/Kg	190	39	50	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	*% Toluene-d8*	*103*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*88*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-04 (11.5') SC52856-05	5529S-18	Soil	20-Dec-18 07:50	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
460-00-4	*% Bromofluorobenzene*	*97*			*70-130 %*			SW8260C	20-Dec-18 07:50	-Dec-18 22:	CT007	461826A	
2199-69-1	*% 1,2-dichlorobenzene-d4*	*98*			*70-130 %*			"	"	"	"	"	
Re-analysis of Subcontracted Analyses													
Prepared by method SW8260C													
79-01-6	Trichloroethene	**29,000**		ug/Kg	2000	200	500	SW8260C	20-Dec-18 07:50	02-Jan-19 12:04	CT007	461964A	
156-59-2	cis-1,2-Dichloroethene	**22,000**		ug/Kg	2000	200	500	"	"	"	"	"	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	**86**		%			1	SW846-%Solid	20-Dec-18 07:50	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-04 (12.9')	5529S-18	Soil	20-Dec-18 08:00	28-Dec-18
SC52856-06				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
79-34-5	1,1,2,2-Tetrachloroethane	< 210		ug/Kg	210	42	50	SW8260C	20-Dec-18 08:00	31-Dec-18 23:11	CT007	461826A	
71-55-6	1,1,1-Trichloroethane	< 210		ug/Kg	210	21	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 210		ug/Kg	210	21	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 210		ug/Kg	210	21	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 210		ug/Kg	210	21	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**3,600**		ug/Kg	210	21	50	"	"	"	"	"	
74-87-3	Chloromethane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
67-66-3	Chloroform	< 210		ug/Kg	210	21	50	"	"	"	"	"	
75-00-3	Chloroethane	< 210		ug/Kg	210	21	50	"	"	"	"	"	
108-90-7	Chlorobenzene	< 210		ug/Kg	210	21	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 210		ug/Kg	210	42	50	"	"	"	"	"	
74-83-9	Bromomethane	< 210		ug/Kg	210	83	50	"	"	"	"	"	
75-25-2	Bromoform	< 210		ug/Kg	210	42	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 210		ug/Kg	210	21	50	"	"	"	"	"	
108-86-1	Bromobenzene	< 210		ug/Kg	210	21	50	"	"	"	"	"	
75-09-2	Methylene chloride	< 210		ug/Kg	210	210	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 210		ug/Kg	210	21	50	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 210		ug/Kg	210	21	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 210		ug/Kg	210	21	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 210		ug/Kg	210	21	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 210		ug/Kg	210	21	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 210		ug/Kg	210	21	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 210		ug/Kg	210	21	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
74-95-3	Dibromomethane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
75-01-4	Vinyl chloride	**420**		ug/Kg	210	21	50	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 210		ug/Kg	210	21	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 210		ug/Kg	210	42	50	"	"	"	"	"	
79-01-6	Trichloroethene	**1,500**		ug/Kg	210	21	50	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-butene	< 420		ug/Kg	420	100	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 210		ug/Kg	210	21	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 210		ug/Kg	210	21	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 210		ug/Kg	210	42	50	"	"	"	"	"	

Surrogate recoveries:

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-04 (12.9') SC52856-06	5529S-18	Soil	20-Dec-18 08:00	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
2037-26-5	% Toluene-d8	99			70-130 %			SW8260C	20-Dec-18 08:00	-Dec-18 23:	CT007	461826A	
1868-53-7	% Dibromofluoromethane	90			70-130 %			"	"	"	"	"	
460-00-4	% Bromofluorobenzene	97			70-130 %			"	"	"	"	"	
2199-69-1	% 1,2-dichlorobenzene-d4	97			70-130 %			"	"	"	"	"	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	87		%			1	SW846-%Solid	"	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-05 (12.5')	5529S-18	Soil	19-Dec-18 16:45	28-Dec-18
SC52856-07				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
156-59-2	cis-1,2-Dichloroethene	**2,900**		ug/Kg	200	20	50	SW8260C	19-Dec-18 16:45	31-Dec-18 23:32	CT007	461826A	
142-28-9	1,3-Dichloropropane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
75-01-4	Vinyl chloride	**21**	J	ug/Kg	200	20	50	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 200		ug/Kg	200	20	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-buten e	< 400		ug/Kg	400	99	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 200		ug/Kg	200	20	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	**22**	J	ug/Kg	200	20	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	**67**	J	ug/Kg	200	40	50	"	"	"	"	"	
75-09-2	Methylene chloride	< 200		ug/Kg	200	200	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 200		ug/Kg	200	20	50	"	"	"	"	"	
74-95-3	Dibromomethane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 200		ug/Kg	200	20	50	"	"	"	"	"	
74-87-3	Chloromethane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
67-66-3	Chloroform	< 200		ug/Kg	200	20	50	"	"	"	"	"	
75-00-3	Chloroethane	< 200		ug/Kg	200	20	50	"	"	"	"	"	
108-90-7	Chlorobenzene	< 200		ug/Kg	200	20	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 200		ug/Kg	200	40	50	"	"	"	"	"	
74-83-9	Bromomethane	< 200		ug/Kg	200	80	50	"	"	"	"	"	
75-25-2	Bromoform	< 200		ug/Kg	200	40	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
108-86-1	Bromobenzene	< 200		ug/Kg	200	20	50	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 200		ug/Kg	200	20	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 200		ug/Kg	200	20	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 200		ug/Kg	200	20	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 200		ug/Kg	200	20	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 200		ug/Kg	200	20	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 200		ug/Kg	200	20	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloroprop ane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 200		ug/Kg	200	20	50	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 200		ug/Kg	200	20	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 200		ug/Kg	200	20	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 200		ug/Kg	200	40	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 200		ug/Kg	200	20	50	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	*% Toluene-d8*	*105*			*70-130 %*			"	"	"	"	"	

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-05 (12.5') SC52856-07	5529S-18	Soil	19-Dec-18 16:45	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
1868-53-7	*% Dibromofluoromethane*	*90*			*70-130 %*			SW8260C	19-Dec-18 16:45	-Dec-18 23:	CT007	461826A	
460-00-4	*% Bromofluorobenzene*	*99*			*70-130 %*			"	"	"	"	"	
2199-69-1	*% 1,2-dichlorobenzene-d4*	*97*			*70-130 %*			"	"	"	"	"	
Re-analysis of Subcontracted Analyses Prepared by method SW8260C													
79-01-6	Trichloroethene	**100,000**		ug/Kg	4000	400	1000	SW8260C	19-Dec-18 16:45	02-Jan-19 12:25	CT007	461964A	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	**88**		%			1	SW846-%Solid	19-Dec-18 16:45	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-10 (4') SC52856-08	5529S-18	Soil	18-Dec-18 12:00	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
106-93-4	1,2-Dibromoethane	< 290		ug/Kg	290	29	50	SW8260C	18-Dec-18 12:00	01-Jan-19 00:35	CT007	461826A	
71-43-2	Benzene	< 120		ug/Kg	120	29	50	"	"	"	"	"	
67-64-1	Acetone	< 1500		ug/Kg	1500	290	50	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 1500		ug/Kg	1500	290	50	"	"	"	"	"	
591-78-6	2-Hexanone	< 1500		ug/Kg	1500	290	50	"	"	"	"	"	
123-91-1	1,4-dioxane	< 4400		ug/Kg	4400	2400	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 59		ug/Kg	59	29	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 59		ug/Kg	59	29	50	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 290		ug/Kg	290	59	50	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 290		ug/Kg	290	59	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 290		ug/Kg	290	29	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 290		ug/Kg	290	29	50	"	"	"	"	"	
74-97-5	Bromochloromethane	< 290		ug/Kg	290	29	50	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 590		ug/Kg	590	59	50	"	"	"	"	"	
75-00-3	Chloroethane	< 290		ug/Kg	290	29	50	"	"	"	"	"	
67-66-3	Chloroform	< 290		ug/Kg	290	29	50	"	"	"	"	"	
74-87-3	Chloromethane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
110-82-7	Cyclohexane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 290		ug/Kg	290	29	50	"	"	"	"	"	
100-41-4	Ethylbenzene	< 120		ug/Kg	120	29	50	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 59		ug/Kg	59	29	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 290		ug/Kg	290	59	50	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 1800		ug/Kg	1800	290	50	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 290		ug/Kg	290	59	50	"	"	"	"	"	
79-20-9	Methylacetate	< 290		ug/Kg	290	290	50	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
75-09-2	Methylene chloride	< 290		ug/Kg	290	290	50	"	"	"	"	"	
104-51-8	n-Butylbenzene	**250**		ug/Kg	59	29	50	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 59		ug/Kg	59	59	50	"	"	"	"	"	
91-20-3	Naphthalene	< 59		ug/Kg	59	59	50	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-10 (4') SC52856-08	5529S-18	Soil	18-Dec-18 12:00	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
95-47-6	o-Xylene	< 290		ug/Kg	290	59	50	SW8260C	18-Dec-18 12:00	01-Jan-19 00:35	CT007	461826A	
99-87-6	p-Isopropyltoluene	< 59		ug/Kg	59	29	50	"	"	"	"	"	
135-98-8	sec-Butylbenzene	**160**		ug/Kg	59	29	50	"	"	"	"	"	
100-42-5	Styrene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 120		ug/Kg	120	59	50	"	"	"	"	"	
108-90-7	Chlorobenzene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
75-25-2	Bromoform	< 290		ug/Kg	290	59	50	"	"	"	"	"	
74-83-9	Bromomethane	< 290		ug/Kg	290	120	50	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 59		ug/Kg	59	29	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 290		ug/Kg	290	59	50	"	"	"	"	"	
108-88-3	Toluene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
79-01-6	Trichloroethene	< 290		ug/Kg	290	29	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 290		ug/Kg	290	59	50	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 290		ug/Kg	290	29	50	"	"	"	"	"	
75-01-4	Vinyl chloride	< 290		ug/Kg	290	29	50	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-Dichlorobenzene-d4*	*98*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*114*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*98*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*89*			*70-130 %*			"	"	"	"	"	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	**84**		%			1	SW846-%Solid	"	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-10 (4-5') SC52856-09	5529S-18	Soil	18-Dec-18 12:05	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW3545A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
37324-23-5	PCB-1262	< 120		ug/Kg	120	120	2	SW8082A	28-Dec-18	31-Dec-18 22:25	CT007	461564A	
12674-11-2	PCB-1016	< 120		ug/Kg	120	120	2	"	"	"	"	"	
11104-28-2	PCB-1221	< 120		ug/Kg	120	120	2	"	"	"	"	"	
11141-16-5	PCB-1232	< 120		ug/Kg	120	120	2	"	"	"	"	"	
53469-21-9	PCB-1242	< 120		ug/Kg	120	120	2	"	"	"	"	"	
12672-29-6	PCB-1248	< 120		ug/Kg	120	120	2	"	"	"	"	"	
11096-82-5	PCB-1260	< 120		ug/Kg	120	120	2	"	"	"	"	"	
11100-14-4	PCB-1268	< 120		ug/Kg	120	120	2	"	"	"	"	"	
11097-69-1	PCB-1254	< 120		ug/Kg	120	120	2	"	"	"	"	"	
Surrogate recoveries:													
2051-24-3	*% DCBP*	*69*			*40-140 %*			"	"	"	"	"	
877-09-8	*% TCMX*	*63*			*40-140 %*			"	"	"	"	"	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	**53**		%			1	SW846-%Solid	18-Dec-18 12:05	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-19 (7-8') SC52856-10	5529S-18	Soil	17-Dec-18 10:35	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW3545A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
37324-23-5	PCB-1262	< 77		ug/Kg	77	77	2	SW8082A	28-Dec-18	31-Dec-18 22:48	CT007	461564A	
12674-11-2	PCB-1016	< 77		ug/Kg	77	77	2	"	"	"	"	"	
11100-14-4	PCB-1268	< 77		ug/Kg	77	77	2	"	"	"	"	"	
11104-28-2	PCB-1221	< 77		ug/Kg	77	77	2	"	"	"	"	"	
11141-16-5	PCB-1232	< 77		ug/Kg	77	77	2	"	"	"	"	"	
53469-21-9	PCB-1242	< 77		ug/Kg	77	77	2	"	"	"	"	"	
12672-29-6	PCB-1248	< 77		ug/Kg	77	77	2	"	"	"	"	"	
11097-69-1	PCB-1254	< 77		ug/Kg	77	77	2	"	"	"	"	"	
11096-82-5	PCB-1260	< 77		ug/Kg	77	77	2	"	"	"	"	"	
Surrogate recoveries:													
877-09-8	*% TCMX*	*60*			*40-140 %*			"	"	"	"	"	
2051-24-3	*% DCBP*	*70*			*40-140 %*			"	"	"	"	"	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
7005-72-3	4-Chlorophenyl phenyl ether	< 270		ug/Kg	270	130	1	SW8270D	"	30-Dec-18 02:32	CT007	461562A	
1912-24-9	Atrazine	< 270		ug/Kg	270	99	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 270		ug/Kg	270	270	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 270		ug/Kg	270	110	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 270		ug/Kg	270	130	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 760		ug/Kg	760	180	1	"	"	"	"	"	
108-95-2	Phenol	< 270		ug/Kg	270	120	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 1900		ug/Kg	1900	130	1	"	"	"	"	"	
83-32-9	Acenaphthene	< 270		ug/Kg	270	120	1	"	"	"	"	"	
208-96-8	Acenaphthylene	< 150		ug/Kg	150	110	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 270		ug/Kg	270	170	1	"	"	"	"	"	
120-12-7	Anthracene	< 270		ug/Kg	270	130	1	"	"	"	"	"	
56-55-3	Benz(a)anthracene	< 270		ug/Kg	270	130	1	"	"	"	"	"	
100-52-7	Benzaldehyde	< 270		ug/Kg	270	110	1	"	"	"	"	"	
50-32-8	Benzo(a)pyrene	< 150		ug/Kg	150	120	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 270		ug/Kg	270	130	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 270		ug/Kg	270	120	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 270		ug/Kg	270	130	1	"	"	"	"	"	
85-68-7	Benzyl butyl phthalate	< 270		ug/Kg	270	99	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 270		ug/Kg	270	110	1	"	"	"	"	"	
98-86-2	Acetophenone	< 270		ug/Kg	270	120	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 270		ug/Kg	270	120	1	"	"	"	"	"	
78-59-1	Isophorone	< 150		ug/Kg	150	110	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 270		ug/Kg	270	130	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 150		ug/Kg	150	110	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 270		ug/Kg	270	120	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-19 (7-8')	5529S-18	Soil	17-Dec-18 10:35	28-Dec-18
SC52856-10				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
87-68-3	Hexachlorobutadiene	< 270		ug/Kg	270	140	1	SW8270D	28-Dec-18	30-Dec-18 02:32	CT007	461562A	
118-74-1	Hexachlorobenzene	< 150		ug/Kg	150	110	1	"	"	"	"	"	
86-73-7	Fluorene	< 270		ug/Kg	270	130	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 270		ug/Kg	270	110	1	"	"	"	"	"	
131-11-3	Dimethylphthalate	< 270		ug/Kg	270	120	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 150		ug/Kg	150	150	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 270		ug/Kg	270	110	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 150		ug/Kg	150	120	1	"	"	"	"	"	
117-84-0	Di-n-octylphthalate	< 270		ug/Kg	270	99	1	"	"	"	"	"	
84-74-2	Di-n-butylphthalate	< 270		ug/Kg	270	100	1	"	"	"	"	"	
218-01-9	Chrysene	< 270		ug/Kg	270	130	1	"	"	"	"	"	
86-74-8	Carbazole	< 270		ug/Kg	270	190	1	"	"	"	"	"	
105-60-2	Caprolactam	< 270		ug/Kg	270	270	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 270		ug/Kg	270	110	1	"	"	"	"	"	
39638-32-9	Bis(2-chloroisopropyl)ether	< 270		ug/Kg	270	110	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 270		ug/Kg	270	120	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 150		ug/Kg	150	120	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 760		ug/Kg	760	270	1	"	"	"	"	"	
129-00-0	Pyrene	< 270		ug/Kg	270	130	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 270		ug/Kg	270	130	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 150		ug/Kg	150	110	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 270		ug/Kg	270	140	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 150		ug/Kg	150	130	1	"	"	"	"	"	
91-20-3	Naphthalene	< 270		ug/Kg	270	110	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 270		ug/Kg	270	210	1	"	"	"	"	"	
91-94-1	3,3'-Dichlorobenzidine	< 150		ug/Kg	150	150	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 270		ug/Kg	270	270	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 270		ug/Kg	270	240	1	"	"	"	"	"	
	3&4-Methylphenol (m&p-cresol)	< 270		ug/Kg	270	150	1	"	"	"	"	"	
95-48-7	2-Methylphenol (o-cresol)	< 270		ug/Kg	270	180	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 270		ug/Kg	270	110	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 270		ug/Kg	270	110	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 150		ug/Kg	150	120	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 150		ug/Kg	150	150	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 270		ug/Kg	270	270	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 270		ug/Kg	270	95	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 150		ug/Kg	150	130	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 150		ug/Kg	150	120	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 270		ug/Kg	270	110	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 150		ug/Kg	150	100	1	"	"	"	"	"	
92-52-4	1,1-Biphenyl	< 270		ug/Kg	270	120	1	"	"	"	"	"	
58-90-2	2,3,4,6-tetrachlorophenol	< 270		ug/Kg	270	180	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-19 (7-8') SC52856-10	5529S-18	Soil	17-Dec-18 10:35	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
Surrogate recoveries:													
118-79-6	*% 2,4,6-Tribromophenol*	*76*			*30-130 %*			SW8270D	28-Dec-18	-Dec-18 02:	CT007	461562A	
321-60-8	*% 2-Fluorobiphenyl*	*64*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*66*			*30-130 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*62*			*30-130 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*64*			*30-130 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*75*			*30-130 %*			"	"	"	"	"	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	87		%			1	SW846-%Solid	17-Dec-18 10:35	28-Dec-18 19:56	CT007	'[none]'	

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW3545A													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
12674-11-2	PCB-1016	< 94		ug/Kg	94	94	2	SW8082A	28-Dec-18	31-Dec-18 23:11	CT007	461564A	
11104-28-2	PCB-1221	< 94		ug/Kg	94	94	2	"	"	"	"	"	
11141-16-5	PCB-1232	< 94		ug/Kg	94	94	2	"	"	"	"	"	
53469-21-9	PCB-1242	< 94		ug/Kg	94	94	2	"	"	"	"	"	
12672-29-6	PCB-1248	< 94		ug/Kg	94	94	2	"	"	"	"	"	
11097-69-1	PCB-1254	< 94		ug/Kg	94	94	2	"	"	"	"	"	
37324-23-5	PCB-1262	< 94		ug/Kg	94	94	2	"	"	"	"	"	
11096-82-5	PCB-1260	< 94		ug/Kg	94	94	2	"	"	"	"	"	
11100-14-4	PCB-1268	< 94		ug/Kg	94	94	2	"	"	"	"	"	
Surrogate recoveries:													
877-09-8	*% TCMX*	*65*			*40-140 %*			"	"	"	"	"	
2051-24-3	*% DCBP*	*67*			*40-140 %*			"	"	"	"	"	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
121-14-2	2,4-Dinitrotoluene	< 190		ug/Kg	190	190	1	SW8270D	"	30-Dec-18 02:58	CT007	461562A	
91-94-1	3,3'-Dichlorobenzidine	< 280		ug/Kg	280	280	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 330		ug/Kg	330	300	1	"	"	"	"	"	
	3&4-Methylphenol (m&p-cresol)	< 330		ug/Kg	330	190	1	"	"	"	"	"	
95-48-7	2-Methylphenol (o-cresol)	< 330		ug/Kg	330	220	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 330		ug/Kg	330	140	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 330		ug/Kg	330	130	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 330		ug/Kg	330	130	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 190		ug/Kg	190	150	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 330		ug/Kg	330	330	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 330		ug/Kg	330	330	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 330		ug/Kg	330	120	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 190		ug/Kg	190	170	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 190		ug/Kg	190	150	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 330		ug/Kg	330	260	1	"	"	"	"	"	
58-90-2	2,3,4,6-tetrachlorophenol	< 330		ug/Kg	330	220	1	"	"	"	"	"	
92-52-4	1,1-Biphenyl	< 330		ug/Kg	330	140	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 940		ug/Kg	940	330	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 330		ug/Kg	330	170	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 330		ug/Kg	330	330	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 330		ug/Kg	330	140	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 330		ug/Kg	330	130	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 330		ug/Kg	330	150	1	"	"	"	"	"	
98-86-2	Acetophenone	< 330		ug/Kg	330	150	1	"	"	"	"	"	
120-12-7	Anthracene	< 330		ug/Kg	330	150	1	"	"	"	"	"	
1912-24-9	Atrazine	< 330		ug/Kg	330	120	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-21 (5-6') SC52856-11	5529S-18	Soil	17-Dec-18 15:30	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
56-55-3	Benz(a)anthracene	**360**		ug/Kg	330	160	1	SW8270D	28-Dec-18	30-Dec-18 02:58	CT007	461562A	
100-52-7	Benzaldehyde	< 330		ug/Kg	330	140	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 330		ug/Kg	330	160	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 330		ug/Kg	330	160	1	"	"	"	"	"	
85-68-7	Benzyl butyl phthalate	< 330		ug/Kg	330	120	1	"	"	"	"	"	
50-32-8	Benzo(a)pyrene	< 190		ug/Kg	190	150	1	"	"	"	"	"	
117-84-0	Di-n-octylphthalate	< 330		ug/Kg	330	120	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 190		ug/Kg	190	150	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 330		ug/Kg	330	140	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 330		ug/Kg	330	150	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 940		ug/Kg	940	220	1	"	"	"	"	"	
131-11-3	Dimethylphthalate	< 330		ug/Kg	330	150	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 330		ug/Kg	330	150	1	"	"	"	"	"	
86-73-7	Fluorene	< 330		ug/Kg	330	150	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 190		ug/Kg	190	140	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 330		ug/Kg	330	170	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 330		ug/Kg	330	140	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 190		ug/Kg	190	140	1	"	"	"	"	"	
84-74-2	Di-n-butylphthalate	< 330		ug/Kg	330	120	1	"	"	"	"	"	
208-96-8	Acenaphthylene	< 190		ug/Kg	190	130	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 330		ug/Kg	330	160	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 190		ug/Kg	190	150	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 330		ug/Kg	330	130	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 330		ug/Kg	330	160	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 190		ug/Kg	190	180	1	"	"	"	"	"	
91-20-3	Naphthalene	< 330		ug/Kg	330	140	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 190		ug/Kg	190	160	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 330		ug/Kg	330	180	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 2300		ug/Kg	2300	160	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 330		ug/Kg	330	210	1	"	"	"	"	"	
83-32-9	Acenaphthene	< 330		ug/Kg	330	140	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 190		ug/Kg	190	130	1	"	"	"	"	"	
108-95-2	Phenol	< 330		ug/Kg	330	150	1	"	"	"	"	"	
129-00-0	Pyrene	**200**	J	ug/Kg	330	160	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 330		ug/Kg	330	170	1	"	"	"	"	"	
78-59-1	Isophorone	< 190		ug/Kg	190	130	1	"	"	"	"	"	
218-01-9	Chrysene	**540**		ug/Kg	330	160	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 190		ug/Kg	190	130	1	"	"	"	"	"	
86-74-8	Carbazole	< 330		ug/Kg	330	230	1	"	"	"	"	"	
105-60-2	Caprolactam	< 330		ug/Kg	330	330	1	"	"	"	"	"	
39638-32-9	Bis(2-chloroisopropyl)ether	< 330		ug/Kg	330	130	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 330		ug/Kg	330	140	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-21 (5-6') SC52856-11	5529S-18	Soil	17-Dec-18 15:30	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
Surrogate recoveries:													
98904-43-9	*% Terphenyl-d14*	*82*			*30-130 %*			SW8270D	28-Dec-18	-Dec-18 02:	CT007	461562A	
4165-62-2	*% Phenol-d5*	*56*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*52*			*30-130 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*61*			*30-130 %*			"	"	"	"	"	
118-79-6	*% 2,4,6-Tribromophenol*	*69*			*30-130 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*42*			*30-130 %*			"	"	"	"	"	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	**70**		%			1	SW846-%Solid	17-Dec-18 15:30	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-22 (13') SC52856-12	5529S-18	Soil	20-Dec-18 10:45	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
76-13-1	Trichlorotrifluoroethane	< 2.4		ug/Kg	2.4	0.24	1	SW8260C	20-Dec-18 10:45	30-Dec-18 16:47	CT007	461716A	
75-69-4	Trichlorofluoromethane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	1.9	J	ug/Kg	2.4	0.24	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
75-00-3	Chloroethane	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
110-57-6	trans-1,4-dichloro-2-butene	< 4.7		ug/Kg	4.7	1.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	1.3	J	ug/Kg	2.4	0.24	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 2.4		ug/Kg	2.4	2.4	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
67-66-3	Chloroform	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
74-83-9	Bromomethane	< 2.4		ug/Kg	2.4	0.95	1	"	"	"	"	"	
75-25-2	Bromoform	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 2.4		ug/Kg	2.4	0.24	1	"	"	"	"	"	
74-87-3	Chloromethane	< 2.4		ug/Kg	2.4	0.47	1	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*101*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*106*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*96*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-22 (13') SC52856-12	5529S-18	Soil	20-Dec-18 10:45	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
1868-53-7	*% Dibromofluoromethane*	*96*			*70-130 %*			SW8260C	20-Dec-18 10:45	-Dec-18 16:	CT007	461716A	
Re-analysis of Subcontracted Analyses Prepared by method SW8260C													
156-59-2	cis-1,2-Dichloroethene	**2,900**		ug/Kg	140	14	50	SW8260C	20-Dec-18 10:45	01-Jan-19 00:14	CT007	461826A	
79-01-6	Trichloroethene	**1,400**		ug/Kg	140	14	50	"	"	"	"	"	
75-01-4	Vinyl chloride	**25**	J	ug/Kg	140	14	50	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*97*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*97*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*88*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*100*			*70-130 %*			"	"	"	"	"	
Prepared by method SW846-%Solid													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Percent Solid	**91**		%			1	SW846-%Solid	20-Dec-18 10:45	28-Dec-18 19:56	CT007	'[none]'	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-A SC52856-13	5529S-18	Ground Water	27-Dec-18 09:53	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
56-23-5	Carbon Tetrachloride	< 100		ug/l	100	20	100	SW-846 8260C	08-Jan-19 04:23	08-Jan-19 04:24	10670	/190072A	
74-83-9	Bromomethane	< 100		ug/l	100	30	100	"	"	"	"	"	
75-25-2	Bromoform	< 400		ug/l	400	20	100	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 100		ug/l	100	20	100	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 25000		ug/l	25000	2900	100	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 500		ug/l	500	20	100	"	"	"	"	"	
75-00-3	Chloroethane	< 100		ug/l	100	20	100	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 100		ug/l	100	20	100	"	"	"	"	"	
67-66-3	Chloroform	< 100		ug/l	100	20	100	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 100		ug/l	100	30	100	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 500		ug/l	500	20	100	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	**230**		ug/l	100	20	100	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 100		ug/l	100	20	100	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 100		ug/l	100	20	100	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 100		ug/l	100	20	100	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 100		ug/l	100	30	100	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 500		ug/l	500	20	100	"	"	"	"	"	
75-01-4	Vinyl Chloride	**1,500**		ug/l	100	20	100	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 100		ug/l	100	20	100	"	"	"	"	"	
79-01-6	Trichloroethene	**82,000**		ug/l	1000	200	1000	"	"	"	"	"	
108-90-7	Chlorobenzene	< 100		ug/l	100	20	100	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	**52**	J.	ug/l	100	20	100	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 100		ug/l	100	20	100	"	"	"	"	"	
75-09-2	Methylene Chloride	< 100		ug/l	100	30	100	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 100		ug/l	100	20	100	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 100		ug/l	100	20	100	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 100		ug/l	100	20	100	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**20,000**		ug/l	100	20	100	"	"	"	"	"	
74-87-3	Chloromethane	< 100		ug/l	100	20	100	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 100		ug/l	100	20	100	"	"	"	"	"	
Surrogate recoveries:													
17060-07-0	*1,2-Dichloroethane-d4*	*103*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*93*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*96*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*105*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-B SC52856-14	5529S-18	Ground Water	27-Dec-18 11:09	28-Dec-18

Subcontracted Analyses

Subcontracted Analyses
Prepared by method SW-846 5030C

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	SW-846 8260C	08-Jan-19 05:10	08-Jan-19 05:11	10670	/190072A	
156-59-2	cis-1,2-Dichloroethene	**44**		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	**36**		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-01-6	Trichloroethene	**3**		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	**0.3**	J.	ug/l	1	0.2	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	**0.3**	J.	ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	**0.7**	J.	ug/l	1	0.2	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	

Surrogate recoveries:

460-00-4	*4-Bromofluorobenzene*	*92*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*105*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*104*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*95*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-C SC52856-15	5529S-18	Ground Water	27-Dec-18 08:40	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW3510C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
11097-69-1	PCB-1254	< 0.048		ug/L	0.048	0.048	1	SW8082A	28-Dec-18	31-Dec-18 20:32	CT007	461572A	
12674-11-2	PCB-1016	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
37324-23-5	PCB-1262	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
11104-28-2	PCB-1221	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
11141-16-5	PCB-1232	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
12672-29-6	PCB-1248	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
11096-82-5	PCB-1260	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
53469-21-9	PCB-1242	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
11100-14-4	PCB-1268	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
Surrogate recoveries:													
2051-24-3	*% DCBP*	*63*			*40-140 %*			"	"	"	"	"	
877-09-8	*% TCMX*	*58*			*40-140 %*			"	"	"	"	"	
Subcontracted Analyses Prepared by method SW3520C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
50-32-8	Benzo(a)pyrene	< 3.3		ug/L	3.3	1.5	1	SW8270D	"	03-Jan-19 12:39	CT007	461615A	
86-74-8	Carbazole	< 4.7		ug/L	4.7	3.6	1	"	"	"	"	"	
105-60-2	Caprolactam	< 4.7		ug/L	4.7	8.4	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 0.94		ug/L	0.94	0.94	1	"	"	"	"	"	
39638-32-9	Bis(2-chloroisopropyl)ether	< 4.7		ug/L	4.7	1.3	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 4.7		ug/L	4.7	1.3	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 4.7		ug/L	4.7	1.3	1	"	"	"	"	"	
85-68-7	Benzyl butyl phthalate	< 4.7		ug/L	4.7	1.2	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
84-74-2	Di-n-butylphthalate	< 4.7		ug/L	4.7	1.3	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
117-84-0	Di-n-octylphthalate	< 4.7		ug/L	4.7	1.2	1	"	"	"	"	"	
100-52-7	Benzaldehyde	< 4.7		ug/L	4.7	1.4	1	"	"	"	"	"	
56-55-3	Benz(a)anthracene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
1912-24-9	Atrazine	< 0.94		ug/L	0.94	0.94	1	"	"	"	"	"	
120-12-7	Anthracene	< 4.7		ug/L	4.7	1.5	1	"	"	"	"	"	
98-86-2	Acetophenone	< 4.7		ug/L	4.7	1.5	1	"	"	"	"	"	
208-96-8	Acenaphthylene	< 3.3		ug/L	3.3	1.3	1	"	"	"	"	"	
83-32-9	Acenaphthene	< 4.7		ug/L	4.7	1.4	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 4.7		ug/L	4.7	1.6	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 4.7		ug/L	4.7	1.5	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 0.94		ug/L	0.94	0.94	1	"	"	"	"	"	
129-00-0	Pyrene	< 4.7		ug/L	4.7	1.6	1	"	"	"	"	"	
108-95-2	Phenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
85-01-8	Phenanthrene	2.9	J	ug/L	3.3	1.3	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-C SC52856-15	5529S-18	Ground Water	27-Dec-18 08:40	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
87-86-5	Pentachlorophenol	< 3.3		ug/L	3.3	1.8	1	SW8270D	28-Dec-18	03-Jan-19 12:39	CT007	461615A	
98-95-3	Nitrobenzene	< 4.7		ug/L	4.7	1.6	1	"	"	"	"	"	
91-20-3	Naphthalene	< 4.7		ug/L	4.7	1.4	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 4.7		ug/L	4.7	1.8	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 3.3		ug/L	3.3	1.3	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 4.7		ug/L	4.7	1.5	1	"	"	"	"	"	
218-01-9	Chrysene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 4.7		ug/L	4.7	1.4	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 3.3		ug/L	3.3	1.7	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 3.3		ug/L	3.3	1.4	1	"	"	"	"	"	
86-73-7	Fluorene	1.8	J	ug/L	4.7	1.6	1	"	"	"	"	"	
206-44-0	Fluoranthene	1.6	J	ug/L	4.7	1.5	1	"	"	"	"	"	
131-11-3	Dimethylphthalate	< 4.7		ug/L	4.7	1.5	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 4.7		ug/L	4.7	1.5	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 4.7		ug/L	4.7	1.4	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 3.3		ug/L	3.3	1.5	1	"	"	"	"	"	
78-59-1	Isophorone	< 4.7		ug/L	4.7	1.3	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 4.7		ug/L	4.7	1.6	1	"	"	"	"	"	
92-52-4	1,1-Biphenyl	< 3.3		ug/L	3.3	3.3	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 4.7		ug/L	4.7	1.3	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 4.7		ug/L	4.7	1.4	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 4.7		ug/L	4.7	5.1	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 4.7		ug/L	4.7	10	1	"	"	"	"	"	
91-94-1	3,3'-Dichlorobenzidine	< 4.7		ug/L	4.7	2.2	1	"	"	"	"	"	
	3&4-Methylphenol (m&p-cresol)	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 4.7		ug/L	4.7	4.7	1	"	"	"	"	"	
95-48-7	2-Methylphenol (o-cresol)	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 4.7		ug/L	4.7	1.5	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 4.7		ug/L	4.7	1.9	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
58-90-2	2,3,4,6-tetrachlorophenol	< 4.7		ug/L	4.7	0.85	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 3.3		ug/L	3.3	3.3	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 4.7		ug/L	4.7	2.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-C	5529S-18	Ground Water	27-Dec-18 08:40	28-Dec-18
SC52856-15				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
91-57-6	2-Methylnaphthalene	< 4.7		ug/L	4.7	1.4	1	SW8270D	28-Dec-18	03-Jan-19 12:39	CT007	461615A	
Surrogate recoveries:													
4165-60-0	*% Nitrobenzene-d5*	*46*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*35*			*15-110 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*53*			*30-130 %*			"	"	"	"	"	
118-79-6	*% 2,4,6-Tribromophenol*	*BRL*			*15-110 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*35*			*15-110 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*57*			*30-130 %*			"	"	"	"	"	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
87-86-5	Pentachlorophenol	< 0.47		ug/L	0.47	0.47	1	SW8270D (SIM)	"	03-Jan-19 04:28	CT007	461615B	
206-44-0	Fluoranthene	**1.4**		ug/L	0.47	0.47	1	"	"	"	"	"	
86-73-7	Fluorene	**1.9**		ug/L	0.47	0.47	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 0.04		ug/L	0.04	0.04	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	**0.14**		ug/L	0.02	0.02	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 0.19		ug/L	0.19	0.19	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 0.38		ug/L	0.38	0.38	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
129-00-0	Pyrene	**0.94**		ug/L	0.47	0.47	1	"	"	"	"	"	
85-01-8	Phenanthrene	**2.8**		ug/L	0.47	0.47	1	"	"	"	"	"	
91-20-3	Naphthalene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
120-12-7	Anthracene	**0.70**		ug/L	0.47	0.47	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
208-96-8	Acenaphthylene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
218-01-9	Chrysene	**0.30**		ug/L	0.02	0.02	1	"	"	"	"	"	
56-55-3	Benz(a)anthracene	**0.28**		ug/L	0.02	0.02	1	"	"	"	"	"	
50-32-8	Benzo(a)pyrene	**0.18**		ug/L	0.02	0.02	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	**0.16**		ug/L	0.02	0.02	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	**0.16**		ug/L	0.02	0.02	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
83-32-9	Acenaphthene	**1.0**		ug/L	0.47	0.47	1	"	"	"	"	"	
Surrogate recoveries:													
367-12-4	*% 2-Fluorophenol*	*37*			*15-110 %*			"	"	"	"	"	
118-79-6	*% 2,4,6-Tribromophenol*	*82*			*15-110 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*58*			*30-130 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*64*			*30-130 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*57*			*30-130 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*43*			*15-110 %*			"	"	"	"	"	
Subcontracted Analyses													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-C SC52856-15	5529S-18	Ground Water	27-Dec-18 08:40	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
57-12-5	Total Cyanide (water)	< 0.010		mg/l	0.010	0.0050	1	EPA 335.4	07-Jan-19 06:30	07-Jan-19 13:00	10670	00710210	
Subcontracted Analyses													
Prepared by method SW-846 3005A													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	SW-846 6010C	07-Jan-19 05:50	08-Jan-19 17:42	10670	00314044	
7440-38-2	Arsenic	< 0.0500		mg/l	0.0500	0.0160	1	"	"	"	"	"	
7440-39-3	Barium	**0.312**		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	
7439-92-1	Lead	**0.0074**	J.	mg/l	0.0150	0.0071	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	07-Jan-19 06:30	07-Jan-19 11:14	10670	00305713	
Subcontracted Analyses													
Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	SW-846 8260C	08-Jan-19 22:07	08-Jan-19 22:08	10670	190082A	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-C SC52856-15	5529S-18	Ground Water	27-Dec-18 08:40	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	SW-846 8260C	08-Jan-19 22:07	08-Jan-19 22:08	10670	190082A	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-01-6	Trichloroethene	**0.8**	J.	ug/l	1	0.2	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
	Total VOC TICs	**0**		ug/l			1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloroprop ane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-C SC52856-15	5529S-18	Ground Water	27-Dec-18 08:40	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	SW-846 8260C	08-Jan-19 22:07	08-Jan-19 22:08	10670	190082A	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
1868-53-7	*Dibromofluoromethane*	*103*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*102*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-D	5529S-18	Ground Water	27-Dec-18 10:00	28-Dec-18
SC52856-16				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW3510C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
53469-21-9	PCB-1242	< 0.048		ug/L	0.048	0.048	1	SW8082A	28-Dec-18	31-Dec-18 20:54	CT007	461572A	
11100-14-4	PCB-1268	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
37324-23-5	PCB-1262	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
11096-82-5	PCB-1260	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
11097-69-1	PCB-1254	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
12672-29-6	PCB-1248	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
11141-16-5	PCB-1232	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
12674-11-2	PCB-1016	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
11104-28-2	PCB-1221	< 0.048		ug/L	0.048	0.048	1	"	"	"	"	"	
Surrogate recoveries:													
877-09-8	*% TCMX*	*59*			*40-140 %*			"	"	"	"	"	
2051-24-3	*% DCBP*	*91*			*40-140 %*			"	"	"	"	"	
Subcontracted Analyses Prepared by method SW3520C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
50-32-8	Benzo(a)pyrene	< 3.3		ug/L	3.3	1.5	1	SW8270D	"	03-Jan-19 13:04	CT007	461615A	
98-86-2	Acetophenone	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
39638-32-9	Bis(2-chloroisopropyl)ether	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
131-11-3	Dimethylphthalate	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
84-66-2	Diethyl phthalate	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 4.8		ug/L	4.8	1.4	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 3.3		ug/L	3.3	1.5	1	"	"	"	"	"	
117-84-0	Di-n-octylphthalate	< 4.8		ug/L	4.8	1.2	1	"	"	"	"	"	
84-74-2	Di-n-butylphthalate	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
218-01-9	Chrysene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
86-74-8	Carbazole	< 4.8		ug/L	4.8	3.6	1	"	"	"	"	"	
56-55-3	Benz(a)anthracene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 0.95		ug/L	0.95	0.95	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 3.3		ug/L	3.3	1.7	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
85-68-7	Benzyl butyl phthalate	< 4.8		ug/L	4.8	1.2	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
100-52-7	Benzaldehyde	< 4.8		ug/L	4.8	1.4	1	"	"	"	"	"	
1912-24-9	Atrazine	< 0.95		ug/L	0.95	0.95	1	"	"	"	"	"	
120-12-7	Anthracene	< 4.8		ug/L	4.8	1.6	1	"	"	"	"	"	
105-60-2	Caprolactam	< 4.8		ug/L	4.8	8.5	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 3.3		ug/L	3.3	1.8	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-D	5529S-18	Ground Water	27-Dec-18 10:00	28-Dec-18
SC52856-16				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
129-00-0	Pyrene	< 4.8		ug/L	4.8	1.6	1	SW8270D	28-Dec-18	03-Jan-19 13:04	CT007	461615A	
86-73-7	Fluorene	< 4.8		ug/L	4.8	1.6	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 3.3		ug/L	3.3	1.4	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 3.3		ug/L	3.3	1.4	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 4.8		ug/L	4.8	1.7	1	"	"	"	"	"	
91-20-3	Naphthalene	< 4.8		ug/L	4.8	1.4	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 4.8		ug/L	4.8	1.8	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 3.3		ug/L	3.3	1.3	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
78-59-1	Isophorone	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 0.95		ug/L	0.95	0.95	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
108-95-2	Phenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 4.8		ug/L	4.8	1.9	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
92-52-4	1,1-Biphenyl	< 3.3		ug/L	3.3	3.3	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 3.3		ug/L	3.3	3.3	1	"	"	"	"	"	
208-96-8	Acenaphthylene	< 3.3		ug/L	3.3	1.3	1	"	"	"	"	"	
58-90-2	2,3,4,6-tetrachlorophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 4.8		ug/L	4.8	1.4	1	"	"	"	"	"	
83-32-9	Acenaphthene	1.5	J	ug/L	4.8	1.4	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 4.8		ug/L	4.8	1.6	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 4.8		ug/L	4.8	1.6	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 4.8		ug/L	4.8	5.1	1	"	"	"	"	"	
88-74-4	2-Nitroaniline	< 4.8		ug/L	4.8	4.8	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 4.8		ug/L	4.8	1.4	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 4.8		ug/L	4.8	2.2	1	"	"	"	"	"	
95-48-7	2-Methylphenol (o-cresol)	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 4.8		ug/L	4.8	10	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
	3&4-Methylphenol (m&p-cresol)	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-D	5529S-18	Ground Water	27-Dec-18 10:00	28-Dec-18
SC52856-16				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
91-94-1	3,3'-Dichlorobenzidine	< 4.8		ug/L	4.8	2.2	1	SW8270D	28-Dec-18	03-Jan-19 13:04	CT007	461615A	
Surrogate recoveries:													
4165-62-2	*% Phenol-d5*	*31*			*15-110 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*67*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*48*			*15-110 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*73*			*30-130 %*			"	"	"	"	"	
118-79-6	*% 2,4,6-Tribromophenol*	*110*			*15-110 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*78*			*30-130 %*			"	"	"	"	"	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
85-01-8	Phenanthrene	**0.80**		ug/L	0.48	0.48	1	SW8270D (SIM)	"	03-Jan-19 04:51	CT007	461615B	
87-86-5	Pentachlorophenol	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
83-32-9	Acenaphthene	**1.3**		ug/L	0.48	0.48	1	"	"	"	"	"	
208-96-8	Acenaphthylene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
120-12-7	Anthracene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
56-55-3	Benz(a)anthracene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
50-32-8	Benzo(a)pyrene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
129-00-0	Pyrene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
218-01-9	Chrysene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
86-73-7	Fluorene	**0.76**		ug/L	0.48	0.48	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 0.04		ug/L	0.04	0.04	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 0.19		ug/L	0.19	0.19	1	"	"	"	"	"	
91-20-3	Naphthalene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 0.38		ug/L	0.38	0.38	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
Surrogate recoveries:													
118-79-6	*% 2,4,6-Tribromophenol*	*93*			*15-110 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*62*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*46*			*15-110 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*77*			*30-130 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*43*			*15-110 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*72*			*30-130 %*			"	"	"	"	"	
Subcontracted Analyses													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-D SC52856-16	5529S-18	Ground Water	27-Dec-18 10:00	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
57-12-5	Total Cyanide (water)	< 0.010		mg/l	0.010	0.0050	1	EPA 335.4	07-Jan-19 06:30	07-Jan-19 13:02	10670	00710210	
Subcontracted Analyses													
Prepared by method SW-846 3005A													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7440-38-2	Arsenic	**0.134**		mg/l	0.0500	0.0160	1	SW-846 6010C	07-Jan-19 05:50	08-Jan-19 17:45	10670	00314044	
7440-39-3	Barium	**0.217**		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	"	"	"	"	"	
7440-43-9	Cadmium	**0.0013**	J.	mg/l	0.0050	0.0010	1	"	"	"	"	"	
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	07-Jan-19 06:30	07-Jan-19 11:16	10670	00305713	
Subcontracted Analyses													
Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	07-Jan-19 13:22	07-Jan-19 13:23	10670	190071A/	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
	Unknown aromatic	**9**	J.	ug/l			1	"	"	"	"	"	
	Total VOC TICs	**160**	J.	ug/l			1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	**6**		ug/l	1	0.2	1	"	"	"	"	"	
	Unknown aromatic1	**17**	J.	ug/l			1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	**0.3**	J.	ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
	Unknown	**11**	J.	ug/l			1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-D SC52856-16	5529S-18	Ground Water	27-Dec-18 10:00	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	SW-846 8260C	07-Jan-19 13:22	07-Jan-19 13:23	10670	190071A/	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
20836-11-7	2,2-Dimethylindene, 2,3-dihy	7	J.	ug/l			1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
934-10-1	3-Phenylbut-1-ene	10	J.	ug/l			1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	2	J.	ug/l	5	0.2	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
71-43-2	Benzene	0.7	J.	ug/l	1	0.2	1	"	"	"	"	"	
95-93-2	Benzene, 1,2,4,5-tetramethyl	21	J.	ug/l			1	"	"	"	"	"	
700-12-9	Benzene, pentamethyl-	6	J.	ug/l			1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
6682-71-9	1H-Indene, 2,3-dihydro-4,7-d	8	J.	ug/l			1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
17059-48-2	1H-Indene, 2,3-dihydro-1,6-d	12	J.	ug/l			1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	0.3	J.	ug/l	5	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	1	J.	ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-D SC52856-16	5529S-18	Ground Water	27-Dec-18 10:00	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	SW-846 8260C	07-Jan-19 13:22	07-Jan-19 13:23	10670	190071A	
108-87-2	Methylcyclohexane	**4**	J.	ug/l	5	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	**0.9**	J.	ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
21564-91-0	Naphthalene, 1,2,3,4-tetr	**5**	J.	ug/l			1	"	"	"	"	"	
4175-54-6	Naphthalene, 1,2,3,4-tetra	**8**	J.	ug/l			1	"	"	"	"	"	
2809-64-5	Naphthalene, 1,2,3,4-tetrah	**16**	J.	ug/l			1	"	"	"	"	"	
1559-81-5	Naphthalene, 1,2,3,4-tetrahy	**15**	J.	ug/l			1	"	"	"	"	"	
3877-19-8	Naphthalene, 1,2,3,4-tetrahy1	**9**	J.	ug/l			1	"	"	"	"	"	
90-12-0	Naphthalene, 1-methyl-	**11**	J.	ug/l			1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
110-82-7	Cyclohexane	**3**	J.	ug/l	5	0.2	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**0.8**	J.	ug/l	1	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	*Toluene-d8*	*100*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*102*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*98*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*103*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-E SC52856-17	5529S-18	Ground Water	27-Dec-18 08:56	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
71-55-6	1,1,1-Trichloroethane	< 1000		ug/l	1000	300	1000	SW-846 8260C	09-Jan-19 04:41	09-Jan-19 04:42	10670	190082A	
79-34-5	1,1,2,2-Tetrachloroethane	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1000		ug/l	1000	300	1000	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5000		ug/l	5000	200	1000	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5000		ug/l	5000	200	1000	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250000		ug/l	250000	29000	1000	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
75-25-2	Bromoform	< 4000		ug/l	4000	200	1000	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5000		ug/l	5000	200	1000	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
74-83-9	Bromomethane	< 1000		ug/l	1000	300	1000	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1000		ug/l	1000	300	1000	"	"	"	"	"	
75-00-3	Chloroethane	**340**	J.	ug/l	1000	200	1000	"	"	"	"	"	
67-66-3	Chloroform	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
74-87-3	Chloromethane	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**32,000**		ug/l	1000	200	1000	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
79-01-6	Trichloroethene	**780,000**		ug/l	5000	1000	5000	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1000		ug/l	1000	200	1000	"	"	"	"	"	
75-01-4	Vinyl Chloride	**1,100**		ug/l	1000	200	1000	"	"	"	"	"	
Surrogate recoveries:													
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*101*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*101*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-F SC52856-18	5529S-18	Ground Water	27-Dec-18 10:30	28-Dec-18

Subcontracted Analyses

Subcontracted Analyses
Prepared by method SW-846 5030C

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
67-66-3	Chloroform	< 500		ug/l	500	100	500	SW-846 8260C	09-Jan-19 05:03	09-Jan-19 05:04	10670	190082A	
123-91-1	1,4-Dioxane	< 130000		ug/l	130000	15000	500	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 500		ug/l	500	100	500	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	**500**	J.	ug/l	500	100	500	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 2500		ug/l	2500	100	500	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 500		ug/l	500	150	500	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 500		ug/l	500	100	500	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 500		ug/l	500	100	500	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 2500		ug/l	2500	100	500	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 500		ug/l	500	150	500	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 500		ug/l	500	100	500	"	"	"	"	"	
75-25-2	Bromoform	< 2000		ug/l	2000	100	500	"	"	"	"	"	
74-83-9	Bromomethane	< 500		ug/l	500	150	500	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 500		ug/l	500	100	500	"	"	"	"	"	
108-90-7	Chlorobenzene	< 500		ug/l	500	100	500	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 2500		ug/l	2500	100	500	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 500		ug/l	500	100	500	"	"	"	"	"	
74-87-3	Chloromethane	< 500		ug/l	500	100	500	"	"	"	"	"	
75-00-3	Chloroethane	**150**	J.	ug/l	500	100	500	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 500		ug/l	500	100	500	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**140,000**		ug/l	500	100	500	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 500		ug/l	500	100	500	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 500		ug/l	500	100	500	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 500		ug/l	500	100	500	"	"	"	"	"	
75-09-2	Methylene Chloride	< 500		ug/l	500	150	500	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 500		ug/l	500	100	500	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	**240**	J.	ug/l	500	100	500	"	"	"	"	"	
79-01-6	Trichloroethene	**230,000**		ug/l	2000	400	2000	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 500		ug/l	500	100	500	"	"	"	"	"	
75-01-4	Vinyl Chloride	**6,200**		ug/l	500	100	500	"	"	"	"	"	
Surrogate recoveries:													
17060-07-0	*1,2-Dichloroethane-d4*	*102*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*100*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*100*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*100*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-G	5529S-18	Ground Water	27-Dec-18 08:17	28-Dec-18
SC52856-19				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	SW-846 8260C	07-Jan-19 16:37	07-Jan-19 16:38	10670	190071A/	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	2		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	3		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*102*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*103*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-H	5529S-18	Ground Water	27-Dec-18 07:25	28-Dec-18
SC52856-20				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 3005A													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	SW-846 6010C	07-Jan-19 05:50	08-Jan-19 17:49	10670	00314044	
7440-39-3	Barium	**0.549**		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	"	"	"	"	"	
7440-38-2	Arsenic	**0.0180**	J.	mg/l	0.0500	0.0160	1	"	"	"	"	"	
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	07-Jan-19 06:30	07-Jan-19 11:18	10670	00305713	
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	SW-846 8260C	07-Jan-19 17:21	07-Jan-19 17:22	10670	190071A/	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	**0.5**	J.	ug/l	1	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**0.8**	J.	ug/l	1	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-H SC52856-20	5529S-18	Ground Water	27-Dec-18 07:25	28-Dec-18

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	SW-846 8260C	07-Jan-19 17:21	07-Jan-19 17:22	10670	190071A	
Surrogate recoveries:													
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*102*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*104*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-I	5529S-18	Ground Water	27-Dec-18 11:25	28-Dec-18
SC52856-21				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
156-59-2	cis-1,2-Dichloroethene	**8**		ug/l	1	0.2	1	SW-846 8260C	07-Jan-19 13:44	07-Jan-19 13:45	10670	190071A/	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
79-01-6	Trichloroethene	**61**		ug/l	1	0.2	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	**0.8**	J.	ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
1868-53-7	*Dibromofluoromethane*	*104*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*101*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-J SC52856-22	5529S-18	Ground Water	26-Dec-18 13:44	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	SW-846 8260C	03-Jan-19 12:55	03-Jan-19 12:56	10670	190031A/	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**3**		ug/l	1	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-01-6	Trichloroethene	**0.5**	J.	ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	**0.6**	J.	ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
1868-53-7	*Dibromofluoromethane*	*100*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*100*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*101*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-K	5529S-18	Ground Water	27-Dec-18 11:20	28-Dec-18
SC52856-23				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW3520C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
88-74-4	2-Nitroaniline	< 4.8		ug/L	4.8	4.8	1	SW8270D	28-Dec-18	03-Jan-19 13:28	CT007	461615A	
84-66-2	Diethyl phthalate	2.2	J	ug/L	4.8	1.5	1	"	"	"	"	"	
100-01-6	4-Nitroaniline	< 4.8		ug/L	4.8	1.6	1	"	"	"	"	"	
7005-72-3	4-Chlorophenyl phenyl ether	< 4.8		ug/L	4.8	1.6	1	"	"	"	"	"	
106-47-8	4-Chloroaniline	< 4.8		ug/L	4.8	2.2	1	"	"	"	"	"	
59-50-7	4-Chloro-3-methylphenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
101-55-3	4-Bromophenyl phenyl ether	< 4.8		ug/L	4.8	1.4	1	"	"	"	"	"	
534-52-1	4,6-Dinitro-2-methylphenol	< 4.8		ug/L	4.8	5.1	1	"	"	"	"	"	
99-09-2	3-Nitroaniline	< 4.8		ug/L	4.8	10	1	"	"	"	"	"	
91-94-1	3,3'-Dichlorobenzidine	< 4.8		ug/L	4.8	2.2	1	"	"	"	"	"	
83-32-9	Acenaphthene	< 4.8		ug/L	4.8	1.4	1	"	"	"	"	"	
88-75-5	2-Nitrophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
208-96-8	Acenaphthylene	< 3.3		ug/L	3.3	1.3	1	"	"	"	"	"	
95-48-7	2-Methylphenol (o-cresol)	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 4.8		ug/L	4.8	1.4	1	"	"	"	"	"	
95-57-8	2-Chlorophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
91-58-7	2-Chloronaphthalene	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
606-20-2	2,6-Dinitrotoluene	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
121-14-2	2,4-Dinitrotoluene	< 4.8		ug/L	4.8	1.9	1	"	"	"	"	"	
51-28-5	2,4-Dinitrophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
105-67-9	2,4-Dimethylphenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
120-83-2	2,4-Dichlorophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
	3&4-Methylphenol (m&p-cresol)	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
85-68-7	Benzyl butyl phthalate	< 4.8		ug/L	4.8	1.2	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 3.3		ug/L	3.3	1.5	1	"	"	"	"	"	
117-84-0	Di-n-octylphthalate	< 4.8		ug/L	4.8	1.2	1	"	"	"	"	"	
84-74-2	Di-n-butylphthalate	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
218-01-9	Chrysene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
86-74-8	Carbazole	< 4.8		ug/L	4.8	3.6	1	"	"	"	"	"	
105-60-2	Caprolactam	< 4.8		ug/L	4.8	8.5	1	"	"	"	"	"	
117-81-7	Bis(2-ethylhexyl)phthalate	< 0.95		ug/L	0.95	0.95	1	"	"	"	"	"	
39638-32-9	Bis(2-chloroisopropyl)ether	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
100-02-7	4-Nitrophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
111-91-1	Bis(2-chloroethoxy)methane	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
95-94-3	1,2,4,5-Tetrachlorobenzene	< 3.3		ug/L	3.3	3.3	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
50-32-8	Benzo(a)pyrene	< 3.3		ug/L	3.3	1.5	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-K	5529S-18	Ground Water	27-Dec-18 11:20	28-Dec-18
SC52856-23				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
100-52-7	Benzaldehyde	< 4.8		ug/L	4.8	1.4	1	SW8270D	28-Dec-18	03-Jan-19 13:28	CT007	461615A	
56-55-3	Benz(a)anthracene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
1912-24-9	Atrazine	< 0.95		ug/L	0.95	0.95	1	"	"	"	"	"	
120-12-7	Anthracene	< 4.8		ug/L	4.8	1.6	1	"	"	"	"	"	
98-86-2	Acetophenone	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
131-11-3	Dimethylphthalate	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
92-52-4	1,1-Biphenyl	< 3.3		ug/L	3.3	3.3	1	"	"	"	"	"	
95-95-4	2,4,5-Trichlorophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
132-64-9	Dibenzofuran	< 4.8		ug/L	4.8	1.4	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 3.3		ug/L	3.3	1.3	1	"	"	"	"	"	
129-00-0	Pyrene	< 4.8		ug/L	4.8	1.6	1	"	"	"	"	"	
108-95-2	Phenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 3.3		ug/L	3.3	1.4	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 3.3		ug/L	3.3	1.8	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 4.8		ug/L	4.8	1.7	1	"	"	"	"	"	
86-30-6	N-Nitrosodiphenylamine	< 4.8		ug/L	4.8	1.8	1	"	"	"	"	"	
621-64-7	N-Nitrosodi-n-propylamine	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
78-59-1	Isophorone	< 4.8		ug/L	4.8	1.3	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 3.3		ug/L	3.3	1.6	1	"	"	"	"	"	
67-72-1	Hexachloroethane	< 0.95		ug/L	0.95	0.95	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 3.3		ug/L	3.3	1.7	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 3.3		ug/L	3.3	1.4	1	"	"	"	"	"	
86-73-7	Fluorene	< 4.8		ug/L	4.8	1.6	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 4.8		ug/L	4.8	1.5	1	"	"	"	"	"	
91-20-3	Naphthalene	< 4.8		ug/L	4.8	1.4	1	"	"	"	"	"	
58-90-2	2,3,4,6-tetrachlorophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
88-06-2	2,4,6-Trichlorophenol	< 4.8		ug/L	4.8	0.86	1	"	"	"	"	"	
Surrogate recoveries:													
98904-43-9	*% Terphenyl-d14*	*87*			*30-130 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*11*			*15-110 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*46*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*28*			*15-110 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*67*			*30-130 %*			"	"	"	"	"	
118-79-6	*% 2,4,6-Tribromophenol*	*112*			*15-110 %*			"	"	"	"	"	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
91-20-3	Naphthalene	< 0.48		ug/L	0.48	0.48	1	SW8270D (SIM)	"	03-Jan-19 03:42	CT007	461615B	
191-24-2	Benzo(ghi)perylene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
85-01-8	Phenanthrene	**0.58**		ug/L	0.48	0.48	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-K	5529S-18	Ground Water	27-Dec-18 11:20	28-Dec-18
SC52856-23				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
83-32-9	Acenaphthene	**1.0**		ug/L	0.48	0.48	1	SW8270D (SIM)	28-Dec-18	03-Jan-19 03:42	CT007	461615B	
208-96-8	Acenaphthylene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
120-12-7	Anthracene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
56-55-3	Benz(a)anthracene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
111-44-4	Bis(2-chloroethyl)ether	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
218-01-9	Chrysene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
86-73-7	Fluorene	**0.82**		ug/L	0.48	0.48	1	"	"	"	"	"	
118-74-1	Hexachlorobenzene	< 0.04		ug/L	0.04	0.04	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
77-47-4	Hexachlorocyclopentadiene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
62-75-9	N-Nitrosodimethylamine	< 0.19		ug/L	0.19	0.19	1	"	"	"	"	"	
87-86-5	Pentachlorophenol	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
50-32-8	Benzo(a)pyrene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
129-00-0	Pyrene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
98-95-3	Nitrobenzene	< 0.38		ug/L	0.38	0.38	1	"	"	"	"	"	
Surrogate recoveries:													
118-79-6	*% 2,4,6-Tribromophenol*	*91*			*15-110 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*71*			*30-130 %*			"	"	"	"	"	
367-12-4	*% 2-Fluorophenol*	*28*			*15-110 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*49*			*30-130 %*			"	"	"	"	"	
4165-62-2	*% Phenol-d5*	*14*			*15-110 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*80*			*30-130 %*			"	"	"	"	"	
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method SW-846 3005A													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	SW-846 6010C	07-Jan-19 05:50	08-Jan-19 17:58	10670	00314044	
7440-38-2	Arsenic	< 0.0500		mg/l	0.0500	0.0160	1	"	"	"	"	"	
7440-39-3	Barium	**0.151**		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	07-Jan-19 06:30	07-Jan-19 11:20	10670	00305713	
Subcontracted Analyses													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-K	5529S-18	Ground Water	27-Dec-18 11:20	28-Dec-18
SC52856-23				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	SW-846 8260C	07-Jan-19 14:05	07-Jan-19 14:06	10670	190071A	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	**0.2**	J.	ug/l	5	0.2	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
4175-54-6	Naphthalene, 1,2,3,4-tetra	**7**	J.	ug/l			1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-01-6	Trichloroethene	**0.4**	J.	ug/l	1	0.2	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
	Unknown aromatic1	**7**	J.	ug/l			1	"	"	"	"	"	
	Unknown aromatic	**9**	J.	ug/l			1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
	Total VOC TICs	**56**	J.	ug/l			1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-K SC52856-23	5529S-18	Ground Water	27-Dec-18 11:20	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	SW-846 8260C	07-Jan-19 14:05	07-Jan-19 14:06	10670	190071A	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
2613-76-5	1H-Indene, 2,3-dihydro-1,1,3	9	J.	ug/l			1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
17059-48-2	1H-Indene, 2,3-dihydro-1,6-d	9	J.	ug/l			1	"	"	"	"	"	
6682-71-9	1H-Indene, 2,3-dihydro-4,7-d	5	J.	ug/l			1	"	"	"	"	"	
1075-22-5	1H-Indene, 2,3-dihydro-5,6-d	10	J.	ug/l			1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	0.2	J.	ug/l	1	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-K SC52856-23	5529S-18	Ground Water	27-Dec-18 11:20	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	SW-846 8260C	07-Jan-19 14:05	07-Jan-19 14:06	10670	190071A	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	*Toluene-d8*	*98*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*102*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-L SC52856-24	5529S-18	Ground Water	26-Dec-18 17:10	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW3520C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
208-96-8	Acenaphthylene	< 0.47		ug/L	0.47	0.47	1	SW8270D MOD(SIM)	28-Dec-18	31-Dec-18 17:34	CT007	461581A	
206-44-0	Fluoranthene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
83-32-9	Acenaphthene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
120-12-7	Anthracene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
56-55-3	Benz(a)anthracene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
50-32-8	Benzo(a)pyrene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
218-01-9	Chrysene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
129-00-0	Pyrene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
91-20-3	Naphthalene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
86-73-7	Fluorene	< 0.47		ug/L	0.47	0.47	1	"	"	"	"	"	
Surrogate recoveries:													
98904-43-9	*% Terphenyl-d14*	*45*			*30-130 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*95*			*30-130 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*69*			*30-130 %*			"	"	"	"	"	
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	SW-846 8260C	08-Jan-19 22:30	08-Jan-19 22:31	10670	190082A/	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**0.4**	J.	ug/l	1	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-L	5529S-18	Ground Water	26-Dec-18 17:10	28-Dec-18
SC52856-24				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	SW-846 8260C	08-Jan-19 22:30	08-Jan-19 22:31	10670	190082A	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
67-64-1	Acetone	1	J.	ug/l	20	0.7	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	0.3	J.	ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
	Total VOC TICs	0		ug/l			1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-L SC52856-24	5529S-18	Ground Water	26-Dec-18 17:10	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	SW-846 8260C	08-Jan-19 22:30	08-Jan-19 22:31	10670	190082A	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-01-6	Trichloroethene	**0.7**	J.	ug/l	1	0.2	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
1868-53-7	*Dibromofluoromethane*	*102*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*101*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-N	5529S-18	Ground Water	26-Dec-18 16:22	28-Dec-18
SC52856-25				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW3520C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
50-32-8	Benzo(a)pyrene	< 0.02		ug/L	0.02	0.02	1	SW8270D MOD(SIM)	28-Dec-18	31-Dec-18 18:20	CT007	461581A	
205-99-2	Benzo(b)fluoranthene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
218-01-9	Chrysene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 0.49		ug/L	0.49	0.49	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 0.49		ug/L	0.49	0.49	1	"	"	"	"	"	
86-73-7	Fluorene	< 0.49		ug/L	0.49	0.49	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
208-96-8	Acenaphthylene	< 0.49		ug/L	0.49	0.49	1	"	"	"	"	"	
91-20-3	Naphthalene	< 0.49		ug/L	0.49	0.49	1	"	"	"	"	"	
56-55-3	Benz(a)anthracene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
85-01-8	Phenanthrene	**0.58**		ug/L	0.49	0.49	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 0.49		ug/L	0.49	0.49	1	"	"	"	"	"	
129-00-0	Pyrene	< 0.49		ug/L	0.49	0.49	1	"	"	"	"	"	
83-32-9	Acenaphthene	< 0.49		ug/L	0.49	0.49	1	"	"	"	"	"	
91-57-6	2-Methylnaphthalene	< 0.49		ug/L	0.49	0.49	1	"	"	"	"	"	
120-12-7	Anthracene	< 0.49		ug/L	0.49	0.49	1	"	"	"	"	"	
Surrogate recoveries:													
98904-43-9	*% Terphenyl-d14*	*56*			*30-130 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*78*			*30-130 %*			"	"	"	"	"	
321-60-8	*% 2-Fluorobiphenyl*	*62*			*30-130 %*			"	"	"	"	"	
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	SW-846 8260C	08-Jan-19 22:51	08-Jan-19 22:52	10670	190082A	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-N SC52856-25	5529S-18	Ground Water	26-Dec-18 16:22	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	SW-846 8260C	08-Jan-19 22:51	08-Jan-19 22:52	10670	190082A	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
	Total VOC TICs	0		ug/l			1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-N SC52856-25	5529S-18	Ground Water	26-Dec-18 16:22	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
64-17-5	Ethanol	< 750		ug/l	750	280	1	SW-846 8260C	08-Jan-19 22:51	08-Jan-19 22:52	10670	190082A	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
Surrogate recoveries:													
17060-07-0	*1,2-Dichloroethane-d4*	*101*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*102*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*103*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-O	5529S-18	Ground Water	26-Dec-18 10:01	28-Dec-18
SC52856-26				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
57-12-5	Total Cyanide (water)	< 0.010		mg/l	0.010	0.0050	1	EPA 335.4	07-Jan-19 06:30	07-Jan-19 13:03	10670	00710210	
Subcontracted Analyses													
Prepared by method SW-846 3005A													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	SW-846 6010C	07-Jan-19 05:50	08-Jan-19 18:01	10670	00314044	
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	
7440-39-3	Barium	**0.274**		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-38-2	Arsenic	< 0.0500		mg/l	0.0500	0.0160	1	"	"	"	"	"	
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	07-Jan-19 06:30	07-Jan-19 11:22	10670	00305713	
Subcontracted Analyses													
Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	SW-846 8260C	08-Jan-19 23:13	08-Jan-19 23:14	10670	190082A	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
	Total VOC TICs	**0**		ug/l			1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	**0.2**	J.	ug/l	1	0.2	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-O	5529S-18	Ground Water	26-Dec-18 10:01	28-Dec-18
SC52856-26				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	SW-846 8260C	08-Jan-19 23:13	08-Jan-19 23:14	10670	190082A	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-O SC52856-26	5529S-18	Ground Water	26-Dec-18 10:01	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	08-Jan-19 23:13	08-Jan-19 23:14	10670	190082A	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*102*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-P SC52856-27	5529S-18	Ground Water	26-Dec-18 11:06	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
57-12-5	Total Cyanide (water)	< 0.010		mg/l	0.010	0.0050	1	EPA 335.4	07-Jan-19 06:30	07-Jan-19 13:04	10670	00710210	
Subcontracted Analyses													
Prepared by method SW-846 3005A													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	SW-846 6010C	07-Jan-19 05:50	08-Jan-19 18:04	10670	00314044	
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	
7440-39-3	Barium	**0.157**		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-38-2	Arsenic	**0.0225**	J.	mg/l	0.0500	0.0160	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	07-Jan-19 06:30	07-Jan-19 11:29	10670	00305713	
Subcontracted Analyses													
Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	SW-846 8260C	08-Jan-19 23:35	08-Jan-19 23:36	10670	190082A	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-P SC52856-27	5529S-18	Ground Water	26-Dec-18 11:06	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	SW-846 8260C	08-Jan-19 23:35	08-Jan-19 23:36	10670	190082A	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-64-1	Acetone	1	J.	ug/l	20	0.7	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-P SC52856-27	5529S-18	Ground Water	26-Dec-18 11:06	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	SW-846 8260C	08-Jan-19 23:35	08-Jan-19 23:36	10670	190082A	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
	Total VOC TICs	0		ug/l			1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
Surrogate recoveries:													
17060-07-0	*1,2-Dichloroethane-d4*	*103*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*103*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*102*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*98*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-Q SC52856-28	5529S-18	Ground Water	26-Dec-18 11:05	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
57-12-5	Total Cyanide (water)	< 0.010		mg/l	0.010	0.0050	1	EPA 335.4	07-Jan-19 06:30	07-Jan-19 13:06	10670	00710210	
Subcontracted Analyses													
Prepared by method SW-846 3005A													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7440-38-2	Arsenic	**0.0721**		mg/l	0.0500	0.0160	1	SW-846 6010C	07-Jan-19 05:50	08-Jan-19 18:07	10670	00314044	
7440-39-3	Barium	**0.309**		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	"	"	"	"	"	
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	07-Jan-19 06:30	07-Jan-19 11:31	10670	00305713	
Subcontracted Analyses													
Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	SW-846 8260C	09-Jan-19 04:19	09-Jan-19 04:20	10670	190082A	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
	Total VOC TICs	**0**		ug/l			1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-Q SC52856-28	5529S-18	Ground Water	26-Dec-18 11:05	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	SW-846 8260C	09-Jan-19 04:19	09-Jan-19 04:20	10670	190082A	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	< 50		ug/l	50	6	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	**0.2**	J.	ug/l	1	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-Q	5529S-18	Ground Water	26-Dec-18 11:05	28-Dec-18
SC52856-28				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	SW-846 8260C	09-Jan-19 04:19	09-Jan-19 04:20	10670	190082A	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*99*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*101*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*100*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-R	5529S-18	Ground Water	26-Dec-18 12:35	28-Dec-18
SC52856-29				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
57-12-5	Total Cyanide (water)	< 0.010		mg/l	0.010	0.0050	1	EPA 335.4	07-Jan-19 06:30	07-Jan-19 13:07	10670	00710210	
Subcontracted Analyses													
Prepared by method SW-846 3005A													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7440-38-2	Arsenic	< 0.0500		mg/l	0.0500	0.0160	1	SW-846 6010C	07-Jan-19 05:50	08-Jan-19 18:11	10670	00314044	
7440-39-3	Barium	**0.268**		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	"	"	"	"	"	
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	07-Jan-19 06:30	07-Jan-19 11:33	10670	00305713	
Subcontracted Analyses													
Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
108-86-1	Bromobenzene	< 25		ug/l	25	1	5	SW-846 8260C	08-Jan-19 23:57	08-Jan-19 23:58	10670	190082A	
79-20-9	Methyl Acetate	< 25		ug/l	25	1	5	"	"	"	"	"	
60-29-7	Ethyl ether	< 25		ug/l	25	1	5	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 5		ug/l	5	1	5	"	"	"	"	"	
100-41-4	Ethylbenzene	< 5		ug/l	5	2	5	"	"	"	"	"	
76-13-1	Freon 113	< 50		ug/l	50	1	5	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 25		ug/l	25	4	5	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 5		ug/l	5	1	5	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 25		ug/l	25	5	5	"	"	"	"	"	
74-95-3	Dibromomethane	< 5		ug/l	5	1	5	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 5		ug/l	5	1	5	"	"	"	"	"	
108-87-2	Methylcyclohexane	**1**	J.	ug/l	25	1	5	"	"	"	"	"	
75-09-2	Methylene Chloride	< 5		ug/l	5	2	5	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
91-20-3	Naphthalene	< 25		ug/l	25	5	5	"	"	"	"	"	
95-47-6	o-Xylene	< 5		ug/l	5	2	5	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
67-66-3	Chloroform	< 5		ug/l	5	1	5	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 5		ug/l	5	1	5	"	"	"	"	"	
75-25-2	Bromoform	< 20		ug/l	20	1	5	"	"	"	"	"	
74-83-9	Bromomethane	< 5		ug/l	5	2	5	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 25		ug/l	25	1	5	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 5		ug/l	5	1	5	"	"	"	"	"	
64-17-5	Ethanol	< 3800		ug/l	3800	1400	5	"	"	"	"	"	
75-00-3	Chloroethane	< 5		ug/l	5	1	5	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-R SC52856-29	5529S-18	Ground Water	26-Dec-18 12:35	28-Dec-18

Subcontracted Analyses

Subcontracted Analyses

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
100-42-5	Styrene	< 25		ug/l	25	1	5	SW-846 8260C	08-Jan-19 23:57	08-Jan-19 23:58	10670	190082A	
74-87-3	Chloromethane	< 5		ug/l	5	1	5	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**3,500**		ug/l	50	10	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 5		ug/l	5	1	5	"	"	"	"	"	
110-82-7	Cyclohexane	< 25		ug/l	25	1	5	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 5		ug/l	5	1	5	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 5		ug/l	5	1	5	"	"	"	"	"	
108-90-7	Chlorobenzene	< 5		ug/l	5	1	5	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 25		ug/l	25	1	5	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	**12**		ug/l	5	1	5	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 25		ug/l	25	4	5	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 250		ug/l	250	60	5	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 25		ug/l	25	2	5	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 5		ug/l	5	1	5	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 50		ug/l	50	4	5	"	"	"	"	"	
108-88-3	Toluene	< 5		ug/l	5	1	5	"	"	"	"	"	
	Total VOC TICs	**0**		ug/l			5	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 5		ug/l	5	1	5	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	< 250		ug/l	250	30	5	"	"	"	"	"	
79-01-6	Trichloroethene	**1,100**		ug/l	5	1	5	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 5		ug/l	5	1	5	"	"	"	"	"	
75-01-4	Vinyl Chloride	**840**		ug/l	5	1	5	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 25		ug/l	25	5	5	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
71-43-2	Benzene	< 5		ug/l	5	1	5	"	"	"	"	"	
74-97-5	Bromochloromethane	< 25		ug/l	25	1	5	"	"	"	"	"	
78-93-3	2-Butanone	< 50		ug/l	50	2	5	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 5		ug/l	5	1	5	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 25		ug/l	25	2	5	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 5		ug/l	5	1	5	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 5		ug/l	5	2	5	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 25		ug/l	25	1	5	"	"	"	"	"	
591-78-6	2-Hexanone	< 50		ug/l	50	2	5	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 25		ug/l	25	1	5	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 50		ug/l	50	3	5	"	"	"	"	"	
67-64-1	Acetone	< 100		ug/l	100	4	5	"	"	"	"	"	
107-13-1	Acrylonitrile	< 100		ug/l	100	2	5	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 1300		ug/l	1300	150	5	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 25		ug/l	25	1	5	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-R SC52856-29	5529S-18	Ground Water	26-Dec-18 12:35	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
630-20-6	1,1,1,2-Tetrachloroethane	< 5		ug/l	5	1	5	SW-846 8260C	08-Jan-19 23:57	08-Jan-19 23:58	10670	190082A	
71-55-6	1,1,1-Trichloroethane	< 5		ug/l	5	2	5	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 5		ug/l	5	1	5	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	2	J.	ug/l	5	1	5	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	38		ug/l	5	1	5	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 5		ug/l	5	2	5	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 25		ug/l	25	2	5	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 25		ug/l	25	1	5	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 25		ug/l	25	2	5	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 25		ug/l	25	5	5	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 25		ug/l	25	2	5	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 5		ug/l	5	1	5	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 5		ug/l	5	1	5	"	"	"	"	"	
Surrogate recoveries:													
1868-53-7	*Dibromofluoromethane*	*105*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*102*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*104*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-S SC52856-30	5529S-18	Ground Water	26-Dec-18 12:31	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
57-12-5	Total Cyanide (water)	< 0.010		mg/l	0.010	0.0050	1	EPA 335.4	07-Jan-19 06:30	07-Jan-19 13:08	10670	00710210	
Subcontracted Analyses													
Prepared by method SW-846 3005A													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	SW-846 6010C	07-Jan-19 05:50	08-Jan-19 18:14	10670	00314044	
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	
7439-92-1	Lead	< 0.0150		mg/l	0.0150	0.0071	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-38-2	Arsenic	< 0.0500		mg/l	0.0500	0.0160	1	"	"	"	"	"	
7440-39-3	Barium	**0.142**		mg/l	0.0050	0.0010	1	"	"	"	"	"	
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	07-Jan-19 06:30	07-Jan-19 11:35	10670	00305713	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-T	5529S-18	Ground Water	26-Dec-18 14:15	28-Dec-18
SC52856-31				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
57-12-5	Total Cyanide (water)	< 0.010		mg/l	0.010	0.0050	1	EPA 335.4	07-Jan-19 06:30	07-Jan-19 13:12	10670	00710210	
Subcontracted Analyses													
Prepared by method SW-846 3005A													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7440-38-2	Arsenic	**0.0371**	J.	mg/l	0.0500	0.0160	1	SW-846 6010C	07-Jan-19 05:50	08-Jan-19 18:17	10670	00314044	
7440-39-3	Barium	**0.256**		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7439-92-1	Lead	**0.0092**	J.	mg/l	0.0150	0.0071	1	"	"	"	"	"	
7440-43-9	Cadmium	< 0.0050		mg/l	0.0050	0.0010	1	"	"	"	"	"	
7440-22-4	Silver	< 0.0100		mg/l	0.0100	0.0050	1	"	"	"	"	"	
7782-49-2	Selenium	< 0.0500		mg/l	0.0500	0.0210	1	"	"	"	"	"	
7440-47-3	Chromium	< 0.0150		mg/l	0.0150	0.0053	1	"	"	"	"	"	
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
7439-97-6	Mercury	< 0.00020		mg/l	0.00020	0.000050	1	SW-846 7470A	07-Jan-19 06:30	07-Jan-19 11:37	10670	00305713	
Subcontracted Analyses													
Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	SW-846 8260C	09-Jan-19 00:41	09-Jan-19 00:42	10670	190082A	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**0.4**	J.	ug/l	1	0.2	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-T SC52856-31	5529S-18	Ground Water	26-Dec-18 14:15	28-Dec-18

Subcontracted Analyses

Subcontracted Analyses

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
67-64-1	Acetone	**2**	J.	ug/l	20	0.7	1	SW-846 8260C	09-Jan-19 00:41	09-Jan-19 00:42	10670	190082A/	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
	Total VOC TICs	**0**		ug/l			1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	**0.3**	J.	ug/l	1	0.2	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	< 50		ug/l	50	6	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-T SC52856-31	5529S-18	Ground Water	26-Dec-18 14:15	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	SW-846 8260C	09-Jan-19 00:41	09-Jan-19 00:42	10670	190082A	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
Surrogate recoveries:													
1868-53-7	*Dibromofluoromethane*	*102*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*101*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*103*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-11 (GW)	5529S-18	Ground Water	26-Dec-18 16:20	28-Dec-18
SC52856-32				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW3520C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
129-00-0	Pyrene	< 0.48		ug/L	0.48	0.48	1	SW8270D MOD(SIM)	28-Dec-18	31-Dec-18 17:57	CT007	461581A	
91-57-6	2-Methylnaphthalene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
208-96-8	Acenaphthylene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
53-70-3	Dibenz(a,h)anthracene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
120-12-7	Anthracene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
56-55-3	Benz(a)anthracene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
50-32-8	Benzo(a)pyrene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
205-99-2	Benzo(b)fluoranthene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
191-24-2	Benzo(ghi)perylene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
218-01-9	Chrysene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
83-32-9	Acenaphthene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
206-44-0	Fluoranthene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
86-73-7	Fluorene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
193-39-5	Indeno(1,2,3-cd)pyrene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
91-20-3	Naphthalene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
85-01-8	Phenanthrene	< 0.48		ug/L	0.48	0.48	1	"	"	"	"	"	
207-08-9	Benzo(k)fluoranthene	< 0.02		ug/L	0.02	0.02	1	"	"	"	"	"	
Surrogate recoveries:													
321-60-8	*% 2-Fluorobiphenyl*	*63*			*30-130 %*			"	"	"	"	"	
4165-60-0	*% Nitrobenzene-d5*	*97*			*30-130 %*			"	"	"	"	"	
98904-43-9	*% Terphenyl-d14*	*33*			*30-130 %*			"	"	"	"	"	
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	09-Jan-19 01:02	09-Jan-19 01:03	10670	190082A	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	**0.5**	J.	ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
	Total VOC TICs	**0**		ug/l			1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-11 (GW)	5529S-18	Ground Water	26-Dec-18 16:20	28-Dec-18
SC52856-32				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	SW-846 8260C	09-Jan-19 01:02	09-Jan-19 01:03	10670	190082A	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-11 (GW)	5529S-18	Ground Water	26-Dec-18 16:20	28-Dec-18
SC52856-32				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	SW-846 8260C	09-Jan-19 01:02	09-Jan-19 01:03	10670	190082A	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	**0.3**	J.	ug/l	1	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
460-00-4	*4-Bromofluorobenzene*	*101*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*100*			*80-120 %*			"	"	"	"	"	
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	
1868-53-7	*Dibromofluoromethane*	*102*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-18 (GW)	5529S-18	Ground Water	26-Dec-18 10:15	28-Dec-18
SC52856-33				

Subcontracted Analyses

Subcontracted Analyses
Prepared by method SW-846 5030C

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
91-20-3	Naphthalene	< 5		ug/l	5	1	1	SW-846 8260C	09-Jan-19 01:24	09-Jan-19 01:25	10670	190082A	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	**0.4**	J.	ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-butene	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	**2**		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	**8**		ug/l	1	0.2	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
	Total VOC TICs	**0**		ug/l			1	"	"	"	"	"	
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	**0.6**	J.	ug/l	1	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-18 (GW)	5529S-18	Ground Water	26-Dec-18 10:15	28-Dec-18
SC52856-33				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	SW-846 8260C	09-Jan-19 01:24	09-Jan-19 01:25	10670	190082A	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	13		ug/l	1	0.2	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
2037-26-5	*Toluene-d8*	*99*			*80-120 %*			"	"	"	"	"	
17060-07-0	*1,2-Dichloroethane-d4*	*102*			*80-120 %*			"	"	"	"	"	

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
TB-18 (GW) SC52856-33	5529S-18	Ground Water	26-Dec-18 10:15	28-Dec-18

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
460-00-4	*4-Bromofluorobenzene*	*101*			*80-120 %*			SW-846 8260C	09-Jan-19 01:24	-Jan-19 01::	10670	190082A/	
1868-53-7	*Dibromofluoromethane*	*103*			*80-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank 12/27/18	5529S-18	Trip Blank	27-Dec-18 00:00	28-Dec-18
SC52856-34				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
75-71-8	Dichlorodifluoromethane	< 250		ug/Kg	250	25	50	SW8260CHL	20-Dec-18 10:45	30-Dec-18 12:56	CT007	461716A	
95-47-6	o-Xylene	< 250		ug/Kg	250	50	50	"	"	"	"	"	
108-90-7	Chlorobenzene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
75-00-3	Chloroethane	< 250		ug/Kg	250	25	50	"	"	"	"	"	
67-66-3	Chloroform	< 250		ug/Kg	250	25	50	"	"	"	"	"	
74-87-3	Chloromethane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
100-41-4	Ethylbenzene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 250		ug/Kg	250	50	50	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 500		ug/Kg	500	50	50	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 250		ug/Kg	250	50	50	"	"	"	"	"	
75-09-2	Methylene chloride	< 250		ug/Kg	250	250	50	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 1500		ug/Kg	1500	250	50	"	"	"	"	"	
100-42-5	Styrene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 250		ug/Kg	250	50	50	"	"	"	"	"	
108-88-3	Toluene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
79-01-6	Trichloroethene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 250		ug/Kg	250	25	50	"	"	"	"	"	
75-01-4	Vinyl chloride	< 250		ug/Kg	250	25	50	"	"	"	"	"	
110-82-7	Cyclohexane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 250		ug/Kg	250	25	50	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 250		ug/Kg	250	50	50	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 250		ug/Kg	250	50	50	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 250		ug/Kg	250	25	50	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 250		ug/Kg	250	25	50	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 250		ug/Kg	250	50	50	"	"	"	"	"	
79-20-9	Methylacetate	< 250		ug/Kg	250	250	50	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
75-25-2	Bromoform	< 250		ug/Kg	250	50	50	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank 12/27/18	5529S-18	Trip Blank	27-Dec-18 00:00	28-Dec-18
SC52856-34				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
74-97-5	Bromochloromethane	< 250		ug/Kg	250	25	50	SW8260CHL	20-Dec-18 10:45	30-Dec-18 12:56	CT007	461716A	
71-43-2	Benzene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
67-64-1	Acetone	< 1300		ug/Kg	1300	250	50	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 1300		ug/Kg	1300	250	50	"	"	"	"	"	
591-78-6	2-Hexanone	< 1300		ug/Kg	1300	250	50	"	"	"	"	"	
123-91-1	1,4-dioxane	< 3800		ug/Kg	3800	2000	50	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 250		ug/Kg	250	25	50	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 250		ug/Kg	250	50	50	"	"	"	"	"	
74-83-9	Bromomethane	< 250		ug/Kg	250	100	50	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*97*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*96*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*97*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*96*			*70-130 %*			"	"	"	"	"	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
74-87-3	Chloromethane	< 5.0		ug/Kg	5.0	1.0	1	SW8260CLL	27-Dec-18	30-Dec-18 12:35	CT007	"	
78-93-3	Methyl ethyl ketone	< 30		ug/Kg	30	5.0	1	"	"	"	"	"	
179601-23-1	m&p-Xylene	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
67-66-3	Chloroform	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 10		ug/Kg	10	1.0	1	"	"	"	"	"	
108-88-3	Toluene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
75-00-3	Chloroethane	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
79-20-9	Methylacetate	< 5.0		ug/Kg	5.0	5.0	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
75-09-2	Methylene chloride	< 5.0		ug/Kg	5.0	5.0	1	"	"	"	"	"	
95-47-6	o-Xylene	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank 12/27/18	5529S-18	Trip Blank	27-Dec-18 00:00	28-Dec-18
SC52856-34				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
75-01-4	Vinyl chloride	< 5.0		ug/Kg	5.0	0.50	1	SW8260CLL	27-Dec-18	30-Dec-18 12:35	CT007	461716A	
100-42-5	Styrene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
123-91-1	1,4-dioxane	< 75		ug/Kg	75	40	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 25		ug/Kg	25	5.0	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 25		ug/Kg	25	5.0	1	"	"	"	"	"	
67-64-1	Acetone	< 25		ug/Kg	25	5.0	1	"	"	"	"	"	
71-43-2	Benzene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
75-25-2	Bromoform	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
74-83-9	Bromomethane	< 5.0		ug/Kg	5.0	2.0	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5.0		ug/Kg	5.0	1.0	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5.0		ug/Kg	5.0	0.50	1	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*97*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*97*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*96*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*98*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank 12/27/18	5529S-18	Trip Blank	27-Dec-18 00:00	28-Dec-18
SC52856-35				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 5030C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1	SW-846 8260C	07-Jan-19 12:38	07-Jan-19 12:39	10670	190071A	
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 5		ug/l	5	0.3	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 250		ug/l	250	29	1	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
78-93-3	2-Butanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1	"	"	"	"	"	
67-64-1	Acetone	< 20		ug/l	20	0.7	1	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank 12/27/18	5529S-18	Trip Blank	27-Dec-18 00:00	28-Dec-18
SC52856-35				

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1	SW-846 8260C	07-Jan-19 12:38	07-Jan-19 12:39	10670	190071A	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	"	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
	Total VOC TICs	0		ug/l			1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten e	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-25-2	Bromoform	< 4		ug/l	4	0.2	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
79-20-9	Methyl Acetate	< 5		ug/l	5	0.2	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 5		ug/l	5	0.2	1	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"	"	
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	0.7	1	"	"	"	"	"	
1330-20-7	Xylene (Total)	< 5		ug/l	5	1	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
Surrogate recoveries:													
17060-07-0	*1,2-Dichloroethane-d4*	*102*			*80-120 %*			"	"	"	"	"	
460-00-4	*4-Bromofluorobenzene*	*102*			*80-120 %*			"	"	"	"	"	

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Trip Blank 12/27/18 SC52856-35	5529S-18	Trip Blank	27-Dec-18 00:00	28-Dec-18

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
2037-26-5	Toluene-d8	99			80-120 %			SW-846 8260C	07-Jan-19 12:38	-Jan-19 12:	10670	190071A	
1868-53-7	Dibromofluoromethane	103			80-120 %			"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8082A										
Batch 461564A - SW3545A										
BLK (CC21618-BLK)					Prepared: 28-Dec-18 Analyzed: 31-Dec-18					
PCB-1262	**ND**		ug/Kg	33			ND	-		
PCB-1268	**ND**		ug/Kg	33			ND	-		
PCB-1260	**ND**		ug/Kg	33			ND	-		
PCB-1254	**ND**		ug/Kg	33			ND	-		
PCB-1248	**ND**		ug/Kg	33			ND	-		
PCB-1242	**ND**		ug/Kg	33			ND	-		
PCB-1221	**ND**		ug/Kg	33			ND	-		
PCB-1016	**ND**		ug/Kg	33			ND	-		
PCB-1232	**ND**		ug/Kg	33			ND	-		
Surrogate: % TCMX	*83*		ug/Kg		*100*		*83*	*40-140*		
Surrogate: % DCBP	*87*		ug/Kg		*100*		*87*	*40-140*		
LCS (CC21618-LCS)					Prepared: 28-Dec-18 Analyzed: 31-Dec-18					
PCB-1016	**416.0**		ug/Kg	33	500		83	40-140		30
PCB-1248	**ND**		ug/Kg	33	500			40-140		30
PCB-1254	**ND**		ug/Kg	33	500			40-140		30
PCB-1260	**456.1**		ug/Kg	33	500		91	40-140		30
PCB-1262	**ND**		ug/Kg	33				40-140		30
PCB-1268	**ND**		ug/Kg	33	500			40-140		30
PCB-1221	**ND**		ug/Kg	33	500			40-140		30
PCB-1232	**ND**		ug/Kg	33	500			40-140		30
PCB-1242	**ND**		ug/Kg	33	500			40-140		30
Surrogate: % DCBP	*37.49*		ug/Kg		*40*		*94*	*40-140*		
Surrogate: % TCMX	*35.42*		ug/Kg		*40*		*89*	*40-140*		
LCSD (CC21618-LCSD)					Prepared: 28-Dec-18 Analyzed: 31-Dec-18					
PCB-1221	**ND**		ug/Kg	33	500			40-140		30
PCB-1248	**ND**		ug/Kg	33	500			40-140		30
PCB-1232	**ND**		ug/Kg	33	500			40-140		30
PCB-1268	**ND**		ug/Kg	33	500			40-140		30
PCB-1016	**394.7**		ug/Kg	33	500		79	40-140	4.9	30
PCB-1242	**ND**		ug/Kg	33	500			40-140		30
PCB-1254	**ND**		ug/Kg	33	500			40-140		30
PCB-1262	**ND**		ug/Kg	33				40-140		30
PCB-1260	**435.0**		ug/Kg	33	500		87	40-140	4.5	30
Surrogate: % DCBP	*36.76*		ug/Kg		*40*		*92*	*40-140*		
Surrogate: % TCMX	*34.64*		ug/Kg		*40*		*87*	*40-140*		
MS (CC21618-MS)			**Source: CC21618**		Prepared: 28-Dec-18 Analyzed: 31-Dec-18					
PCB-1242	**ND**		ug/Kg	33				40-140		30
PCB-1016	**388.6**		ug/Kg	33	500		78	40-140		30
PCB-1221	**ND**		ug/Kg	33				40-140		30
PCB-1232	**ND**		ug/Kg	33				40-140		30
PCB-1248	**ND**		ug/Kg	33				40-140		30
PCB-1260	**424.9**		ug/Kg	33	500		85	40-140		30
PCB-1262	**ND**		ug/Kg	33				40-140		30
PCB-1268	**ND**		ug/Kg	33				40-140		30
PCB-1254	**ND**		ug/Kg	33				40-140		30
Surrogate: % TCMX	*33.28*		ug/Kg		*40*		*83*	*40-140*		
Surrogate: % DCBP	*34.18*		ug/Kg		*40*		*85*	*40-140*		
MSD (CC21618-MSD)			**Source: CC21618**		Prepared: 28-Dec-18 Analyzed: 31-Dec-18					
PCB-1016	**464.6**		ug/Kg	33	500		93	40-140	17.5	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8082A										
Batch 461564A - SW3545A										
MSD (CC21618-MSD)			**Source: CC21618**			Prepared: 28-Dec-18 Analyzed: 31-Dec-18				
PCB-1268	**ND**		ug/Kg	33				40-140		30
PCB-1262	**ND**		ug/Kg	33				40-140		30
PCB-1260	**509.0**		ug/Kg	33	500		102	40-140	18.2	30
PCB-1254	**ND**		ug/Kg	33				40-140		30
PCB-1248	**ND**		ug/Kg	33				40-140		30
PCB-1242	**ND**		ug/Kg	33				40-140		30
PCB-1232	**ND**		ug/Kg	33				40-140		30
PCB-1221	**ND**		ug/Kg	33				40-140		30
Surrogate: % DCBP	*40.99*		ug/Kg		*40*		*102*	*40-140*		
Surrogate: % TCMX	*40.54*		ug/Kg		*40*		*101*	*40-140*		
Batch 461572A - SW3510C										
BLK (CC21102-BLK)						Prepared: 28-Dec-18 Analyzed: 31-Dec-18				
PCB-1254	**ND**		ug/L	0.050			ND	-		
PCB-1016	**ND**		ug/L	0.050			ND	-		
PCB-1232	**ND**		ug/L	0.050			ND	-		
PCB-1242	**ND**		ug/L	0.050			ND	-		
PCB-1248	**ND**		ug/L	0.050			ND	-		
PCB-1268	**ND**		ug/L	0.050			ND	-		
PCB-1260	**ND**		ug/L	0.050			ND	-		
PCB-1262	**ND**		ug/L	0.050			ND	-		
PCB-1221	**ND**		ug/L	0.050			ND	-		
Surrogate: % DCBP	*71*		ug/L		*100*		*71*	*40-140*		
Surrogate: % TCMX	*67*		ug/L		*100*		*67*	*40-140*		
LCS (CC21102-LCS)						Prepared: 28-Dec-18 Analyzed: 31-Dec-18				
PCB-1221	**ND**		ug/L	0.050	500			40-140		20
PCB-1232	**ND**		ug/L	0.050	500			40-140		20
PCB-1242	**ND**		ug/L	0.050	500			40-140		20
PCB-1268	**ND**		ug/L	0.050	500			40-140		20
PCB-1262	**ND**		ug/L	0.050				40-140		20
PCB-1254	**ND**		ug/L	0.050	500			40-140		20
PCB-1260	**501.6**		ug/L	0.050	500		100	40-140		20
PCB-1016	**388.8**		ug/L	0.050	500		78	40-140		20
PCB-1248	**ND**		ug/L	0.050	500			40-140		20
Surrogate: % DCBP	*40.05*		ug/L		*40*		*100*	*40-140*		
Surrogate: % TCMX	*30.03*		ug/L		*40*		*75*	*40-140*		
LCSD (CC21102-LCSD)						Prepared: 28-Dec-18 Analyzed: 31-Dec-18				
PCB-1221	**ND**		ug/L	0.050	500			40-140		20
PCB-1016	**382.1**		ug/L	0.050	500		76	40-140	2.6	20
PCB-1232	**ND**		ug/L	0.050	500			40-140		20
PCB-1242	**ND**		ug/L	0.050	500			40-140		20
PCB-1248	**ND**		ug/L	0.050	500			40-140		20
PCB-1254	**ND**		ug/L	0.050	500			40-140		20
PCB-1262	**ND**		ug/L	0.050				40-140		20
PCB-1268	**ND**		ug/L	0.050	500			40-140		20
PCB-1260	**483.6**		ug/L	0.050	500		97	40-140	3.0	20
Surrogate: % TCMX	*31.75*		ug/L		*40*		*79*	*40-140*		
Surrogate: % DCBP	*37.05*		ug/L		*40*		*93*	*40-140*		
SW8260C										

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461716A - SW8260C										
BLK (CC21270-BLK)						Prepared:	Analyzed: 30-Dec-18			
Methyl ethyl ketone	**ND**		ug/kg	5.0			ND	-		
m&p-Xylene	**ND**		ug/kg	2.0			ND	-		
Isopropylbenzene	**ND**		ug/kg	1.0			ND	-		
Ethylbenzene	**ND**		ug/kg	1.0			ND	-		
Carbon tetrachloride	**ND**		ug/kg	5.0			ND	-		
Dichlorodifluoromethane	**ND**		ug/kg	5.0			ND	-		
Dibromomethane	**ND**		ug/kg	5.0			ND	-		
Chloroform	**ND**		ug/kg	5.0			ND	-		
Cyclohexane	**ND**		ug/kg	5.0			ND	-		
cis-1,2-Dichloroethene	**ND**		ug/kg	5.0			ND	-		
Methyl t-butyl ether (MTBE)	**ND**		ug/kg	1.0			ND	-		
Chlorobenzene	**ND**		ug/kg	5.0			ND	-		
Chloroethane	**ND**		ug/kg	5.0			ND	-		
Dibromochloromethane	**ND**		ug/kg	3.0			ND	-		
Methylacetate	**ND**		ug/kg	5.0			ND	-		
Methylcyclohexane	**ND**		ug/kg	5.0			ND	-		
Methylene chloride	**ND**		ug/kg	5.0			ND	-		
o-Xylene	**ND**		ug/kg	2.0			ND	-		
Styrene	**ND**		ug/kg	5.0			ND	-		
Toluene	**ND**		ug/kg	1.0			ND	-		
Trichlorofluoromethane	**ND**		ug/kg	5.0			ND	-		
trans-1,2-Dichloroethene	**ND**		ug/kg	5.0			ND	-		
trans-1,3-Dichloropropene	**ND**		ug/kg	5.0			ND	-		
trans-1,4-dichloro-2-butene	**ND**		ug/kg	5.0			ND	-		
Trichloroethene	**ND**		ug/kg	5.0			ND	-		
Carbon Disulfide	**ND**		ug/kg	5.0			ND	-		
1,1-Dichloroethane	**ND**		ug/kg	5.0			ND	-		
Trichlorotrifluoroethane	**ND**		ug/kg	5.0			ND	-		
Tetrachloroethene	**ND**		ug/kg	5.0			ND	-		
1,2-Dichloropropane	**ND**		ug/kg	5.0			ND	-		
cis-1,3-Dichloropropene	**ND**		ug/kg	5.0			ND	-		
Vinyl chloride	**ND**		ug/kg	5.0			ND	-		
1,1,1,2-Tetrachloroethane	**ND**		ug/kg	5.0			ND	-		
1,1,1-Trichloroethane	**ND**		ug/kg	5.0			ND	-		
1,1,2,2-Tetrachloroethane	**ND**		ug/kg	3.0			ND	-		
1,1,2-Trichloroethane	**ND**		ug/kg	5.0			ND	-		
1,1-Dichloroethene	**ND**		ug/kg	5.0			ND	-		
1,2,3-Trichlorobenzene	**ND**		ug/kg	5.0			ND	-		
1,2,3-Trichloropropane	**ND**		ug/kg	5.0			ND	-		
1,2,4-Trichlorobenzene	**ND**		ug/kg	5.0			ND	-		
1,2-Dibromo-3-chloropropane	**ND**		ug/kg	5.0			ND	-		
1,2-Dibromoethane	**ND**		ug/kg	5.0			ND	-		
1,1-Dichloropropene	**ND**		ug/kg	5.0			ND	-		
1,2-Dichloroethane	**ND**		ug/kg	5.0			ND	-		
Bromomethane	**ND**		ug/kg	5.0			ND	-		
1,3-Dichlorobenzene	**ND**		ug/kg	5.0			ND	-		
1,3-Dichloropropane	**ND**		ug/kg	5.0			ND	-		
1,4-Dichlorobenzene	**ND**		ug/kg	5.0			ND	-		
1,4-dioxane	**ND**		ug/kg	100			ND	-		
2,2-Dichloropropane	**ND**		ug/kg	5.0			ND	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461716A - SW8260C										
BLK (CC21270-BLK)					Prepared: Analyzed: 30-Dec-18					
2-Hexanone	**ND**		ug/kg	25			ND	-		
4-Methyl-2-pentanone	**ND**		ug/kg	25			ND	-		
Acetone	**ND**		ug/kg	10			ND	-		
Benzene	**ND**		ug/kg	1.0			ND	-		
Bromobenzene	**ND**		ug/kg	5.0			ND	-		
Bromochloromethane	**ND**		ug/kg	5.0			ND	-		
Bromodichloromethane	**ND**		ug/kg	5.0			ND	-		
Bromoform	**ND**		ug/kg	5.0			ND	-		
1,2-Dichlorobenzene	**ND**		ug/kg	5.0			ND	-		
Chloromethane	**ND**		ug/kg	5.0			ND	-		
Surrogate: % 1,2-dichlorobenzene-d4	*97*		ug/kg		*50*		*97*	*70-130*		
Surrogate: % Bromofluorobenzene	*98*		ug/kg		*50*		*98*	*70-130*		
Surrogate: % Dibromofluoromethane	*101*		ug/kg		*50*		*101*	*70-130*		
Surrogate: % Toluene-d8	*97*		ug/kg		*50*		*97*	*70-130*		
LCS (CC21270-LCS)					Prepared: Analyzed: 30-Dec-18					
Bromochloromethane	**54.55**		ug/kg	5.0	50		109	70-130		30
1,3-Dichloropropane	**53.06**		ug/kg	5.0	50		106	70-130		30
1,4-Dichlorobenzene	**54.88**		ug/kg	5.0	50		110	70-130		30
1,4-dioxane	**1154**		ug/kg	100	1000		115	70-130		30
2,2-Dichloropropane	**60.50**		ug/kg	5.0	50		121	70-130		30
2-Hexanone	**47.02**		ug/kg	25	50		94	70-130		30
4-Methyl-2-pentanone	**52.71**		ug/kg	25	50		105	70-130		30
Acetone	**35.58**		ug/kg	10	50		71	70-130		30
1,3-Dichlorobenzene	**56.25**		ug/kg	5.0	50		112	70-130		30
Bromobenzene	**55.39**		ug/kg	5.0	50		111	70-130		30
1,2-Dibromoethane	**55.04**		ug/kg	5.0	50		110	70-130		30
Bromodichloromethane	**57.85**		ug/kg	5.0	50		116	70-130		30
Bromoform	**59.64**		ug/kg	5.0	50		119	70-130		30
Benzene	**53.95**		ug/kg	1.0	50		108	70-130		30
1,2-Dichloropropane	**56.27**		ug/kg	5.0	50		113	70-130		30
Bromomethane	**48.77**		ug/kg	5.0	50		98	70-130		30
1,2-Dichlorobenzene	**53.81**		ug/kg	5.0	50		108	70-130		30
Chloroethane	**54.99**		ug/kg	5.0	50		110	70-130		30
1,2-Dibromo-3-chloropropane	**60.89**		ug/kg	5.0	50		122	70-130		30
1,2,4-Trichlorobenzene	**59.28**		ug/kg	5.0	50		119	70-130		30
1,2,3-Trichloropropane	**52.47**		ug/kg	5.0	50		105	70-130		30
1,2,3-Trichlorobenzene	**59.37**		ug/kg	5.0	50		119	70-130		30
1,1-Dichloropropene	**57.82**		ug/kg	5.0	50		116	70-130		30
1,1-Dichloroethene	**52.35**		ug/kg	5.0	50		105	70-130		30
1,1-Dichloroethane	**56.17**		ug/kg	5.0	50		112	70-130		30
1,1,2-Trichloroethane	**53.57**		ug/kg	5.0	50		107	70-130		30
1,1,2,2-Tetrachloroethane	**56.01**		ug/kg	3.0	50		112	70-130		30
1,1,1-Trichloroethane	**55.64**		ug/kg	5.0	50		111	70-130		30
1,2-Dichloroethane	**52.33**		ug/kg	5.0	50		105	70-130		30
m&p-Xylene	**107.3**		ug/kg	2.0	100		107	70-130		30
Trichlorotrifluoroethane	**50.33**		ug/kg	5.0	50		101	70-130		30
Trichloroethene	**56.01**		ug/kg	5.0	50		112	70-130		30
trans-1,4-dichloro-2-butene	**316.6**		ug/kg	5.0	250		127	70-130		30
trans-1,3-Dichloropropene	**58.08**		ug/kg	5.0	50		116	70-130		30
trans-1,2-Dichloroethene	**53.11**		ug/kg	5.0	50		106	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461716A - SW8260C										
LCS (CC21270-LCS)					Prepared: Analyzed: 30-Dec-18					
Toluene	**54.34**		ug/kg	1.0	50		109	70-130		30
Tetrachloroethene	**56.73**		ug/kg	5.0	50		113	70-130		30
Styrene	**55.87**		ug/kg	5.0	50		112	70-130		30
o-Xylene	**56.22**		ug/kg	2.0	50		112	70-130		30
Methylene chloride	**45.63**		ug/kg	5.0	50		91	70-130		30
Methylcyclohexane	**52.96**		ug/kg	5.0	50		106	70-130		30
Methylacetate	**41.88**		ug/kg	5.0	50		84	70-130		30
Carbon tetrachloride	**57.21**		ug/kg	5.0	50		114	70-130		30
Methyl ethyl ketone	**45.62**		ug/kg	5.0	50		91	70-130		30
Carbon Disulfide	**55.08**		ug/kg	5.0	50		110	70-130		30
Isopropylbenzene	**56.74**		ug/kg	1.0	50		113	70-130		30
Ethylbenzene	**53.73**		ug/kg	1.0	50		107	70-130		30
Dichlorodifluoromethane	**63.28**		ug/kg	5.0	50		127	70-130		30
Dibromomethane	**53.61**		ug/kg	5.0	50		107	70-130		30
Dibromochloromethane	**62.43**		ug/kg	3.0	50		125	70-130		30
Cyclohexane	**47.99**		ug/kg	5.0	50		96	70-130		30
cis-1,3-Dichloropropene	**61.58**		ug/kg	5.0	50		123	70-130		30
cis-1,2-Dichloroethene	**56.95**		ug/kg	5.0	50		114	70-130		30
Chloromethane	**53.21**		ug/kg	5.0	50		106	70-130		30
Chloroform	**53.20**		ug/kg	5.0	50		106	70-130		30
Trichlorofluoromethane	**49.75**		ug/kg	5.0	50		100	70-130		30
Chlorobenzene	**53.47**		ug/kg	5.0	50		107	70-130		30
1,1,1,2-Tetrachloroethane	**55.80**		ug/kg	5.0	50		112	70-130		30
Methyl t-butyl ether (MTBE)	**47.98**		ug/kg	1.0	50		96	70-130		30
Vinyl chloride	**51.82**		ug/kg	5.0	50		104	70-130		30
Surrogate: % Bromofluorobenzene	*49.93*		ug/kg		*50*		*100*	*70-130*		
Surrogate: % Dibromofluoromethane	*50.01*		ug/kg		*50*		*100*	*70-130*		
Surrogate: % Toluene-d8	*51.25*		ug/kg		*50*		*103*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*50.34*		ug/kg		*50*		*101*	*70-130*		
LCSD (CC21270-LCSD)					Prepared: Analyzed: 30-Dec-18					
Benzene	**54.19**		ug/kg	1.0	50		108	70-130	0.0	30
1,3-Dichlorobenzene	**56.04**		ug/kg	5.0	50		112	70-130	0.0	30
1,3-Dichloropropane	**54.26**		ug/kg	5.0	50		109	70-130	2.8	30
1,4-Dichlorobenzene	**54.91**		ug/kg	5.0	50		110	70-130	0.0	30
1,4-dioxane	**1129**		ug/kg	100	1000		113	70-130	1.8	30
2,2-Dichloropropane	**60.46**		ug/kg	5.0	50		121	70-130	0.0	30
2-Hexanone	**51.60**		ug/kg	25	50		103	70-130	9.1	30
1,2-Dichloropropane	**56.05**		ug/kg	5.0	50		112	70-130	0.9	30
Acetone	**37.32**		ug/kg	10	50		75	70-130	5.5	30
1,2-Dibromo-3-chloropropane	**63.47**		ug/kg	5.0	50		127	70-130	4.0	30
Bromobenzene	**56.18**		ug/kg	5.0	50		112	70-130	0.9	30
Bromochloromethane	**55.42**		ug/kg	5.0	50		111	70-130	1.8	30
4-Methyl-2-pentanone	**55.75**		ug/kg	25	50		111	70-130	5.6	30
1,2-Dichloroethane	**53.03**		ug/kg	5.0	50		106	70-130	0.9	30
Bromoform	**62.46**		ug/kg	5.0	50		125	70-130	4.9	30
1,2-Dibromoethane	**57.11**		ug/kg	5.0	50		114	70-130	3.6	30
Bromomethane	**48.90**		ug/kg	5.0	50		98	70-130	0.0	30
1,2,4-Trichlorobenzene	**59.64**		ug/kg	5.0	50		119	70-130	0.0	30
1,2,3-Trichloropropane	**54.04**		ug/kg	5.0	50		108	70-130	2.8	30
1,2,3-Trichlorobenzene	**60.79**		ug/kg	5.0	50		122	70-130	2.5	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461716A - SW8260C										
LCSD (CC21270-LCSD)					Prepared: Analyzed: 30-Dec-18					
1,1-Dichloropropene	**57.89**		ug/kg	5.0	50		116	70-130	0.0	30
1,1-Dichloroethene	**52.30**		ug/kg	5.0	50		105	70-130	0.0	30
1,1-Dichloroethane	**56.26**		ug/kg	5.0	50		113	70-130	0.9	30
1,1,2-Trichloroethane	**54.36**		ug/kg	5.0	50		109	70-130	1.9	30
1,1,2,2-Tetrachloroethane	**58.36**		ug/kg	3.0	50		117	70-130	4.4	30
1,1,1-Trichloroethane	**55.24**		ug/kg	5.0	50		110	70-130	0.9	30
1,1,1,2-Tetrachloroethane	**57.26**		ug/kg	5.0	50		115	70-130	2.6	30
1,2-Dichlorobenzene	**54.76**		ug/kg	5.0	50		110	70-130	1.8	30
trans-1,2-Dichloroethene	**53.07**		ug/kg	5.0	50		106	70-130	0.0	30
Methylacetate	**43.65**		ug/kg	5.0	50		87	70-130	3.5	30
Methylcyclohexane	**52.90**		ug/kg	5.0	50		106	70-130	0.0	30
Methylene chloride	**45.30**		ug/kg	5.0	50		91	70-130	0.0	30
o-Xylene	**57.37**		ug/kg	2.0	50		115	70-130	2.6	30
Styrene	**57.27**		ug/kg	5.0	50		115	70-130	2.6	30
Bromodichloromethane	**58.30**		ug/kg	5.0	50		117	70-130	0.9	30
Toluene	**54.27**		ug/kg	1.0	50		109	70-130	0.0	30
m&p-Xylene	**109.1**		ug/kg	2.0	100		109	70-130	1.9	30
trans-1,3-Dichloropropene	**58.35**		ug/kg	5.0	50		117	70-130	0.9	30
trans-1,4-dichloro-2-butene	**331.4**	I	ug/kg	5.0	250		133	70-130	4.6	30
Trichloroethene	**56.48**		ug/kg	5.0	50		113	70-130	0.9	30
Trichlorofluoromethane	**49.69**		ug/kg	5.0	50		99	70-130	1.0	30
Trichlorotrifluoroethane	**50.31**		ug/kg	5.0	50		101	70-130	0.0	30
Vinyl chloride	**51.48**		ug/kg	5.0	50		103	70-130	1.0	30
Tetrachloroethene	**55.93**		ug/kg	5.0	50		112	70-130	0.9	30
Cyclohexane	**48.17**		ug/kg	5.0	50		96	70-130	0.0	30
Carbon Disulfide	**54.89**		ug/kg	5.0	50		110	70-130	0.0	30
Carbon tetrachloride	**57.42**		ug/kg	5.0	50		115	70-130	0.9	30
Chlorobenzene	**54.47**		ug/kg	5.0	50		109	70-130	1.9	30
Chloroethane	**54.60**		ug/kg	5.0	50		109	70-130	0.9	30
Chloroform	**53.57**		ug/kg	5.0	50		107	70-130	0.9	30
Chloromethane	**54.01**		ug/kg	5.0	50		108	70-130	1.9	30
Methyl t-butyl ether (MTBE)	**44.08**		ug/kg	1.0	50		88	70-130	8.7	30
cis-1,3-Dichloropropene	**60.62**		ug/kg	5.0	50		121	70-130	1.6	30
Methyl ethyl ketone	**47.74**		ug/kg	5.0	50		95	70-130	4.3	30
Dibromochloromethane	**63.33**		ug/kg	3.0	50		127	70-130	1.6	30
Dibromomethane	**54.22**		ug/kg	5.0	50		108	70-130	0.9	30
Dichlorodifluoromethane	**63.84**		ug/kg	5.0	50		128	70-130	0.8	30
Ethylbenzene	**54.10**		ug/kg	1.0	50		108	70-130	0.9	30
Isopropylbenzene	**57.32**		ug/kg	1.0	50		115	70-130	1.8	30
cis-1,2-Dichloroethene	**56.88**		ug/kg	5.0	50		114	70-130	0.0	30
Surrogate: % Bromofluorobenzene	*51.10*		ug/kg		*50*		*102*	*70-130*		
Surrogate: % Toluene-d8	*50.91*		ug/kg		*50*		*102*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*50.13*		ug/kg		*50*		*100*	*70-130*		
Surrogate: % Dibromofluoromethane	*50.40*		ug/kg		*50*		*101*	*70-130*		
MS (CC21270-MS)			**Source: CC21270**		Prepared: Analyzed: 30-Dec-18					
Cyclohexane	**52.74**		ug/kg	5.0	50		105	70-130		30
m&p-Xylene	**94.56**		ug/kg	2.0	100		95	70-130		30
Isopropylbenzene	**51.23**		ug/kg	1.0	50		102	70-130		30
Ethylbenzene	**47.98**		ug/kg	1.0	50		96	70-130		30
Dichlorodifluoromethane	**51.36**		ug/kg	5.0	50		103	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461716A - SW8260C										
MS (CC21270-MS)			**Source: CC21270**			Prepared: Analyzed: 30-Dec-18				
1,1,1,2-Tetrachloroethane	**52.40**		ug/kg	5.0	50		105	70-130		30
Dibromochloromethane	**56.07**		ug/kg	3.0	50		112	70-130		30
cis-1,3-Dichloropropene	**54.04**		ug/kg	5.0	50		108	70-130		30
cis-1,2-Dichloroethene	**51.94**		ug/kg	5.0	50		104	70-130		30
Chloromethane	**50.51**		ug/kg	5.0	50		101	70-130		30
Chloroform	**49.84**		ug/kg	5.0	50		100	70-130		30
Chloroethane	**48.79**		ug/kg	5.0	50		98	70-130		30
Carbon tetrachloride	**51.42**		ug/kg	5.0	50		103	70-130		30
Dibromomethane	**51.44**		ug/kg	5.0	50		103	70-130		30
Methyl t-butyl ether (MTBE)	**50.46**		ug/kg	1.0	50		101	70-130		30
Methylacetate	**43.40**		ug/kg	5.0	50		87	70-130		30
Methylcyclohexane	**49.45**		ug/kg	5.0	50		99	70-130		30
Methylene chloride	**41.25**		ug/kg	5.0	50		83	70-130		30
o-Xylene	**50.26**		ug/kg	2.0	50		101	70-130		30
Styrene	**50.49**		ug/kg	5.0	50		101	70-130		30
Tetrachloroethene	**48.23**		ug/kg	5.0	50		96	70-130		30
Toluene	**48.85**		ug/kg	1.0	50		98	59-139		30
trans-1,2-Dichloroethene	**46.08**		ug/kg	5.0	50		92	70-130		30
trans-1,3-Dichloropropene	**53.98**		ug/kg	5.0	50		108	70-130		30
trans-1,4-dichloro-2-butene	**281.8**		ug/kg	5.0	250		113	70-130		30
Trichloroethene	**51.92**		ug/kg	5.0	50		104	62-137		30
Trichlorofluoromethane	**46.65**		ug/kg	5.0	50		93	70-130		30
Trichlorotrifluoroethane	**46.69**		ug/kg	5.0	50		93	70-130		30
Methyl ethyl ketone	**46.11**		ug/kg	5.0	50		92	70-130		30
1,2-Dichloropropane	**51.67**		ug/kg	5.0	50		103	70-130		30
1,1,2,2-Tetrachloroethane	**51.41**		ug/kg	3.0	50		103	70-130		30
1,1,2-Trichloroethane	**51.74**		ug/kg	5.0	50		103	70-130		30
1,1-Dichloroethane	**52.10**		ug/kg	5.0	50		104	70-130		30
1,1-Dichloroethene	**45.87**		ug/kg	5.0	50		92	59-172		30
1,1-Dichloropropene	**49.80**		ug/kg	5.0	50		100	70-130		30
1,2,3-Trichlorobenzene	**44.97**		ug/kg	5.0	50		90	70-130		30
1,2,3-Trichloropropane	**52.50**		ug/kg	5.0	50		105	70-130		30
1,2,4-Trichlorobenzene	**39.88**		ug/kg	5.0	50		80	70-130		30
1,2-Dibromo-3-chloropropane	**58.64**		ug/kg	5.0	50		117	70-130		30
1,2-Dibromoethane	**53.71**		ug/kg	5.0	50		107	70-130		30
1,2-Dichlorobenzene	**45.74**		ug/kg	5.0	50		91	70-130		30
Vinyl chloride	**47.21**		ug/kg	5.0	50		94	70-130		30
Bromomethane	**45.90**		ug/kg	5.0	50		92	70-130		30
1,2-Dichloroethane	**48.90**		ug/kg	5.0	50		98	70-130		30
Bromoform	**56.58**		ug/kg	5.0	50		113	70-130		30
1,3-Dichlorobenzene	**44.18**		ug/kg	5.0	50		88	70-130		30
1,3-Dichloropropane	**52.18**		ug/kg	5.0	50		104	70-130		30
1,4-Dichlorobenzene	**42.75**		ug/kg	5.0	50		86	70-130		30
1,4-dioxane	**1122**		ug/kg	100	1000		112	70-130		30
2,2-Dichloropropane	**51.93**		ug/kg	5.0	50		104	70-130		30
2-Hexanone	**52.90**		ug/kg	25	50		106	70-130		30
4-Methyl-2-pentanone	**55.91**		ug/kg	25	50		112	70-130		30
Acetone	**43.89**		ug/kg	10	50		88	70-130		30
Benzene	**48.96**		ug/kg	1.0	50		98	66-142		30
Bromobenzene	**49.50**		ug/kg	5.0	50		99	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461716A - SW8260C										
MS (CC21270-MS)			**Source: CC21270**			Prepared: Analyzed: 30-Dec-18				
Bromochloromethane	**52.26**		ug/kg	5.0	50		105	70-130		30
Bromodichloromethane	**53.08**		ug/kg	5.0	50		106	70-130		30
1,1,1-Trichloroethane	**51.26**		ug/kg	5.0	50		103	70-130		30
Chlorobenzene	**48.05**		ug/kg	5.0	50		96	60-133		30
Carbon Disulfide	**48.08**		ug/kg	5.0	50		96	70-130		30
Surrogate: % Toluene-d8	*50.79*		ug/kg		*50*		*102*	*70-130*		
Surrogate: % Dibromofluoromethane	*50.03*		ug/kg		*50*		*100*	*70-130*		
Surrogate: % Bromofluorobenzene	*50.42*		ug/kg		*50*		*101*	*70-130*		
Surrogate: % 1,2-dichlorobenzene-d4	*49.67*		ug/kg		*50*		*99*	*70-130*		
MSD (CC21270-MSD)			**Source: CC21270**			Prepared: Analyzed: 30-Dec-18				
Cyclohexane	**54.31**		ug/kg	5.0	50		109	70-130	3.7	30
Methyl ethyl ketone	**47.22**		ug/kg	5.0	50		94	70-130	2.2	30
m&p-Xylene	**97.99**		ug/kg	2.0	100		98	70-130	3.1	30
Isopropylbenzene	**52.68**		ug/kg	1.0	50		105	70-130	2.9	30
Ethylbenzene	**49.16**		ug/kg	1.0	50		98	70-130	2.1	30
Dichlorodifluoromethane	**53.56**		ug/kg	5.0	50		107	70-130	3.8	30
Methyl t-butyl ether (MTBE)	**52.28**		ug/kg	1.0	50		105	70-130	3.9	30
Dibromochloromethane	**56.23**		ug/kg	3.0	50		112	70-130	0.0	30
o-Xylene	**51.18**		ug/kg	2.0	50		102	70-130	1.0	30
cis-1,3-Dichloropropene	**55.13**		ug/kg	5.0	50		110	70-130	1.8	30
cis-1,2-Dichloroethene	**53.32**		ug/kg	5.0	50		107	70-130	2.8	30
Chloromethane	**51.97**		ug/kg	5.0	50		104	70-130	2.9	30
Dibromomethane	**52.76**		ug/kg	5.0	50		106	70-130	2.9	30
Methylacetate	**43.06**		ug/kg	5.0	50		86	70-130	1.2	30
Chloroethane	**51.63**		ug/kg	5.0	50		103	70-130	5.0	30
Methylene chloride	**42.68**		ug/kg	5.0	50		85	70-130	2.4	30
Styrene	**51.15**		ug/kg	5.0	50		102	70-130	1.0	30
Tetrachloroethene	**50.55**		ug/kg	5.0	50		101	70-130	5.1	30
Toluene	**50.13**		ug/kg	1.0	50		100	59-139	2.0	30
trans-1,2-Dichloroethene	**48.00**		ug/kg	5.0	50		96	70-130	4.3	30
trans-1,3-Dichloropropene	**53.73**		ug/kg	5.0	50		107	70-130	0.9	30
trans-1,4-dichloro-2-butene	**285.1**		ug/kg	5.0	250		114	70-130	0.9	30
Trichloroethene	**54.07**		ug/kg	5.0	50		108	62-137	3.8	30
Trichlorofluoromethane	**49.09**		ug/kg	5.0	50		98	70-130	5.2	30
Trichlorotrifluoroethane	**48.93**		ug/kg	5.0	50		98	70-130	5.2	30
Vinyl chloride	**49.63**		ug/kg	5.0	50		99	70-130	5.2	30
Methylcyclohexane	**51.22**		ug/kg	5.0	50		102	70-130	3.0	30
1,1-Dichloropropene	**52.27**		ug/kg	5.0	50		105	70-130	4.9	30
Chloroform	**50.54**		ug/kg	5.0	50		101	70-130	1.0	30
1,2-Dichloroethane	**49.63**		ug/kg	5.0	50		99	70-130	1.0	30
1,2-Dichlorobenzene	**47.89**		ug/kg	5.0	50		96	70-130	5.3	30
1,2-Dibromoethane	**54.29**		ug/kg	5.0	50		109	70-130	1.9	30
1,2-Dibromo-3-chloropropane	**59.58**		ug/kg	5.0	50		119	70-130	1.7	30
1,2,4-Trichlorobenzene	**43.40**		ug/kg	5.0	50		87	70-130	8.4	30
1,3-Dichlorobenzene	**46.46**		ug/kg	5.0	50		93	70-130	5.5	30
1,2,3-Trichlorobenzene	**47.74**		ug/kg	5.0	50		95	70-130	5.4	30
1,3-Dichloropropane	**52.44**		ug/kg	5.0	50		105	70-130	1.0	30
1,1-Dichloroethene	**47.84**		ug/kg	5.0	50		96	59-172	4.3	30
1,1-Dichloroethane	**53.24**		ug/kg	5.0	50		106	70-130	1.9	30
1,1,2-Trichloroethane	**52.23**		ug/kg	5.0	50		104	70-130	1.0	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461716A - SW8260C										
MSD (CC21270-MSD)			**Source: CC21270**			Prepared: Analyzed: 30-Dec-18				
1,1,2,2-Tetrachloroethane	**51.98**		ug/kg	3.0	50		104	70-130	1.0	30
1,1,1-Trichloroethane	**52.58**		ug/kg	5.0	50		105	70-130	1.9	30
1,1,1,2-Tetrachloroethane	**53.18**		ug/kg	5.0	50		106	70-130	0.9	30
1,2,3-Trichloropropane	**52.86**		ug/kg	5.0	50		106	70-130	0.9	30
Bromobenzene	**50.94**		ug/kg	5.0	50		102	70-130	3.0	30
Carbon tetrachloride	**52.85**		ug/kg	5.0	50		106	70-130	2.9	30
Carbon Disulfide	**50.33**		ug/kg	5.0	50		101	70-130	5.1	30
Bromomethane	**47.12**		ug/kg	5.0	50		94	70-130	2.2	30
Bromoform	**56.39**		ug/kg	5.0	50		113	70-130	0.0	30
1,2-Dichloropropane	**52.53**		ug/kg	5.0	50		105	70-130	1.9	30
Bromochloromethane	**52.93**		ug/kg	5.0	50		106	70-130	0.9	30
Chlorobenzene	**49.17**		ug/kg	5.0	50		98	60-133	2.1	30
Benzene	**50.24**		ug/kg	1.0	50		100	66-142	2.0	30
Acetone	**40.58**		ug/kg	10	50		81	70-130	8.3	30
4-Methyl-2-pentanone	**56.15**		ug/kg	25	50		112	70-130	0.0	30
2-Hexanone	**52.62**		ug/kg	25	50		105	70-130	0.9	30
2,2-Dichloropropane	**52.84**		ug/kg	5.0	50		106	70-130	1.9	30
1,4-dioxane	**1145**		ug/kg	100	1000		114	70-130	1.8	30
1,4-Dichlorobenzene	**45.10**		ug/kg	5.0	50		90	70-130	4.5	30
Bromodichloromethane	**54.31**		ug/kg	5.0	50		109	70-130	2.8	30
Surrogate: % 1,2-dichlorobenzene-d4	*49.92*		ug/kg		*50*		*100*	*70-130*		
Surrogate: % Bromofluorobenzene	*50.18*		ug/kg		*50*		*100*	*70-130*		
Surrogate: % Dibromofluoromethane	*51.36*		ug/kg		*50*		*103*	*70-130*		
Surrogate: % Toluene-d8	*51.27*		ug/kg		*50*		*103*	*70-130*		
Batch 461826A - SW8260C										
BLK (CC21618-BLK)						Prepared: Analyzed: 31-Dec-18				
Acetone	**ND**		ug/kg	10			ND	-		
1,3,5-Trimethylbenzene	**ND**		ug/kg	1.0			ND	-		
1,3-Dichlorobenzene	**ND**		ug/kg	5.0			ND	-		
1,3-Dichloropropane	**ND**		ug/kg	5.0			ND	-		
1,4-Dichlorobenzene	**ND**		ug/kg	5.0			ND	-		
1,4-dioxane	**ND**		ug/kg	100			ND	-		
2,2-Dichloropropane	**ND**		ug/kg	5.0			ND	-		
Bromomethane	**ND**		ug/kg	5.0			ND	-		
4-Methyl-2-pentanone	**ND**		ug/kg	25			ND	-		
1,2-Dichlorobenzene	**ND**		ug/kg	5.0			ND	-		
Benzene	**ND**		ug/kg	1.0			ND	-		
Bromobenzene	**ND**		ug/kg	5.0			ND	-		
1,2,3-Trichlorobenzene	**ND**		ug/kg	5.0			ND	-		
trans-1,2-Dichloroethene	**ND**		ug/kg	5.0			ND	-		
Bromoform	**ND**		ug/kg	5.0			ND	-		
2-Hexanone	**ND**		ug/kg	25			ND	-		
sec-Butylbenzene	**ND**		ug/kg	1.0			ND	-		
1,1-Dichloropropene	**ND**		ug/kg	5.0			ND	-		
1,1-Dichloroethene	**ND**		ug/kg	5.0			ND	-		
1,1-Dichloroethane	**ND**		ug/kg	5.0			ND	-		
1,1,2-Trichloroethane	**ND**		ug/kg	5.0			ND	-		
1,1,2,2-Tetrachloroethane	**ND**		ug/kg	3.0			ND	-		
1,1,1-Trichloroethane	**ND**		ug/kg	5.0			ND	-		
1,2-Dichloropropane	**ND**		ug/kg	5.0			ND	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461826A - SW8260C										
BLK (CC21618-BLK)						Prepared:	Analyzed: 31-Dec-18			
p-Isopropyltoluene	**ND**		ug/kg	1.0			ND	-		
1,2-Dichloroethane	**ND**		ug/kg	5.0			ND	-		
Styrene	**ND**		ug/kg	5.0			ND	-		
1,2,3-Trichloropropane	**ND**		ug/kg	5.0			ND	-		
1,2,4-Trichlorobenzene	**ND**		ug/kg	5.0			ND	-		
1,2,4-Trimethylbenzene	**ND**		ug/kg	1.0			ND	-		
1,2-Dibromo-3-chloropropane	**ND**		ug/kg	5.0			ND	-		
1,2-Dibromoethane	**ND**		ug/kg	5.0			ND	-		
Bromodichloromethane	**ND**		ug/kg	5.0			ND	-		
1,1,1,2-Tetrachloroethane	**ND**		ug/kg	5.0			ND	-		
Trichlorotrifluoroethane	**ND**		ug/kg	5.0			ND	-		
Methylacetate	**ND**		ug/kg	5.0			ND	-		
Methylcyclohexane	**ND**		ug/kg	5.0			ND	-		
Carbon Disulfide	**ND**		ug/kg	5.0			ND	-		
Naphthalene	**ND**		ug/kg	5.0			ND	-		
Bromochloromethane	**ND**		ug/kg	5.0			ND	-		
n-Propylbenzene	**ND**		ug/kg	1.0			ND	-		
Methyl t-Butyl Ether (MTBE)	**ND**		ug/kg	1.0			ND	-		
Vinyl chloride	**ND**		ug/kg	5.0			ND	-		
Methylene chloride	**ND**		ug/kg	5.0			ND	-		
Trichlorofluoromethane	**ND**		ug/kg	5.0			ND	-		
Trichloroethene	**ND**		ug/kg	5.0			ND	-		
trans-1,4-dichloro-2-butene	**ND**		ug/kg	5.0			ND	-		
trans-1,3-Dichloropropene	**ND**		ug/kg	5.0			ND	-		
Tetrachloroethene	**ND**		ug/kg	5.0			ND	-		
Toluene	**ND**		ug/kg	1.0			ND	-		
tert-Butylbenzene	**ND**		ug/kg	1.0			ND	-		
cis-1,3-Dichloropropene	**ND**		ug/kg	5.0			ND	-		
Chloroethane	**ND**		ug/kg	5.0			ND	-		
o-Xylene	**ND**		ug/kg	2.0			ND	-		
n-Butylbenzene	**ND**		ug/kg	1.0			ND	-		
Chlorobenzene	**ND**		ug/kg	5.0			ND	-		
Methyl ethyl ketone	**ND**		ug/kg	5.0			ND	-		
Chloromethane	**ND**		ug/kg	5.0			ND	-		
Chloroform	**ND**		ug/kg	5.0			ND	-		
cis-1,2-Dichloroethene	**ND**		ug/kg	5.0			ND	-		
Cyclohexane	**ND**		ug/kg	5.0			ND	-		
Dibromochloromethane	**ND**		ug/kg	3.0			ND	-		
Dibromomethane	**ND**		ug/kg	5.0			ND	-		
Dichlorodifluoromethane	**ND**		ug/kg	5.0			ND	-		
Ethylbenzene	**ND**		ug/kg	1.0			ND	-		
Isopropylbenzene	**ND**		ug/kg	1.0			ND	-		
m&p-Xylene	**ND**		ug/kg	2.0			ND	-		
Carbon tetrachloride	**ND**		ug/kg	5.0			ND	-		
Surrogate: % Bromofluorobenzene	*97*		ug/kg		*50*		*97*	*70-130*		
Surrogate: % Dibromofluoromethane	*98*		ug/kg		*50*		*98*	*70-130*		
Surrogate: % 1,2-Dichlorobenzene-d4	*98*		ug/kg		*50*		*98*	*70-130*		
Surrogate: % Toluene-d8	*97*		ug/kg		*50*		*97*	*70-130*		
LCS (CC21618-LCS)						Prepared:	Analyzed: 31-Dec-18			
Benzene	**51.39**		ug/kg	1.0	50		103	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461826A - SW8260C										
LCS (CC21618-LCS)					Prepared: Analyzed: 31-Dec-18					
Trichloroethene	**50.97**		ug/kg	5.0	50		102	70-130		30
Vinyl chloride	**49.20**		ug/kg	5.0	50		98	70-130		30
Trichlorotrifluoroethane	**52.43**		ug/kg	5.0	50		105	70-130		30
Trichlorofluoromethane	**51.03**		ug/kg	5.0	50		102	70-130		30
1,2-Dichlorobenzene	**52.19**		ug/kg	5.0	50		104	70-130		30
Bromomethane	**48.91**		ug/kg	5.0	50		98	70-130		30
trans-1,4-dichloro-2-butene	**308.7**		ug/kg	5.0	250		123	70-130		30
Bromodichloromethane	**57.02**		ug/kg	5.0	50		114	70-130		30
Bromochloromethane	**53.12**		ug/kg	5.0	50		106	70-130		30
Acetone	**43.69**		ug/kg	10	50		87	70-130		30
4-Methyl-2-pentanone	**53.12**		ug/kg	25	50		106	70-130		30
2-Hexanone	**49.79**		ug/kg	25	50		100	70-130		30
2,2-Dichloropropane	**56.74**		ug/kg	5.0	50		113	70-130		30
1,4-dioxane	**1049**		ug/kg	100	1000		105	70-130		30
1,4-Dichlorobenzene	**52.01**		ug/kg	5.0	50		104	70-130		30
1,3-Dichloropropane	**52.74**		ug/kg	5.0	50		105	70-130		30
1,3-Dichlorobenzene	**53.02**		ug/kg	5.0	50		106	70-130		30
1,3,5-Trimethylbenzene	**52.16**		ug/kg	1.0	50		104	70-130		30
Carbon Disulfide	**58.31**		ug/kg	5.0	50		117	70-130		30
1,2,3-Trichlorobenzene	**60.23**		ug/kg	5.0	50		120	70-130		30
1,1,1,2-Tetrachloroethane	**56.05**		ug/kg	5.0	50		112	70-130		30
1,1,1-Trichloroethane	**53.09**		ug/kg	5.0	50		106	70-130		30
1,1,2,2-Tetrachloroethane	**55.47**		ug/kg	3.0	50		111	70-130		30
1,1,2-Trichloroethane	**52.83**		ug/kg	5.0	50		106	70-130		30
1,1-Dichloroethane	**52.37**		ug/kg	5.0	50		105	70-130		30
1,2-Dichloropropane	**53.23**		ug/kg	5.0	50		106	70-130		30
1,1-Dichloropropene	**53.74**		ug/kg	5.0	50		107	70-130		30
1,2-Dichloroethane	**53.63**		ug/kg	5.0	50		107	70-130		30
1,2,3-Trichloropropane	**51.70**		ug/kg	5.0	50		103	70-130		30
1,2,4-Trichlorobenzene	**59.06**		ug/kg	5.0	50		118	70-130		30
1,2,4-Trimethylbenzene	**52.72**		ug/kg	1.0	50		105	70-130		30
1,2-Dibromo-3-chloropropane	**61.47**		ug/kg	5.0	50		123	70-130		30
1,2-Dibromoethane	**53.75**		ug/kg	5.0	50		107	70-130		30
Bromoform	**59.05**		ug/kg	5.0	50		118	70-130		30
1,1-Dichloroethene	**54.92**		ug/kg	5.0	50		110	70-130		30
sec-Butylbenzene	**54.16**		ug/kg	1.0	50		108	70-130		30
Methylcyclohexane	**49.09**		ug/kg	5.0	50		98	70-130		30
Methylene chloride	**53.19**		ug/kg	5.0	50		106	70-130		30
Carbon tetrachloride	**53.13**		ug/kg	5.0	50		106	70-130		30
n-Butylbenzene	**55.80**		ug/kg	1.0	50		112	70-130		30
Bromobenzene	**52.81**		ug/kg	5.0	50		106	70-130		30
Methylacetate	**49.32**		ug/kg	5.0	50		99	70-130		30
p-Isopropyltoluene	**53.78**		ug/kg	1.0	50		108	70-130		30
Naphthalene	**65.17**		ug/kg	5.0	50		130	70-130		30
Styrene	**53.87**		ug/kg	5.0	50		108	70-130		30
tert-Butylbenzene	**52.06**		ug/kg	1.0	50		104	70-130		30
Tetrachloroethene	**53.01**		ug/kg	5.0	50		106	70-130		30
Toluene	**51.48**		ug/kg	1.0	50		103	70-130		30
trans-1,2-Dichloroethene	**57.20**		ug/kg	5.0	50		114	70-130		30
trans-1,3-Dichloropropene	**57.13**		ug/kg	5.0	50		114	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461826A - SW8260C										
LCS (CC21618-LCS)					Prepared: Analyzed: 31-Dec-18					
o-Xylene	**53.29**		ug/kg	2.0	50		107	70-130		30
Chloromethane	**46.22**		ug/kg	5.0	50		92	70-130		30
Chlorobenzene	**52.15**		ug/kg	5.0	50		104	70-130		30
n-Propylbenzene	**52.53**		ug/kg	1.0	50		105	70-130		30
Chloroform	**51.21**		ug/kg	5.0	50		102	70-130		30
Methyl t-Butyl Ether (MTBE)	**51.08**		ug/kg	1.0	50		102	70-130		30
cis-1,2-Dichloroethene	**52.09**		ug/kg	5.0	50		104	70-130		30
cis-1,3-Dichloropropene	**58.54**		ug/kg	5.0	50		117	70-130		30
Cyclohexane	**41.74**		ug/kg	5.0	50		83	70-130		30
Dibromomethane	**54.10**		ug/kg	5.0	50		108	70-130		30
Dichlorodifluoromethane	**48.36**		ug/kg	5.0	50		97	70-130		30
Ethylbenzene	**51.63**		ug/kg	1.0	50		103	70-130		30
Isopropylbenzene	**52.07**		ug/kg	1.0	50		104	70-130		30
m&p-Xylene	**102.6**		ug/kg	2.0	100		103	70-130		30
Methyl ethyl ketone	**46.95**		ug/kg	5.0	50		94	70-130		30
Dibromochloromethane	**61.82**		ug/kg	3.0	50		124	70-130		30
Chloroethane	**52.75**		ug/kg	5.0	50		106	70-130		30
Surrogate: % Toluene-d8	*50.78*		ug/kg		*50*		*102*	*70-130*		
Surrogate: % 1,2-Dichlorobenzene-d4	*50.76*		ug/kg		*50*		*102*	*70-130*		
Surrogate: % Dibromofluoromethane	*51.98*		ug/kg		*50*		*104*	*70-130*		
Surrogate: % Bromofluorobenzene	*50.51*		ug/kg		*50*		*101*	*70-130*		
LCSD (CC21618-LCSD)					Prepared: Analyzed: 31-Dec-18					
1,1,2,2-Tetrachloroethane	**53.77**		ug/kg	3.0	50		108	70-130	2.7	30
1,2,3-Trichlorobenzene	**58.79**		ug/kg	5.0	50		118	70-130	1.7	30
1,1,1,2-Tetrachloroethane	**55.70**		ug/kg	5.0	50		111	70-130	0.9	30
1,1,1-Trichloroethane	**53.16**		ug/kg	5.0	50		106	70-130	0.0	30
Dibromochloromethane	**61.46**		ug/kg	3.0	50		123	70-130	0.8	30
Chlorobenzene	**51.55**		ug/kg	5.0	50		103	70-130	1.0	30
Methyl t-Butyl Ether (MTBE)	**49.15**		ug/kg	1.0	50		98	70-130	4.0	30
Methyl ethyl ketone	**45.50**		ug/kg	5.0	50		91	70-130	3.2	30
m&p-Xylene	**102.6**		ug/kg	2.0	100		103	70-130	0.0	30
Isopropylbenzene	**52.43**		ug/kg	1.0	50		105	70-130	1.0	30
Ethylbenzene	**51.24**		ug/kg	1.0	50		102	70-130	1.0	30
Methylcyclohexane	**48.56**		ug/kg	5.0	50		97	70-130	1.0	30
Dibromomethane	**53.63**		ug/kg	5.0	50		107	70-130	0.9	30
Methylene chloride	**50.84**		ug/kg	5.0	50		102	70-130	3.8	30
Cyclohexane	**41.74**		ug/kg	5.0	50		83	70-130	0.0	30
cis-1,3-Dichloropropene	**57.63**		ug/kg	5.0	50		115	70-130	1.7	30
cis-1,2-Dichloroethene	**51.43**		ug/kg	5.0	50		103	70-130	1.0	30
Chloromethane	**46.08**		ug/kg	5.0	50		92	70-130	0.0	30
Chloroform	**51.52**		ug/kg	5.0	50		103	70-130	1.0	30
Chloroethane	**51.11**		ug/kg	5.0	50		102	70-130	3.8	30
Dichlorodifluoromethane	**47.88**		ug/kg	5.0	50		96	70-130	1.0	30
Tetrachloroethene	**52.92**		ug/kg	5.0	50		106	70-130	0.0	30
Vinyl chloride	**49.62**		ug/kg	5.0	50		99	70-130	1.0	30
Trichlorotrifluoroethane	**51.22**		ug/kg	5.0	50		102	70-130	2.9	30
Trichlorofluoromethane	**49.65**		ug/kg	5.0	50		99	70-130	3.0	30
Trichloroethene	**50.87**		ug/kg	5.0	50		102	70-130	0.0	30
trans-1,4-dichloro-2-butene	**291.9**		ug/kg	5.0	250		117	70-130	5.0	30
trans-1,3-Dichloropropene	**56.46**		ug/kg	5.0	50		113	70-130	0.9	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461826A - SW8260C										
LCSD (CC21618-LCSD)					Prepared: Analyzed: 31-Dec-18					
Methylacetate	**43.97**		ug/kg	5.0	50		88	70-130	11.8	30
Toluene	**51.79**		ug/kg	1.0	50		104	70-130	1.0	30
Naphthalene	**62.95**		ug/kg	5.0	50		126	70-130	3.1	30
tert-Butylbenzene	**52.53**		ug/kg	1.0	50		105	70-130	1.0	30
Styrene	**53.44**		ug/kg	5.0	50		107	70-130	0.9	30
sec-Butylbenzene	**54.37**		ug/kg	1.0	50		109	70-130	0.9	30
p-Isopropyltoluene	**53.77**		ug/kg	1.0	50		108	70-130	0.0	30
o-Xylene	**53.10**		ug/kg	2.0	50		106	70-130	0.9	30
n-Butylbenzene	**55.46**		ug/kg	1.0	50		111	70-130	0.9	30
trans-1,2-Dichloroethene	**55.25**		ug/kg	5.0	50		111	70-130	2.7	30
1,2,4-Trichlorobenzene	**57.32**		ug/kg	5.0	50		115	70-130	2.6	30
n-Propylbenzene	**52.90**		ug/kg	1.0	50		106	70-130	0.9	30
Carbon tetrachloride	**53.21**		ug/kg	5.0	50		106	70-130	0.0	30
1,1-Dichloroethane	**52.86**		ug/kg	5.0	50		106	70-130	0.9	30
1,1,2-Trichloroethane	**52.30**		ug/kg	5.0	50		105	70-130	0.9	30
1,1-Dichloropropene	**53.58**		ug/kg	5.0	50		107	70-130	0.0	30
1,2,3-Trichloropropane	**49.96**		ug/kg	5.0	50		100	70-130	3.0	30
1,2,4-Trimethylbenzene	**53.44**		ug/kg	1.0	50		107	70-130	1.9	30
1,2-Dibromo-3-chloropropane	**59.42**		ug/kg	5.0	50		119	70-130	3.3	30
1,2-Dibromoethane	**53.66**		ug/kg	5.0	50		107	70-130	0.0	30
1,2-Dichlorobenzene	**52.27**		ug/kg	5.0	50		105	70-130	1.0	30
1,2-Dichloroethane	**52.84**		ug/kg	5.0	50		106	70-130	0.9	30
1,2-Dichloropropane	**53.02**		ug/kg	5.0	50		106	70-130	0.0	30
1,3,5-Trimethylbenzene	**52.68**		ug/kg	1.0	50		105	70-130	1.0	30
1,3-Dichlorobenzene	**52.48**		ug/kg	5.0	50		105	70-130	0.9	30
Bromodichloromethane	**55.92**		ug/kg	5.0	50		112	70-130	1.8	30
Carbon Disulfide	**55.88**		ug/kg	5.0	50		112	70-130	4.4	30
1,1-Dichloroethene	**52.80**		ug/kg	5.0	50		106	70-130	3.7	30
Bromoform	**57.04**		ug/kg	5.0	50		114	70-130	3.4	30
1,3-Dichloropropane	**51.37**		ug/kg	5.0	50		103	70-130	1.9	30
Bromochloromethane	**51.88**		ug/kg	5.0	50		104	70-130	1.9	30
Bromobenzene	**53.68**		ug/kg	5.0	50		107	70-130	0.9	30
Benzene	**51.17**		ug/kg	1.0	50		102	70-130	1.0	30
2,2-Dichloropropane	**56.85**		ug/kg	5.0	50		114	70-130	0.9	30
4-Methyl-2-pentanone	**49.47**		ug/kg	25	50		99	70-130	6.8	30
2-Hexanone	**45.78**		ug/kg	25	50		92	70-130	8.3	30
1,4-Dichlorobenzene	**51.92**		ug/kg	5.0	50		104	70-130	0.0	30
Bromomethane	**48.51**		ug/kg	5.0	50		97	70-130	1.0	30
1,4-dioxane	**1072**		ug/kg	100	1000		107	70-130	1.9	30
Acetone	**36.95**		ug/kg	10	50		74	70-130	16.1	30
Surrogate: % 1,2-Dichlorobenzene-d4	*50.90*		ug/kg		*50*		*102*	*70-130*		
Surrogate: % Bromofluorobenzene	*50.53*		ug/kg		*50*		*101*	*70-130*		
Surrogate: % Dibromofluoromethane	*51.90*		ug/kg		*50*		*104*	*70-130*		
Surrogate: % Toluene-d8	*50.82*		ug/kg		*50*		*102*	*70-130*		
MS (CC21618-MS)			**Source: CC21618**		Prepared: Analyzed: 01-Jan-19					
Dibromomethane	**46.90**		ug/kg	5.0	50		94	70-130		30
Dichlorodifluoromethane	**45.72**		ug/kg	5.0	50		91	70-130		30
Ethylbenzene	**48.13**		ug/kg	1.0	50		96	70-130		30
Isopropylbenzene	**53.02**		ug/kg	1.0	50		106	70-130		30
Dibromochloromethane	**53.47**		ug/kg	3.0	50		107	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461826A - SW8260C										
MS (CC21618-MS)			**Source: CC21618**			Prepared: Analyzed: 01-Jan-19				
Methyl ethyl ketone	**39.66**		ug/kg	5.0	50		79	70-130		30
Methyl t-Butyl Ether (MTBE)	**42.70**		ug/kg	1.0	50		85	70-130		30
Methylacetate	**11.09**	m	ug/kg	5.0	50		22	70-130		30
m&p-Xylene	**89.60**		ug/kg	2.0	100		90	70-130		30
Cyclohexane	**37.36**		ug/kg	5.0	50		75	70-130		30
cis-1,3-Dichloropropene	**48.30**		ug/kg	5.0	50		97	70-130		30
cis-1,2-Dichloroethene	**46.95**		ug/kg	5.0	50		94	70-130		30
Chloroform	**47.45**		ug/kg	5.0	50		95	70-130		30
Chloroethane	**49.86**		ug/kg	5.0	50		100	70-130		30
Carbon tetrachloride	**48.85**		ug/kg	5.0	50		98	70-130		30
Chlorobenzene	**46.95**		ug/kg	5.0	50		94	60-133		30
Methylcyclohexane	**40.32**		ug/kg	5.0	50		81	70-130		30
Vinyl chloride	**46.80**		ug/kg	5.0	50		94	70-130		30
Chloromethane	**43.86**		ug/kg	5.0	50		88	70-130		30
tert-Butylbenzene	**53.58**		ug/kg	1.0	50		107	70-130		30
1,2-Dichlorobenzene	**51.55**		ug/kg	5.0	50		103	70-130		30
Carbon Disulfide	**44.83**		ug/kg	5.0	50		90	70-130		30
Trichlorotrifluoroethane	**45.97**		ug/kg	5.0	50		92	70-130		30
Trichloroethene	**83.73**	m	ug/kg	5.0	50		167	62-137		30
trans-1,4-dichloro-2-butene	**264.9**		ug/kg	5.0	250		106	70-130		30
trans-1,3-Dichloropropene	**44.00**		ug/kg	5.0	50		88	70-130		30
trans-1,2-Dichloroethene	**48.45**		ug/kg	5.0	50		97	70-130		30
Trichlorofluoromethane	**46.71**		ug/kg	5.0	50		93	70-130		30
Tetrachloroethene	**46.78**		ug/kg	5.0	50		94	70-130		30
Methylene chloride	**49.85**		ug/kg	5.0	50		100	70-130		30
Styrene	**45.82**		ug/kg	5.0	50		92	70-130		30
sec-Butylbenzene	**55.86**		ug/kg	1.0	50		112	70-130		30
p-Isopropyltoluene	**54.97**		ug/kg	1.0	50		110	70-130		30
o-Xylene	**48.39**		ug/kg	2.0	50		97	70-130		30
n-Propylbenzene	**53.59**		ug/kg	1.0	50		107	70-130		30
n-Butylbenzene	**56.23**		ug/kg	1.0	50		112	70-130		30
Naphthalene	**64.85**		ug/kg	5.0	50		130	70-130		30
Toluene	**46.89**		ug/kg	1.0	50		94	59-139		30
1,1-Dichloroethene	**48.32**		ug/kg	5.0	50		97	59-172		30
1,2-Dibromoethane	**49.09**		ug/kg	5.0	50		98	70-130		30
1,2-Dibromo-3-chloropropane	**55.75**		ug/kg	5.0	50		112	70-130		30
1,2,4-Trimethylbenzene	**53.08**		ug/kg	1.0	50		106	70-130		30
1,2,4-Trichlorobenzene	**56.78**		ug/kg	5.0	50		114	70-130		30
1,2,3-Trichloropropane	**50.66**		ug/kg	5.0	50		101	70-130		30
1,2-Dichloroethane	**48.77**		ug/kg	5.0	50		98	70-130		30
1,1-Dichloropropene	**49.94**		ug/kg	5.0	50		100	70-130		30
1,2-Dichloropropane	**49.35**		ug/kg	5.0	50		99	70-130		30
1,1-Dichloroethane	**49.10**		ug/kg	5.0	50		98	70-130		30
1,1,2-Trichloroethane	**46.28**		ug/kg	5.0	50		93	70-130		30
1,1,2,2-Tetrachloroethane	**51.72**		ug/kg	3.0	50		103	70-130		30
1,1,1-Trichloroethane	**50.38**		ug/kg	5.0	50		101	70-130		30
1,1,1,2-Tetrachloroethane	**52.04**		ug/kg	5.0	50		104	70-130		30
Bromomethane	**46.30**		ug/kg	5.0	50		93	70-130		30
1,2,3-Trichlorobenzene	**58.91**		ug/kg	5.0	50		118	70-130		30
2,2-Dichloropropane	**52.08**		ug/kg	5.0	50		104	70-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461826A - SW8260C										
MS (CC21618-MS)			**Source: CC21618**			Prepared: Analyzed: 01-Jan-19				
Bromoform	**45.53**		ug/kg	5.0	50		91	70-130		30
Bromodichloromethane	**50.97**		ug/kg	5.0	50		102	70-130		30
Bromochloromethane	**47.89**		ug/kg	5.0	50		96	70-130		30
Bromobenzene	**51.82**		ug/kg	5.0	50		104	70-130		30
Benzene	**48.20**		ug/kg	1.0	50		96	66-142		30
Acetone	**50.98**	m	ug/kg	10	50		45	70-130		30
2-Hexanone	**41.02**		ug/kg	25	50		82	70-130		30
1,4-dioxane	**1067**		ug/kg	100	1000		107	70-130		30
1,4-Dichlorobenzene	**51.39**		ug/kg	5.0	50		103	70-130		30
1,3-Dichloropropane	**49.08**		ug/kg	5.0	50		98	70-130		30
1,3-Dichlorobenzene	**52.41**		ug/kg	5.0	50		105	70-130		30
1,3,5-Trimethylbenzene	**53.31**		ug/kg	1.0	50		107	70-130		30
4-Methyl-2-pentanone	**45.65**		ug/kg	25	50		91	70-130		30
Surrogate: % Bromofluorobenzene	*50.77*		ug/kg		*50*		*102*	*70-130*		
Surrogate: % 1,2-Dichlorobenzene-d4	*50.19*		ug/kg		*50*		*100*	*70-130*		
Surrogate: % Dibromofluoromethane	*50.16*		ug/kg		*50*		*100*	*70-130*		
Surrogate: % Toluene-d8	*50.04*		ug/kg		*50*		*100*	*70-130*		
MSD (CC21618-MSD)			**Source: CC21618**			Prepared: Analyzed: 01-Jan-19				
cis-1,2-Dichloroethene	**47.18**		ug/kg	5.0	50		94	70-130	0.0	30
Methyl ethyl ketone	**44.21**		ug/kg	5.0	50		88	70-130	10.8	30
m&p-Xylene	**90.89**		ug/kg	2.0	100		91	70-130	1.1	30
Isopropylbenzene	**53.09**		ug/kg	1.0	50		106	70-130	0.0	30
Ethylbenzene	**48.02**		ug/kg	1.0	50		96	70-130	0.0	30
Dichlorodifluoromethane	**46.92**		ug/kg	5.0	50		94	70-130	3.2	30
Dibromomethane	**48.62**		ug/kg	5.0	50		97	70-130	3.1	30
Dibromochloromethane	**55.30**		ug/kg	3.0	50		111	70-130	3.7	30
trans-1,4-dichloro-2-butene	**264.4**		ug/kg	5.0	250		106	70-130	0.0	30
cis-1,3-Dichloropropene	**49.44**		ug/kg	5.0	50		99	70-130	2.0	30
Methylcyclohexane	**40.62**		ug/kg	5.0	50		81	70-130	0.0	30
Chloromethane	**44.51**		ug/kg	5.0	50		89	70-130	1.1	30
Chloroform	**48.67**		ug/kg	5.0	50		97	70-130	2.1	30
Chloroethane	**48.76**		ug/kg	5.0	50		98	70-130	2.0	30
Chlorobenzene	**47.05**		ug/kg	5.0	50		94	60-133	0.0	30
Carbon tetrachloride	**50.15**		ug/kg	5.0	50		100	70-130	2.0	30
Carbon Disulfide	**44.64**		ug/kg	5.0	50		89	70-130	1.1	30
Bromomethane	**46.49**		ug/kg	5.0	50		93	70-130	0.0	30
Cyclohexane	**37.62**		ug/kg	5.0	50		75	70-130	0.0	30
sec-Butylbenzene	**54.88**		ug/kg	1.0	50		110	70-130	1.8	30
Trichloroethene	**84.38**	m	ug/kg	5.0	50		169	62-137	1.2	30
n-Butylbenzene	**55.10**		ug/kg	1.0	50		110	70-130	1.8	30
Bromoform	**49.26**		ug/kg	5.0	50		99	70-130	8.4	30
trans-1,3-Dichloropropene	**47.07**		ug/kg	5.0	50		94	70-130	6.6	30
trans-1,2-Dichloroethene	**48.28**		ug/kg	5.0	50		97	70-130	0.0	30
Toluene	**47.73**		ug/kg	1.0	50		95	59-139	1.1	30
Tetrachloroethene	**48.61**		ug/kg	5.0	50		97	70-130	3.1	30
Methyl t-Butyl Ether (MTBE)	**43.21**		ug/kg	1.0	50		86	70-130	1.2	30
Styrene	**46.01**		ug/kg	5.0	50		92	70-130	0.0	30
Methylacetate	**8.940**	m	ug/kg	5.0	50		18	70-130	20.0	30
p-Isopropyltoluene	**54.15**		ug/kg	1.0	50		108	70-130	1.8	30
Trichlorotrifluoroethane	**47.04**		ug/kg	5.0	50		94	70-130	2.2	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461826A - SW8260C										
MSD (CC21618-MSD)			**Source: CC21618**			Prepared: Analyzed: 01-Jan-19				
n-Propylbenzene	**53.26**		ug/kg	1.0	50		107	70-130	0.0	30
Vinyl chloride	**46.73**		ug/kg	5.0	50		93	70-130	1.1	30
Naphthalene	**65.25**		ug/kg	5.0	50		130	70-130	0.0	30
Methylene chloride	**49.65**		ug/kg	5.0	50		99	70-130	1.0	30
Trichlorofluoromethane	**47.22**		ug/kg	5.0	50		94	70-130	1.1	30
tert-Butylbenzene	**52.68**		ug/kg	1.0	50		105	70-130	1.9	30
1,2,4-Trimethylbenzene	**52.54**		ug/kg	1.0	50		105	70-130	0.9	30
o-Xylene	**48.58**		ug/kg	2.0	50		97	70-130	0.0	30
1,1,1,2-Tetrachloroethane	**51.93**		ug/kg	5.0	50		104	70-130	0.0	30
1,1,1-Trichloroethane	**51.50**		ug/kg	5.0	50		103	70-130	2.0	30
1,1,2,2-Tetrachloroethane	**51.52**		ug/kg	3.0	50		103	70-130	0.0	30
1,1,2-Trichloroethane	**47.29**		ug/kg	5.0	50		95	70-130	2.1	30
1,1-Dichloroethane	**50.33**		ug/kg	5.0	50		101	70-130	3.0	30
1,1-Dichloroethene	**48.86**		ug/kg	5.0	50		98	59-172	1.0	30
1,1-Dichloropropene	**50.27**		ug/kg	5.0	50		101	70-130	1.0	30
1,2,3-Trichlorobenzene	**59.09**		ug/kg	5.0	50		118	70-130	0.0	30
1,2,4-Trichlorobenzene	**56.17**		ug/kg	5.0	50		112	70-130	1.8	30
Bromodichloromethane	**52.14**		ug/kg	5.0	50		104	70-130	1.9	30
1,2-Dibromo-3-chloropropane	**54.16**		ug/kg	5.0	50		108	70-130	3.6	30
1,2-Dibromoethane	**50.11**		ug/kg	5.0	50		100	70-130	2.0	30
1,2-Dichlorobenzene	**51.14**		ug/kg	5.0	50		102	70-130	1.0	30
Acetone	**52.14**	m	ug/kg	10	50		47	70-130	4.3	30
Bromochloromethane	**49.28**		ug/kg	5.0	50		99	70-130	3.1	30
1,2,3-Trichloropropane	**50.70**		ug/kg	5.0	50		101	70-130	0.0	30
Benzene	**48.40**		ug/kg	1.0	50		97	66-142	1.0	30
1,2-Dichloroethane	**50.64**		ug/kg	5.0	50		101	70-130	3.0	30
4-Methyl-2-pentanone	**49.42**		ug/kg	25	50		99	70-130	8.4	30
2-Hexanone	**44.15**		ug/kg	25	50		88	70-130	7.1	30
2,2-Dichloropropane	**53.02**		ug/kg	5.0	50		106	70-130	1.9	30
1,4-Dichlorobenzene	**50.79**		ug/kg	5.0	50		102	70-130	1.0	30
1,2-Dichloropropane	**49.74**		ug/kg	5.0	50		99	70-130	0.0	30
1,3-Dichloropropane	**49.99**		ug/kg	5.0	50		100	70-130	2.0	30
1,3-Dichlorobenzene	**51.99**		ug/kg	5.0	50		104	70-130	1.0	30
1,3,5-Trimethylbenzene	**52.20**		ug/kg	1.0	50		104	70-130	2.8	30
1,4-dioxane	**1085**		ug/kg	100	1000		109	70-130	1.9	30
Bromobenzene	**51.70**		ug/kg	5.0	50		103	70-130	1.0	30
Surrogate: % Dibromofluoromethane	*50.43*		ug/kg		*50*		*101*	*70-130*		
Surrogate: % 1,2-Dichlorobenzene-d4	*50.23*		ug/kg		*50*		*100*	*70-130*		
Surrogate: % Bromofluorobenzene	*50.22*		ug/kg		*50*		*100*	*70-130*		
Surrogate: % Toluene-d8	*49.70*		ug/kg		*50*		*99*	*70-130*		
Batch 461964A - SW8260C										
BLK (CC21849-BLK)						Prepared: Analyzed: 02-Jan-19				
Trichloroethene	**ND**		ug/kg	5.0			ND	-		
cis-1,2-Dichloroethene	**ND**		ug/kg	5.0			ND	-		
LCS (CC21849-LCS)						Prepared: Analyzed: 02-Jan-19				
cis-1,2-Dichloroethene	**55.23**		ug/kg	5.0	50		110	70-130		30
Trichloroethene	**55.65**		ug/kg	5.0	50		111	70-130		30
LCSD (CC21849-LCSD)						Prepared: Analyzed: 02-Jan-19				
Trichloroethene	**54.18**		ug/kg	5.0	50		108	70-130	2.7	30
cis-1,2-Dichloroethene	**53.99**		ug/kg	5.0	50		108	70-130	1.8	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8260C										
Batch 461964A - SW8260C										
MS (CC21849-MS)			**Source: CC21849**			Prepared: Analyzed: 02-Jan-19				
cis-1,2-Dichloroethene	**46.29**		ug/kg	5.0	50		93	70-130		30
Trichloroethene	**48.20**		ug/kg	5.0	50		96	62-137		30
MSD (CC21849-MSD)			**Source: CC21849**			Prepared: Analyzed: 02-Jan-19				
cis-1,2-Dichloroethene	**40.65**		ug/kg	5.0	50		81	70-130	13.8	30
Trichloroethene	**40.66**		ug/kg	5.0	50		81	62-137	16.9	30
SW8270D										
Batch 461562A - SW3545A										
BLK (CC21618-BLK)						Prepared: 28-Dec-18 Analyzed: 29-Dec-18				
4-Nitrophenol	**ND**		ug/kg	230			ND	-		
3-Nitroaniline	**ND**		ug/kg	330			ND	-		
4,6-Dinitro-2-methylphenol	**ND**		ug/kg	230			ND	-		
4-Bromophenyl phenyl ether	**ND**		ug/kg	230			ND	-		
4-Chloro-3-methylphenol	**ND**		ug/kg	230			ND	-		
4-Chloroaniline	**ND**		ug/kg	230			ND	-		
3,3'-Dichlorobenzidine	**ND**		ug/kg	130			ND	-		
4-Nitroaniline	**ND**		ug/kg	230			ND	-		
Acenaphthene	**ND**		ug/kg	230			ND	-		
Acenaphthylene	**ND**		ug/kg	130			ND	-		
Acetophenone	**ND**		ug/kg	230			ND	-		
Anthracene	**ND**		ug/kg	230			ND	-		
Atrazine	**ND**		ug/kg	130			ND	-		
Benz(a)anthracene	**ND**		ug/kg	230			ND	-		
4-Chlorophenyl phenyl ether	**ND**		ug/kg	230			ND	-		
2,6-Dinitrotoluene	**ND**		ug/kg	130			ND	-		
Benzaldehyde	**ND**		ug/kg	230			ND	-		
1,2,4,5-Tetrachlorobenzene	**ND**		ug/kg	230			ND	-		
2,3,4,6-tetrachlorophenol	**ND**		ug/kg	230			ND	-		
2,4,5-Trichlorophenol	**ND**		ug/kg	230			ND	-		
2,4,6-Trichlorophenol	**ND**		ug/kg	130			ND	-		
2,4-Dichlorophenol	**ND**		ug/kg	130			ND	-		
2,4-Dimethylphenol	**ND**		ug/kg	230			ND	-		
3&4-Methylphenol (m&p-cresol)	**ND**		ug/kg	230			ND	-		
2,4-Dinitrotoluene	**ND**		ug/kg	130			ND	-		
1,1-Biphenyl	**ND**		ug/kg	230			ND	-		
2-Chloronaphthalene	**ND**		ug/kg	230			ND	-		
2-Chlorophenol	**ND**		ug/kg	230			ND	-		
2-Methylnaphthalene	**ND**		ug/kg	230			ND	-		
2-Methylphenol (o-cresol)	**ND**		ug/kg	230			ND	-		
2-Nitroaniline	**ND**		ug/kg	330			ND	-		
Fluorene	**ND**		ug/kg	230			ND	-		
2-Nitrophenol	**ND**		ug/kg	230			ND	-		
2,4-Dinitrophenol	**ND**		ug/kg	230			ND	-		
N-Nitrosodimethylamine	**ND**		ug/kg	230			ND	-		
Di-n-octylphthalate	**ND**		ug/kg	230			ND	-		
Hexachlorobutadiene	**ND**		ug/kg	230			ND	-		
Hexachlorocyclopentadiene	**ND**		ug/kg	230			ND	-		
Hexachloroethane	**ND**		ug/kg	130			ND	-		
Indeno(1,2,3-cd)pyrene	**ND**		ug/kg	230			ND	-		
Isophorone	**ND**		ug/kg	130			ND	-		
Hexachlorobenzene	**ND**		ug/kg	130			ND	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461562A - SW3545A										
BLK (CC21618-BLK)						Prepared: 28-Dec-18 Analyzed: 29-Dec-18				
Nitrobenzene	**ND**		ug/kg	130			ND	-		
Fluoranthene	**ND**		ug/kg	230			ND	-		
N-Nitrosodi-n-propylamine	**ND**		ug/kg	130			ND	-		
N-Nitrosodiphenylamine	**ND**		ug/kg	130			ND	-		
Pentachlorophenol	**ND**		ug/kg	230			ND	-		
Phenanthrene	**ND**		ug/kg	130			ND	-		
Phenol	**ND**		ug/kg	230			ND	-		
Pyrene	**ND**		ug/kg	230			ND	-		
Naphthalene	**ND**		ug/kg	230			ND	-		
Bis(2-ethylhexyl)phthalate	**ND**		ug/kg	230			ND	-		
Benzo(b)fluoranthene	**ND**		ug/kg	160			ND	-		
Benzo(ghi)perylene	**ND**		ug/kg	230			ND	-		
Benzo(k)fluoranthene	**ND**		ug/kg	230			ND	-		
Benzyl butyl phthalate	**ND**		ug/kg	230			ND	-		
Bis(2-chloroethoxy)methane	**ND**		ug/kg	230			ND	-		
Bis(2-chloroisopropyl)ether	**ND**		ug/kg	230			ND	-		
Benzo(a)pyrene	**ND**		ug/kg	130			ND	-		
Caprolactam	**ND**		ug/kg	230			ND	-		
Carbazole	**ND**		ug/kg	230			ND	-		
Chrysene	**ND**		ug/kg	230			ND	-		
Dibenz(a,h)anthracene	**ND**		ug/kg	130			ND	-		
Dibenzofuran	**ND**		ug/kg	230			ND	-		
Diethyl phthalate	**ND**		ug/kg	230			ND	-		
Dimethylphthalate	**ND**		ug/kg	230			ND	-		
Di-n-butylphthalate	**ND**		ug/kg	670			ND	-		
Bis(2-chloroethyl)ether	**ND**		ug/kg	130			ND	-		
Surrogate: % 2-Fluorobiphenyl	*70*		ug/kg		*50*		*70*	*30-130*		
Surrogate: % Terphenyl-d14	*72*		ug/kg		*50*		*72*	*30-130*		
Surrogate: % Phenol-d5	*72*		ug/kg		*75*		*72*	*30-130*		
Surrogate: % Nitrobenzene-d5	*69*		ug/kg		*50*		*69*	*30-130*		
Surrogate: % 2-Fluorophenol	*70*		ug/kg		*75*		*70*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*58*		ug/kg		*75*		*58*	*30-130*		
LCS (CC21618-LCS)						Prepared: 28-Dec-18 Analyzed: 29-Dec-18				
Bis(2-chloroethoxy)methane	**36.47**		ug/kg	230	50		73	30-130		30
Dibenzofuran	**38.29**		ug/kg	230	50		77	30-130		30
Dibenz(a,h)anthracene	**43.00**		ug/kg	130	50		86	30-130		30
Chrysene	**39.08**		ug/kg	230	50		78	30-130		30
Carbazole	**41.00**		ug/kg	230	50		82	30-130		30
Caprolactam	**41.12**		ug/kg	230	50		82	30-130		30
Bis(2-ethylhexyl)phthalate	**46.40**		ug/kg	230	50		93	30-130		30
Atrazine	**39.31**		ug/kg	130	50		79	30-130		30
Bis(2-chloroethyl)ether	**29.38**		ug/kg	130	50		59	30-130		30
Fluoranthene	**41.29**		ug/kg	230	50		83	30-130		30
Benzyl butyl phthalate	**44.61**		ug/kg	230	50		89	30-130		30
Benzo(k)fluoranthene	**40.71**		ug/kg	230	50		81	30-130		30
Benzo(ghi)perylene	**39.12**		ug/kg	230	50		78	30-130		30
Benzo(b)fluoranthene	**40.92**		ug/kg	160	50		82	30-130		30
Benzo(a)pyrene	**40.56**		ug/kg	130	50		81	30-130		30
Benzaldehyde	**7.766**	I	ug/kg	230	50		16	30-130		30
Benz(a)anthracene	**39.87**		ug/kg	230	50		80	30-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461562A - SW3545A										
LCS (CC21618-LCS)					Prepared: 28-Dec-18 Analyzed: 29-Dec-18					
Bis(2-chloroisopropyl)ether	**28.70**		ug/kg	230	50		57	30-130		30
Isophorone	**33.31**		ug/kg	130	50		67	30-130		30
Pyrene	**42.03**		ug/kg	230	50		84	30-130		30
Phenol	**41.38**		ug/kg	230	50		83	30-130		30
Phenanthrene	**38.16**		ug/kg	130	50		76	30-130		30
Pentachlorophenol	**38.30**		ug/kg	230	50		77	30-130		30
N-Nitrosodiphenylamine	**40.88**		ug/kg	130	50		82	30-130		30
N-Nitrosodi-n-propylamine	**36.92**		ug/kg	130	50		74	30-130		30
N-Nitrosodimethylamine	**32.95**		ug/kg	230	50		66	30-130		30
Diethyl phthalate	**40.28**		ug/kg	230	50		81	30-130		30
Naphthalene	**33.26**		ug/kg	230	50		67	30-130		30
Di-n-butylphthalate	**43.94**		ug/kg	670	50		88	30-130		30
Indeno(1,2,3-cd)pyrene	**43.01**		ug/kg	230	50		86	30-130		30
Hexachloroethane	**30.52**		ug/kg	130	50		61	30-130		30
Hexachlorocyclopentadiene	**30.17**		ug/kg	230	50		60	30-130		30
Hexachlorobutadiene	**32.07**		ug/kg	230	50		64	30-130		30
Hexachlorobenzene	**38.68**		ug/kg	130	50		77	30-130		30
Fluorene	**39.58**		ug/kg	230	50		79	30-130		30
Dimethylphthalate	**40.69**		ug/kg	230	50		81	30-130		30
Nitrobenzene	**34.58**		ug/kg	130	50		69	30-130		30
2-Methylphenol (o-cresol)	**39.63**		ug/kg	230	50		79	30-130		30
Anthracene	**39.56**		ug/kg	230	50		79	30-130		30
1,1-Biphenyl	**35.10**		ug/kg	230	50		70	30-130		30
1,2,4,5-Tetrachlorobenzene	**34.02**		ug/kg	230	50		68	30-130		30
2,3,4,6-tetrachlorophenol	**37.40**		ug/kg	230	50		75	30-130		30
2,4,5-Trichlorophenol	**42.82**		ug/kg	230	50		86	30-130		30
2,4,6-Trichlorophenol	**40.72**		ug/kg	130	50		81	30-130		30
2,4-Dichlorophenol	**38.81**		ug/kg	130	50		78	30-130		30
2,4-Dimethylphenol	**36.21**		ug/kg	230	50		72	30-130		30
2,4-Dinitrophenol	**10.18**	I	ug/kg	230	50		20	30-130		30
2,4-Dinitrotoluene	**42.49**		ug/kg	130	50		85	30-130		30
2,6-Dinitrotoluene	**41.72**		ug/kg	130	50		83	30-130		30
2-Chloronaphthalene	**37.59**		ug/kg	230	50		75	30-130		30
2-Chlorophenol	**36.82**		ug/kg	230	50		74	30-130		30
2-Methylnaphthalene	**35.05**		ug/kg	230	50		70	30-130		30
4,6-Dinitro-2-methylphenol	**21.44**		ug/kg	230	50		43	30-130		30
Acetophenone	**33.41**		ug/kg	230	50		67	30-130		30
Acenaphthylene	**37.08**		ug/kg	130	50		74	30-130		30
Acenaphthene	**37.94**		ug/kg	230	50		76	30-130		30
4-Nitrophenol	**44.23**		ug/kg	230	50		88	30-130		30
4-Nitroaniline	**42.40**		ug/kg	230	50		85	30-130		30
4-Chlorophenyl phenyl ether	**39.53**		ug/kg	230	50		79	30-130		30
4-Chloroaniline	**28.27**		ug/kg	230	50		57	30-130		30
Di-n-octylphthalate	**46.02**		ug/kg	230	50		92	30-130		30
4-Bromophenyl phenyl ether	**40.30**		ug/kg	230	50		81	30-130		30
2-Nitroaniline	**63.44**		ug/kg	330	50		127	30-130		30
3-Nitroaniline	**45.89**		ug/kg	330	50		92	30-130		30
3,3'-Dichlorobenzidine	**37.93**		ug/kg	130	50		76	30-130		30
3&4-Methylphenol (m&p-cresol)	**39.50**		ug/kg	230	50		79	30-130		30
2-Nitrophenol	**38.20**		ug/kg	230	50		76	30-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461562A - SW3545A										
LCS (CC21618-LCS)					Prepared: 28-Dec-18 Analyzed: 29-Dec-18					
4-Chloro-3-methylphenol	**41.50**		ug/kg	230	50		83	30-130		30
Surrogate: % 2,4,6-Tribromophenol	*59.87*		ug/kg		*75*		*80*	*30-130*		
Surrogate: % 2-Fluorophenol	*53.05*		ug/kg		*75*		*71*	*30-130*		
Surrogate: % 2-Fluorobiphenyl	*35.87*		ug/kg		*50*		*72*	*30-130*		
Surrogate: % Phenol-d5	*54.31*		ug/kg		*75*		*72*	*30-130*		
Surrogate: % Terphenyl-d14	*37.06*		ug/kg		*50*		*74*	*30-130*		
Surrogate: % Nitrobenzene-d5	*34.37*		ug/kg		*50*		*69*	*30-130*		
LCSD (CC21618-LCSD)					Prepared: 28-Dec-18 Analyzed: 29-Dec-18					
Bis(2-chloroethyl)ether	**28.96**		ug/kg	130	50		58	30-130	1.7	30
Dimethylphthalate	**36.64**		ug/kg	230	50		73	30-130	10.4	30
Diethyl phthalate	**36.97**		ug/kg	230	50		74	30-130	9.0	30
Dibenzofuran	**35.40**		ug/kg	230	50		71	30-130	8.1	30
Dibenz(a,h)anthracene	**39.17**		ug/kg	130	50		78	30-130	9.8	30
Chrysene	**36.56**		ug/kg	230	50		73	30-130	6.6	30
Carbazole	**38.00**		ug/kg	230	50		76	30-130	7.6	30
Caprolactam	**38.36**		ug/kg	230	50		77	30-130	6.3	30
Di-n-butylphthalate	**40.09**		ug/kg	670	50		80	30-130	9.5	30
Bis(2-chloroisopropyl)ether	**28.07**		ug/kg	230	50		56	30-130	1.8	30
Fluorene	**36.26**		ug/kg	230	50		73	30-130	7.9	30
Bis(2-chloroethoxy)methane	**34.27**		ug/kg	230	50		69	30-130	5.6	30
Benzyl butyl phthalate	**40.62**		ug/kg	230	50		81	30-130	9.4	30
Benzo(k)fluoranthene	**37.45**		ug/kg	230	50		75	30-130	7.7	30
Benzo(ghi)perylene	**36.20**		ug/kg	230	50		72	30-130	8.0	30
Benzo(b)fluoranthene	**37.93**		ug/kg	160	50		76	30-130	7.6	30
Benzo(a)pyrene	**37.61**		ug/kg	130	50		75	30-130	7.7	30
Benzaldehyde	**7.567**	I	ug/kg	230	50		15	30-130	6.5	30
Bis(2-ethylhexyl)phthalate	**42.02**		ug/kg	230	50		84	30-130	10.2	30
Naphthalene	**32.12**		ug/kg	230	50		64	30-130	4.6	30
Benz(a)anthracene	**36.99**		ug/kg	230	50		74	30-130	7.8	30
4-Nitrophenol	**40.32**		ug/kg	230	50		81	30-130	8.3	30
Phenol	**39.83**		ug/kg	230	50		80	30-130	3.7	30
Phenanthrene	**35.40**		ug/kg	130	50		71	30-130	6.8	30
Pentachlorophenol	**30.96**		ug/kg	230	50		62	30-130	21.6	30
N-Nitrosodiphenylamine	**36.83**		ug/kg	130	50		74	30-130	10.3	30
N-Nitrosodi-n-propylamine	**35.75**		ug/kg	130	50		71	30-130	4.1	30
Di-n-octylphthalate	**42.37**		ug/kg	230	50		85	30-130	7.9	30
Nitrobenzene	**33.76**		ug/kg	130	50		68	30-130	1.5	30
Pyrene	**39.06**		ug/kg	230	50		78	30-130	7.4	30
Isophorone	**31.70**		ug/kg	130	50		63	30-130	6.2	30
Indeno(1,2,3-cd)pyrene	**39.36**		ug/kg	230	50		79	30-130	8.5	30
Hexachloroethane	**30.06**		ug/kg	130	50		60	30-130	1.7	30
Hexachlorocyclopentadiene	**30.22**		ug/kg	230	50		60	30-130	0.0	30
Hexachlorobutadiene	**31.49**		ug/kg	230	50		63	30-130	1.6	30
Hexachlorobenzene	**36.38**		ug/kg	130	50		73	30-130	5.3	30
Fluoranthene	**38.17**		ug/kg	230	50		76	30-130	8.8	30
N-Nitrosodimethylamine	**32.49**		ug/kg	230	50		65	30-130	1.5	30
2-Nitrophenol	**36.33**		ug/kg	230	50		73	30-130	4.0	30
1,1-Biphenyl	**32.61**		ug/kg	230	50		65	30-130	7.4	30
1,2,4,5-Tetrachlorobenzene	**32.75**		ug/kg	230	50		66	30-130	3.0	30
2,3,4,6-tetrachlorophenol	**31.89**		ug/kg	230	50		64	30-130	15.8	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461562A - SW3545A										
LCSD (CC21618-LCSD)					Prepared: 28-Dec-18 Analyzed: 29-Dec-18					
2,4,5-Trichlorophenol	**38.96**		ug/kg	230	50		78	30-130	9.8	30
2,4,6-Trichlorophenol	**37.43**		ug/kg	130	50		75	30-130	7.7	30
2,4-Dichlorophenol	**36.41**		ug/kg	130	50		73	30-130	6.6	30
2,4-Dimethylphenol	**35.99**		ug/kg	230	50		72	30-130	0.0	30
2,4-Dinitrophenol	**10.03**	I	ug/kg	230	50		20	30-130	0.0	30
2,4-Dinitrotoluene	**38.52**		ug/kg	130	50		77	30-130	9.9	30
2,6-Dinitrotoluene	**37.93**		ug/kg	130	50		76	30-130	8.8	30
2-Chloronaphthalene	**34.93**		ug/kg	230	50		70	30-130	6.9	30
2-Chlorophenol	**35.35**		ug/kg	230	50		71	30-130	4.1	30
2-Methylnaphthalene	**33.42**		ug/kg	230	50		67	30-130	4.4	30
2-Nitroaniline	**57.35**		ug/kg	330	50		115	30-130	9.9	30
4-Chloroaniline	**27.86**		ug/kg	230	50		56	30-130	1.8	30
Anthracene	**36.30**		ug/kg	230	50		73	30-130	7.9	30
Acetophenone	**32.21**		ug/kg	230	50		64	30-130	4.6	30
Acenaphthylene	**34.32**		ug/kg	130	50		69	30-130	7.0	30
Acenaphthene	**35.17**		ug/kg	230	50		70	30-130	8.2	30
Atrazine	**36.18**		ug/kg	130	50		72	30-130	9.3	30
2-Methylphenol (o-cresol)	**38.74**		ug/kg	230	50		77	30-130	2.6	30
4-Chlorophenyl phenyl ether	**36.65**		ug/kg	230	50		73	30-130	7.9	30
4-Chloro-3-methylphenol	**38.52**		ug/kg	230	50		77	30-130	7.5	30
4-Bromophenyl phenyl ether	**37.37**		ug/kg	230	50		75	30-130	7.7	30
4,6-Dinitro-2-methylphenol	**22.83**		ug/kg	230	50		46	30-130	6.7	30
3-Nitroaniline	**42.06**		ug/kg	330	50		84	30-130	9.1	30
3,3'-Dichlorobenzidine	**37.34**		ug/kg	130	50		75	30-130	1.3	30
3&4-Methylphenol (m&p-cresol)	**37.86**		ug/kg	230	50		76	30-130	3.9	30
4-Nitroaniline	**39.41**		ug/kg	230	50		79	30-130	7.3	30
Surrogate: % Nitrobenzene-d5	*32.89*		ug/kg		*50*		*66*	*30-130*		
Surrogate: % 2-Fluorophenol	*51.11*		ug/kg		*75*		*68*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*54.04*		ug/kg		*75*		*72*	*30-130*		
Surrogate: % Phenol-d5	*51.09*		ug/kg		*75*		*68*	*30-130*		
Surrogate: % Terphenyl-d14	*34.30*		ug/kg		*50*		*69*	*30-130*		
Surrogate: % 2-Fluorobiphenyl	*32.70*		ug/kg		*50*		*65*	*30-130*		
MS (CC21618-MS)			**Source: CC21618**		Prepared: 28-Dec-18 Analyzed: 29-Dec-18					
Bis(2-ethylhexyl)phthalate	**43.57**		ug/kg	230	50		87	30-130		30
Di-n-octylphthalate	**44.39**		ug/kg	230	50		89	30-130		30
Di-n-butylphthalate	**40.46**		ug/kg	670	50		81	30-130		30
Dimethylphthalate	**37.56**		ug/kg	230	50		75	30-130		30
Diethyl phthalate	**37.61**		ug/kg	230	50		75	30-130		30
Dibenzofuran	**36.93**		ug/kg	230	50		74	30-130		30
Dibenz(a,h)anthracene	**41.71**		ug/kg	130	50		83	30-130		30
Chrysene	**43.24**		ug/kg	230	50		82	30-130		30
Caprolactam	**39.30**		ug/kg	230	50		79	30-130		30
Phenanthrene	**41.93**		ug/kg	130	50		79	30-130		30
Bis(2-chloroisopropyl)ether	**25.29**		ug/kg	230	50		51	30-130		30
Bis(2-chloroethyl)ether	**26.25**		ug/kg	130	50		53	30-130		30
Bis(2-chloroethoxy)methane	**32.50**		ug/kg	230	50		65	30-130		30
Benzyl butyl phthalate	**42.82**		ug/kg	230	50		86	30-130		30
Benzo(k)fluoranthene	**39.27**		ug/kg	230	50		79	30-130		30
Carbazole	**39.56**		ug/kg	230	50		79	30-130		30
Indeno(1,2,3-cd)pyrene	**41.53**		ug/kg	230	50		79	30-130		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461562A - SW3545A										
MS (CC21618-MS)			**Source: CC21618**			Prepared: 28-Dec-18 Analyzed: 29-Dec-18				
Benzo(ghi)perylene	**36.27**		ug/kg	230	50		69	30-130		30
Pentachlorophenol	**36.48**		ug/kg	230	50		73	17-109		30
N-Nitrosodiphenylamine	**39.57**		ug/kg	130	50		79	30-130		30
N-Nitrosodi-n-propylamine	**32.26**		ug/kg	130	50		65	30-130		30
N-Nitrosodimethylamine	**28.30**		ug/kg	230	50		57	30-130		30
Nitrobenzene	**30.98**		ug/kg	130	50		62	30-130		30
Phenol	**36.84**		ug/kg	230	50		74	26-90		30
Isophorone	**29.75**		ug/kg	130	50		59	30-130		30
Fluoranthene	**44.23**		ug/kg	230	50		81	30-130		30
Hexachloroethane	**26.07**		ug/kg	130	50		52	30-130		30
Hexachlorocyclopentadiene	**7.247**	m	ug/kg	230	50		14	30-130		30
Hexachlorobutadiene	**30.45**		ug/kg	230	50		61	30-130		30
Hexachlorobenzene	**37.13**		ug/kg	130	50		74	30-130		30
Fluorene	**38.16**		ug/kg	230	50		76	30-130		30
2-Methylphenol (o-cresol)	**35.77**		ug/kg	230	50		72	30-130		30
Naphthalene	**31.32**		ug/kg	230	50		63	30-130		30
2,4,6-Trichlorophenol	**37.15**		ug/kg	130	50		74	30-130		30
2-Nitrophenol	**35.44**		ug/kg	230	50		71	30-130		30
2-Chlorophenol	**31.75**		ug/kg	230	50		63	25-102		30
2-Chloronaphthalene	**35.24**		ug/kg	230	50		70	30-130		30
2,6-Dinitrotoluene	**39.29**		ug/kg	130	50		79	30-130		30
2,4-Dinitrotoluene	**40.41**		ug/kg	130	50		81	28-89		30
2,4-Dinitrophenol	**25.69**	r	ug/kg	230	50		51	30-130		30
2-Nitroaniline	**61.34**		ug/kg	330	50		123	30-130		30
2,4-Dichlorophenol	**36.41**		ug/kg	130	50		73	30-130		30
3&4-Methylphenol (m&p-cresol)	**35.83**		ug/kg	230	50		72	30-130		30
2,4,5-Trichlorophenol	**40.21**		ug/kg	230	50		80	30-130		30
2,3,4,6-tetrachlorophenol	**33.07**		ug/kg	230	50		66	30-130		30
1,2,4,5-Tetrachlorobenzene	**33.66**		ug/kg	230	50		67	30-130		30
1,1-Biphenyl	**33.03**		ug/kg	230	50		66	30-130		30
Anthracene	**38.19**		ug/kg	230	50		76	30-130		30
Pyrene	**46.11**		ug/kg	230	50		86	35-142		30
2,4-Dimethylphenol	**38.09**		ug/kg	230	50		76	30-130		30
4-Chlorophenyl phenyl ether	**37.79**		ug/kg	230	50		76	30-130		30
Benzo(a)pyrene	**43.11**		ug/kg	130	50		82	30-130		30
Benzaldehyde	**57.72**		ug/kg	230	50		115	30-130		30
Benz(a)anthracene	**44.34**		ug/kg	230	50		85	30-130		30
Atrazine	**36.51**		ug/kg	130	50		73	30-130		30
Acetophenone	**29.58**		ug/kg	230	50		59	30-130		30
Acenaphthene	**36.88**		ug/kg	230	50		74	31-137		30
2-Methylnaphthalene	**34.00**		ug/kg	230	50		68	30-130		30
4-Nitroaniline	**40.60**		ug/kg	230	50		81	30-130		30
Benzo(b)fluoranthene	**42.91**		ug/kg	160	50		82	30-130		30
4-Chloroaniline	**35.41**		ug/kg	230	50		71	30-130		30
4-Chloro-3-methylphenol	**41.30**		ug/kg	230	50		83	26-103		30
4-Bromophenyl phenyl ether	**38.52**		ug/kg	230	50		77	30-130		30
4,6-Dinitro-2-methylphenol	**34.56**	r	ug/kg	230	50		69	30-130		30
3-Nitroaniline	**50.37**		ug/kg	330	50		101	30-130		30
3,3'-Dichlorobenzidine	**56.35**		ug/kg	130	50		113	30-130		30
4-Nitrophenol	**38.83**		ug/kg	230	50		78	11-114		30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461562A - SW3545A										
MS (CC21618-MS)			**Source: CC21618**			Prepared: 28-Dec-18 Analyzed: 29-Dec-18				
Acenaphthylene	**35.58**		ug/kg	130	50		71	30-130		30
Surrogate: % 2-Fluorophenol	*45.28*		ug/kg		*75*		*60*	*30-130*		
Surrogate: % 2-Fluorobiphenyl	*32.54*		ug/kg		*50*		*65*	*30-130*		
Surrogate: % Nitrobenzene-d5	*30.30*		ug/kg		*50*		*61*	*30-130*		
Surrogate: % Phenol-d5	*46.50*		ug/kg		*75*		*62*	*30-130*		
Surrogate: % Terphenyl-d14	*33.44*		ug/kg		*50*		*67*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*54.15*		ug/kg		*75*		*72*	*30-130*		
MSD (CC21618-MSD)			**Source: CC21618**			Prepared: 28-Dec-18 Analyzed: 30-Dec-18				
Carbazole	**37.72**		ug/kg	230	50		75	30-130	5.2	30
Fluoranthene	**45.46**		ug/kg	230	50		84	30-130	3.6	30
Di-n-octylphthalate	**41.70**		ug/kg	230	50		83	30-130	7.0	30
Di-n-butylphthalate	**38.51**		ug/kg	670	50		77	30-130	5.1	30
Dimethylphthalate	**35.12**		ug/kg	230	50		70	30-130	6.9	30
Diethyl phthalate	**35.42**		ug/kg	230	50		71	30-130	5.5	30
Dibenzofuran	**35.18**		ug/kg	230	50		70	30-130	5.6	30
Benzo(k)fluoranthene	**37.89**		ug/kg	230	50		76	30-130	3.9	30
Chrysene	**39.26**		ug/kg	230	50		74	30-130	10.3	30
Hexachlorocyclopentadiene	**3.552**	m	ug/kg	230	50		<10	30-130	NC	30
Caprolactam	**34.42**		ug/kg	230	50		69	30-130	13.5	30
Bis(2-ethylhexyl)phthalate	**40.91**		ug/kg	230	50		82	30-130	5.9	30
Bis(2-chloroisopropyl)ether	**25.32**		ug/kg	230	50		51	30-130	0.0	30
Bis(2-chloroethyl)ether	**25.96**		ug/kg	130	50		52	30-130	1.9	30
Bis(2-chloroethoxy)methane	**31.35**		ug/kg	230	50		63	30-130	3.1	30
Benzyl butyl phthalate	**40.87**		ug/kg	230	50		82	30-130	4.8	30
Dibenz(a,h)anthracene	**36.39**		ug/kg	130	50		73	30-130	12.8	30
N-Nitrosodi-n-propylamine	**31.18**		ug/kg	130	50		62	30-130	4.7	30
2,3,4,6-tetrachlorophenol	**30.29**		ug/kg	230	50		61	30-130	7.9	30
1,2,4,5-Tetrachlorobenzene	**31.62**		ug/kg	230	50		63	30-130	6.2	30
1,1-Biphenyl	**31.97**		ug/kg	230	50		64	30-130	3.1	30
Pyrene	**44.44**		ug/kg	230	50		82	35-142	4.8	30
Phenol	**35.80**		ug/kg	230	50		72	26-90	2.7	30
Phenanthrene	**42.78**		ug/kg	130	50		80	30-130	1.3	30
Fluorene	**36.56**		ug/kg	230	50		73	30-130	4.0	30
N-Nitrosodiphenylamine	**37.59**		ug/kg	130	50		75	30-130	5.2	30
Hexachlorobenzene	**33.66**		ug/kg	130	50		67	30-130	9.9	30
N-Nitrosodimethylamine	**27.80**		ug/kg	230	50		56	30-130	1.8	30
Nitrobenzene	**30.59**		ug/kg	130	50		61	30-130	1.6	30
Naphthalene	**30.73**		ug/kg	230	50		61	30-130	3.2	30
Isophorone	**28.57**		ug/kg	130	50		57	30-130	3.4	30
Indeno(1,2,3-cd)pyrene	**36.18**		ug/kg	230	50		68	30-130	15.0	30
Hexachlorobutadiene	**29.50**		ug/kg	230	50		59	30-130	3.3	30
Pentachlorophenol	**31.94**		ug/kg	230	50		64	17-109	13.1	30
2-Chloronaphthalene	**33.67**		ug/kg	230	50		67	30-130	4.4	30
3-Nitroaniline	**47.89**		ug/kg	330	50		96	30-130	5.1	30
3,3'-Dichlorobenzidine	**54.53**		ug/kg	130	50		109	30-130	3.6	30
3&4-Methylphenol (m&p-cresol)	**33.42**		ug/kg	230	50		67	30-130	7.2	30
2-Nitrophenol	**33.70**		ug/kg	230	50		67	30-130	5.8	30
2-Nitroaniline	**57.50**		ug/kg	330	50		115	30-130	6.7	30
2-Methylphenol (o-cresol)	**34.70**		ug/kg	230	50		69	30-130	4.3	30
4,6-Dinitro-2-methylphenol	**23.97**	r	ug/kg	230	50		48	30-130	35.9	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461562A - SW3545A										
MSD (CC21618-MSD)			**Source: CC21618**			Prepared: 28-Dec-18 Analyzed: 30-Dec-18				
2-Chlorophenol	**31.15**		ug/kg	230	50		62	25-102	1.6	30
2,6-Dinitrotoluene	**37.34**		ug/kg	130	50		75	30-130	5.2	30
2,4,6-Trichlorophenol	**34.70**		ug/kg	130	50		69	30-130	7.0	30
2,4-Dinitrotoluene	**38.15**		ug/kg	130	50		76	28-89	6.4	30
2,4-Dimethylphenol	**36.87**		ug/kg	230	50		74	30-130	2.7	30
2,4-Dichlorophenol	**34.22**		ug/kg	130	50		68	30-130	7.1	30
Benzo(ghi)perylene	**30.34**		ug/kg	230	50		57	30-130	19.0	30
Hexachloroethane	**25.41**		ug/kg	130	50		51	30-130	1.9	30
2,4,5-Trichlorophenol	**36.42**		ug/kg	230	50		73	30-130	9.2	30
2-Methylnaphthalene	**32.77**		ug/kg	230	50		66	30-130	3.0	30
Benzaldehyde	**65.59**	m	ug/kg	230	50		131	30-130	13.0	30
Benzo(b)fluoranthene	**39.81**		ug/kg	160	50		76	30-130	7.6	30
2,4-Dinitrophenol	**15.10**	r	ug/kg	230	50		30	30-130	51.9	30
Benzo(a)pyrene	**39.06**		ug/kg	130	50		74	30-130	10.3	30
4-Bromophenyl phenyl ether	**36.79**		ug/kg	230	50		74	30-130	4.0	30
Benz(a)anthracene	**40.99**		ug/kg	230	50		78	30-130	8.6	30
Atrazine	**34.64**		ug/kg	130	50		69	30-130	5.6	30
Anthracene	**37.85**		ug/kg	230	50		76	30-130	0.0	30
Acetophenone	**28.83**		ug/kg	230	50		58	30-130	1.7	30
4-Chloro-3-methylphenol	**38.03**		ug/kg	230	50		76	26-103	8.8	30
Acenaphthene	**35.16**		ug/kg	230	50		70	31-137	5.6	30
4-Nitrophenol	**34.51**		ug/kg	230	50		69	11-114	12.2	30
Acenaphthylene	**33.49**		ug/kg	130	50		67	30-130	5.8	30
4-Nitroaniline	**39.05**		ug/kg	230	50		78	30-130	3.8	30
4-Chloroaniline	**33.19**		ug/kg	230	50		66	30-130	7.3	30
4-Chlorophenyl phenyl ether	**36.09**		ug/kg	230	50		72	30-130	5.4	30
Surrogate: % 2-Fluorobiphenyl	*31.25*		ug/kg		*50*		*62*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*50.75*		ug/kg		*75*		*68*	*30-130*		
Surrogate: % 2-Fluorophenol	*44.90*		ug/kg		*75*		*60*	*30-130*		
Surrogate: % Terphenyl-d14	*31.79*		ug/kg		*50*		*64*	*30-130*		
Surrogate: % Nitrobenzene-d5	*29.76*		ug/kg		*50*		*60*	*30-130*		
Surrogate: % Phenol-d5	*45.38*		ug/kg		*75*		*61*	*30-130*		
Batch 461615A - SW3520C										
BLK (CC21515-BLK)						Prepared: 28-Dec-18 Analyzed: 03-Jan-19				
4-Chloro-3-methylphenol	**ND**		ug/L	1.0			ND	-		
Isophorone	**ND**		ug/L	3.5			ND	-		
Indeno(1,2,3-cd)pyrene	**ND**		ug/L	3.5			ND	-		
2-Nitrophenol	**ND**		ug/L	1.0			ND	-		
3&4-Methylphenol (m&p-cresol)	**ND**		ug/L	1.0			ND	-		
3,3'-Dichlorobenzidine	**ND**		ug/L	5.0			ND	-		
3-Nitroaniline	**ND**		ug/L	5.0			ND	-		
2-Nitroaniline	**ND**		ug/L	3.5			ND	-		
4-Bromophenyl phenyl ether	**ND**		ug/L	3.5			ND	-		
4-Chloroaniline	**ND**		ug/L	3.5			ND	-		
4-Chlorophenyl phenyl ether	**ND**		ug/L	1.0			ND	-		
4-Nitroaniline	**ND**		ug/L	5.0			ND	-		
4-Nitrophenol	**ND**		ug/L	1.0			ND	-		
Acenaphthene	**ND**		ug/L	1.5			ND	-		
Acenaphthylene	**ND**		ug/L	3.5			ND	-		
4,6-Dinitro-2-methylphenol	**ND**		ug/L	1.0			ND	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461615A - SW3520C										
BLK (CC21515-BLK)					Prepared: 28-Dec-18 Analyzed: 03-Jan-19					
2,4-Dinitrophenol	**ND**		ug/L	1.0			ND	-		
N-Nitrosodi-n-propylamine	**ND**		ug/L	3.5			ND	-		
1,1-Biphenyl	**ND**		ug/L	3.5			ND	-		
1,2,4,5-Tetrachlorobenzene	**ND**		ug/L	3.5			ND	-		
2,3,4,6-tetrachlorophenol	**ND**		ug/L	3.5			ND	-		
2,4,5-Trichlorophenol	**ND**		ug/L	1.0			ND	-		
2,4,6-Trichlorophenol	**ND**		ug/L	1.0			ND	-		
Naphthalene	**ND**		ug/L	1.5			ND	-		
2,4-Dimethylphenol	**ND**		ug/L	1.0			ND	-		
Acetophenone	**ND**		ug/L	3.5			ND	-		
2,4-Dinitrotoluene	**ND**		ug/L	3.5			ND	-		
2,6-Dinitrotoluene	**ND**		ug/L	3.5			ND	-		
2-Chloronaphthalene	**ND**		ug/L	3.5			ND	-		
2-Chlorophenol	**ND**		ug/L	1.0			ND	-		
2-Methylnaphthalene	**ND**		ug/L	3.5			ND	-		
Nitrobenzene	**ND**		ug/L	3.5			ND	-		
N-Nitrosodimethylamine	**ND**		ug/L	1.0			ND	-		
2,4-Dichlorophenol	**ND**		ug/L	1.0			ND	-		
Hexachlorobutadiene	**ND**		ug/L	3.5			ND	-		
Anthracene	**ND**		ug/L	1.5			ND	-		
Pyrene	**ND**		ug/L	1.5			ND	-		
Di-n-butylphthalate	**ND**		ug/L	1.5			ND	-		
Phenol	**ND**		ug/L	1.0			ND	-		
Di-n-octylphthalate	**ND**		ug/L	1.5			ND	-		
Fluoranthene	**ND**		ug/L	1.5			ND	-		
Diethyl phthalate	**ND**		ug/L	1.5			ND	-		
Hexachlorobenzene	**ND**		ug/L	3.5			ND	-		
Dibenzofuran	**ND**		ug/L	3.5			ND	-		
Hexachlorocyclopentadiene	**ND**		ug/L	3.5			ND	-		
Hexachloroethane	**ND**		ug/L	3.5			ND	-		
N-Nitrosodiphenylamine	**ND**		ug/L	3.5			ND	-		
Pentachlorophenol	**ND**		ug/L	3.5			ND	-		
Phenanthrene	**ND**		ug/L	1.5			ND	-		
2-Methylphenol (o-cresol)	**ND**		ug/L	1.0			ND	-		
Fluorene	**ND**		ug/L	1.5			ND	-		
Bis(2-chloroethoxy)methane	**ND**		ug/L	3.5			ND	-		
Atrazine	**ND**		ug/L	3.5			ND	-		
Benz(a)anthracene	**ND**		ug/L	1.5			ND	-		
Benzaldehyde	**ND**		ug/L	3.5			ND	-		
Benzo(a)pyrene	**ND**		ug/L	1.5			ND	-		
Benzo(b)fluoranthene	**ND**		ug/L	1.5			ND	-		
Benzo(ghi)perylene	**ND**		ug/L	1.5			ND	-		
Dimethylphthalate	**ND**		ug/L	1.5			ND	-		
Benzyl butyl phthalate	**ND**		ug/L	1.5			ND	-		
Bis(2-chloroethyl)ether	**ND**		ug/L	1.0			ND	-		
Bis(2-chloroisopropyl)ether	**ND**		ug/L	1.0			ND	-		
Bis(2-ethylhexyl)phthalate	**ND**		ug/L	1.5			ND	-		
Caprolactam	**ND**		ug/L	3.5			ND	-		
Carbazole	**ND**		ug/L	5.0			ND	-		
Chrysene	**ND**		ug/L	1.5			ND	-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461615A - SW3520C										
BLK (CC21515-BLK)						Prepared: 28-Dec-18 Analyzed: 03-Jan-19				
Dibenz(a,h)anthracene	**ND**		ug/L	1.5			ND	-		
Benzo(k)fluoranthene	**ND**		ug/L	1.5			ND	-		
Surrogate: % 2-Fluorophenol	*55*		ug/L		*7.5*		*55*	*15-110*		
Surrogate: % 2-Fluorobiphenyl	*80*		ug/L		*5*		*80*	*30-130*		
Surrogate: % Phenol-d5	*41*		ug/L		*7.5*		*41*	*15-110*		
Surrogate: % Terphenyl-d14	*76*		ug/L		*5*		*76*	*30-130*		
Surrogate: % Nitrobenzene-d5	*70*		ug/L		*5*		*70*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*62*		ug/L		*7.5*		*62*	*15-110*		
LCS (CC21515-LCS)						Prepared: 28-Dec-18 Analyzed: 03-Jan-19				
Benzo(ghi)perylene	**40.53**		ug/L	1.5	50		81	30-130		20
Chrysene	**39.63**		ug/L	1.5	50		79	30-130		20
Carbazole	**41.53**		ug/L	5.0	50		83	30-130		20
Caprolactam	**41.20**		ug/L	3.5	50		82	30-130		20
Bis(2-ethylhexyl)phthalate	**40.05**		ug/L	1.5	50		80	30-130		20
Bis(2-chloroisopropyl)ether	**26.30**		ug/L	1.0	50		53	30-130		20
Bis(2-chloroethyl)ether	**30.45**		ug/L	1.0	50		61	30-130		20
Bis(2-chloroethoxy)methane	**36.32**		ug/L	3.5	50		73	30-130		20
Benzo(k)fluoranthene	**43.21**		ug/L	1.5	50		86	30-130		20
Diethyl phthalate	**40.38**		ug/L	1.5	50		81	30-130		20
Benzo(b)fluoranthene	**42.22**		ug/L	1.5	50		84	30-130		20
Benzo(a)pyrene	**35.35**		ug/L	1.5	50		71	30-130		20
Benzaldehyde	**41.31**	r	ug/L	3.5	50		83	30-130		20
Benz(a)anthracene	**41.18**		ug/L	1.5	50		82	30-130		20
Atrazine	**29.99**		ug/L	3.5	50		60	30-130		20
Anthracene	**39.28**		ug/L	1.5	50		79	30-130		20
Benzyl butyl phthalate	**39.05**		ug/L	1.5	50		78	30-130		20
Fluorene	**39.38**		ug/L	1.5	50		79	30-130		20
Acetophenone	**32.64**		ug/L	3.5	50		65	30-130		20
2,4,5-Trichlorophenol	**43.53**		ug/L	1.0	50		87	30-130		20
Isophorone	**34.88**		ug/L	3.5	50		70	30-130		20
Indeno(1,2,3-cd)pyrene	**41.23**		ug/L	3.5	50		82	30-130		20
Hexachloroethane	**27.27**		ug/L	3.5	50		55	30-130		20
Hexachlorocyclopentadiene	**15.83**		ug/L	3.5	50		32	30-130		20
Dibenz(a,h)anthracene	**41.15**		ug/L	1.5	50		82	30-130		20
Hexachlorobenzene	**41.40**		ug/L	3.5	50		83	30-130		20
Dibenzofuran	**39.38**		ug/L	3.5	50		79	30-130		20
Fluoranthene	**40.39**		ug/L	1.5	50		81	30-130		20
Di-n-octylphthalate	**35.79**	r	ug/L	1.5	50		72	30-130		20
Nitrobenzene	**33.31**		ug/L	3.5	50		67	30-130		20
Di-n-butylphthalate	**41.91**		ug/L	1.5	50		84	30-130		20
Naphthalene	**32.26**		ug/L	1.5	50		65	30-130		20
Dimethylphthalate	**40.23**		ug/L	1.5	50		80	30-130		20
Hexachlorobutadiene	**30.59**		ug/L	3.5	50		61	30-130		20
2-Methylphenol (o-cresol)	**33.17**		ug/L	1.0	50		66	30-130		20
N-Nitrosodimethylamine	**29.40**		ug/L	1.0	50		59	30-130		20
2,4-Dichlorophenol	**37.76**		ug/L	1.0	50		76	30-130		20
Acenaphthylene	**38.06**		ug/L	3.5	50		76	30-130		20
1,1-Biphenyl	**37.96**		ug/L	3.5	50		76	30-130		20
1,2,4,5-Tetrachlorobenzene	**35.54**		ug/L	3.5	50		71	30-130		20
2,3,4,6-tetrachlorophenol	**37.15**		ug/L	3.5	50		74	30-130		20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461615A - SW3520C										
LCS (CC21515-LCS)					Prepared: 28-Dec-18 Analyzed: 03-Jan-19					
2,4,6-Trichlorophenol	**42.51**		ug/L	1.0	50		85	30-130		20
2,4-Dimethylphenol	**32.88**		ug/L	1.0	50		66	30-130		20
2,4-Dinitrophenol	**34.32**	r	ug/L	1.0	50		69	30-130		20
2,4-Dinitrotoluene	**42.25**		ug/L	3.5	50		84	30-130		20
2,6-Dinitrotoluene	**43.95**		ug/L	3.5	50		88	30-130		20
2-Chloronaphthalene	**37.41**		ug/L	3.5	50		75	30-130		20
2-Methylnaphthalene	**34.96**		ug/L	3.5	50		70	30-130		20
4,6-Dinitro-2-methylphenol	**37.99**		ug/L	1.0	50		76	30-130		20
Acenaphthene	**39.45**		ug/L	1.5	50		79	30-130		20
4-Nitrophenol	**39.86**		ug/L	1.0	50		80	30-130		20
4-Nitroaniline	**43.31**		ug/L	5.0	50		87	30-130		20
4-Chlorophenyl phenyl ether	**38.40**		ug/L	1.0	50		77	30-130		20
4-Chloroaniline	**40.99**		ug/L	3.5	50		82	30-130		20
2-Chlorophenol	**29.81**		ug/L	1.0	50		60	30-130		20
4-Bromophenyl phenyl ether	**40.05**		ug/L	3.5	50		80	30-130		20
3-Nitroaniline	**48.96**		ug/L	5.0	50		98	30-130		20
3,3'-Dichlorobenzidine	**34.23**		ug/L	5.0	50		68	30-130		20
3&4-Methylphenol (m&p-cresol)	**34.33**		ug/L	1.0	50		69	30-130		20
2-Nitrophenol	**36.10**		ug/L	1.0	50		72	30-130		20
2-Nitroaniline	**55.98**		ug/L	3.5	50		112	30-130		20
4-Chloro-3-methylphenol	**40.97**		ug/L	1.0	50		82	30-130		20
Pentachlorophenol	**45.86**		ug/L	3.5	50		92	30-130		20
Phenanthrene	**39.48**		ug/L	1.5	50		79	30-130		20
Phenol	**27.03**		ug/L	1.0	50		54	30-130		20
N-Nitrosodiphenylamine	**35.85**		ug/L	3.5	50		72	30-130		20
Pyrene	**41.64**		ug/L	1.5	50		83	30-130		20
N-Nitrosodi-n-propylamine	**34.70**		ug/L	3.5	50		69	30-130		20
Surrogate: % 2-Fluorobiphenyl	*37.38*		ug/L		*50*		*75*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*67.05*		ug/L		*75*		*89*	*15-110*		
Surrogate: % 2-Fluorophenol	*34.36*		ug/L		*75*		*46*	*15-110*		
Surrogate: % Nitrobenzene-d5	*31.17*	r	ug/L		*50*		*62*	*30-130*		
Surrogate: % Phenol-d5	*37.53*		ug/L		*75*		*50*	*15-110*		
Surrogate: % Terphenyl-d14	*35.75*		ug/L		*50*		*71*	*30-130*		
LCSD (CC21515-LCSD)					Prepared: 28-Dec-18 Analyzed: 03-Jan-19					
Fluoranthene	**45.59**		ug/L	1.5	50		91	30-130	11.0	20
Isophorone	**35.63**		ug/L	3.5	50		71	30-130	1.4	20
Indeno(1,2,3-cd)pyrene	**46.11**		ug/L	3.5	50		92	30-130	11.5	20
Hexachloroethane	**29.92**		ug/L	3.5	50		60	30-130	8.7	20
Hexachlorocyclopentadiene	**16.26**		ug/L	3.5	50		33	30-130	6.9	20
Hexachlorobutadiene	**34.45**		ug/L	3.5	50		69	30-130	12.3	20
Dimethylphthalate	**42.86**		ug/L	1.5	50		86	30-130	7.2	20
Fluorene	**42.68**		ug/L	1.5	50		85	30-130	7.3	20
Di-n-octylphthalate	**45.25**	r	ug/L	1.5	50		91	30-130	23.3	20
Di-n-butylphthalate	**46.33**		ug/L	1.5	50		93	30-130	10.2	20
Diethyl phthalate	**46.29**		ug/L	1.5	50		93	30-130	13.8	20
Naphthalene	**33.97**		ug/L	1.5	50		68	30-130	4.5	20
Dibenz(a,h)anthracene	**46.62**		ug/L	1.5	50		93	30-130	8.7	20
Dibenzofuran	**41.96**		ug/L	3.5	50		84	30-130	6.1	20
Chrysene	**44.11**		ug/L	1.5	50		88	30-130	13.2	20
Hexachlorobenzene	**43.32**		ug/L	3.5	50		87	30-130	14.0	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461615A - SW3520C										
LCSD (CC21515-LCSD)					Prepared: 28-Dec-18 Analyzed: 03-Jan-19					
2,4-Dimethylphenol	**35.40**		ug/L	1.0	50		71	30-130	7.3	20
2-Methylnaphthalene	**36.66**		ug/L	3.5	50		73	30-130	8.0	20
Carbazole	**46.43**		ug/L	5.0	50		93	30-130	11.4	20
Pentachlorophenol	**51.56**		ug/L	3.5	50		103	30-130	11.3	20
Phenanthrene	**42.34**		ug/L	1.5	50		85	30-130	7.3	20
Pyrene	**46.03**		ug/L	1.5	50		92	30-130	10.3	20
2,6-Dinitrotoluene	**48.45**		ug/L	3.5	50		97	30-130	9.7	20
Phenol	**26.69**		ug/L	1.0	50		53	30-130	1.9	20
2,4-Dinitrophenol	**43.56**	r	ug/L	1.0	50		87	30-130	23.1	20
Nitrobenzene	**34.00**		ug/L	3.5	50		68	30-130	1.5	20
2,4-Dichlorophenol	**36.77**		ug/L	1.0	50		74	30-130	2.7	20
2,4,6-Trichlorophenol	**44.82**		ug/L	1.0	50		90	30-130	5.7	20
2,4,5-Trichlorophenol	**45.97**		ug/L	1.0	50		92	30-130	5.6	20
2,3,4,6-tetrachlorophenol	**41.69**		ug/L	3.5	50		83	30-130	11.5	20
1,2,4,5-Tetrachlorobenzene	**35.97**		ug/L	3.5	50		72	30-130	1.4	20
N-Nitrosodi-n-propylamine	**35.63**		ug/L	3.5	50		71	30-130	2.9	20
N-Nitrosodimethylamine	**29.77**		ug/L	1.0	50		60	30-130	1.7	20
2,4-Dinitrotoluene	**45.68**		ug/L	3.5	50		91	30-130	8.0	20
4-Bromophenyl phenyl ether	**44.05**		ug/L	3.5	50		88	30-130	9.5	20
2-Nitroaniline	**64.72**		ug/L	3.5	50		129	30-130	14.1	20
Acetophenone	**33.00**		ug/L	3.5	50		66	30-130	1.5	20
Acenaphthylene	**39.67**		ug/L	3.5	50		79	30-130	3.9	20
Acenaphthene	**42.00**		ug/L	1.5	50		84	30-130	13.2	20
4-Nitrophenol	**43.90**		ug/L	1.0	50		88	30-130	9.5	20
4-Nitroaniline	**46.89**		ug/L	5.0	50		94	30-130	7.7	20
4-Chlorophenyl phenyl ether	**41.81**		ug/L	1.0	50		84	30-130	8.7	20
Atrazine	**36.51**		ug/L	3.5	50		73	30-130	19.5	20
4-Chloro-3-methylphenol	**44.17**		ug/L	1.0	50		88	30-130	7.1	20
Benz(a)anthracene	**44.41**		ug/L	1.5	50		89	30-130	16.1	20
4,6-Dinitro-2-methylphenol	**46.59**		ug/L	1.0	50		93	30-130	20.1	20
3-Nitroaniline	**57.00**		ug/L	5.0	50		114	30-130	15.1	20
3,3'-Dichlorobenzidine	**36.57**		ug/L	5.0	50		73	30-130	7.1	20
3&4-Methylphenol (m&p-cresol)	**34.24**		ug/L	1.0	50		68	30-130	1.5	20
2-Nitrophenol	**38.56**		ug/L	1.0	50		77	30-130	6.7	20
2-Methylphenol (o-cresol)	**31.42**		ug/L	1.0	50		63	30-130	4.7	20
N-Nitrosodiphenylamine	**36.81**		ug/L	3.5	50		74	30-130	2.7	20
2-Chlorophenol	**29.74**		ug/L	1.0	50		59	30-130	1.7	20
4-Chloroaniline	**41.57**		ug/L	3.5	50		83	30-130	1.2	20
Bis(2-chloroethyl)ether	**31.50**		ug/L	1.0	50		63	30-130	3.2	20
Benzaldehyde	**52.40**	r	ug/L	3.5	50		105	30-130	23.4	20
Benzo(a)pyrene	**39.06**		ug/L	1.5	50		78	30-130	9.4	20
Benzo(b)fluoranthene	**46.75**		ug/L	1.5	50		93	30-130	10.2	20
Benzo(ghi)perylene	**45.11**		ug/L	1.5	50		90	30-130	10.5	20
Benzo(k)fluoranthene	**46.89**		ug/L	1.5	50		94	30-130	11.6	20
2-Chloronaphthalene	**39.37**		ug/L	3.5	50		79	30-130	5.2	20
Benzyl butyl phthalate	**43.97**		ug/L	1.5	50		88	30-130	12.0	20
Bis(2-chloroethoxy)methane	**36.34**		ug/L	3.5	50		73	30-130	0.0	20
Caprolactam	**45.24**		ug/L	3.5	50		90	30-130	9.3	20
Bis(2-ethylhexyl)phthalate	**46.16**		ug/L	1.5	50		92	30-130	14.0	20
Anthracene	**42.34**		ug/L	1.5	50		85	30-130	15.0	20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D										
Batch 461615A - SW3520C										
LCSD (CC21515-LCSD)					Prepared: 28-Dec-18 Analyzed: 03-Jan-19					
Bis(2-chloroisopropyl)ether	**26.65**		ug/L	1.0	50		53	30-130	0.0	20
1,1-Biphenyl	**39.55**		ug/L	3.5	50		79	30-130	3.9	20
Surrogate: % Terphenyl-d14	*40.50*		ug/L		*50*		*81*	*30-130*		
Surrogate: % Phenol-d5	*36.05*		ug/L		*75*		*48*	*15-110*		
Surrogate: % Nitrobenzene-d5	*32.64*		ug/L		*50*		*65*	*30-130*		
Surrogate: % 2-Fluorophenol	*35.80*		ug/L		*75*		*48*	*15-110*		
Surrogate: % 2,4,6-Tribromophenol	*69.28*		ug/L		*75*		*92*	*15-110*		
Surrogate: % 2-Fluorobiphenyl	*38.43*		ug/L		*50*		*77*	*30-130*		
SW8270D (SIM)										
Batch 461615B - SW3520C										
BLK (CC21515-BLK)					Prepared: 28-Dec-18 Analyzed: 02-Jan-19					
Naphthalene	**ND**		ug/L	0.50			ND	-		
Bis(2-chloroethyl)ether	**ND**		ug/L	0.50			ND	-		
Phenanthrene	**ND**		ug/L	0.50			ND	-		
Nitrobenzene	**ND**		ug/L	0.50			ND	-		
N-Nitrosodimethylamine	**ND**		ug/L	0.05			ND	-		
Indeno(1,2,3-cd)pyrene	**ND**		ug/L	0.50			ND	-		
Hexachlorocyclopentadiene	**ND**		ug/L	0.50			ND	-		
Hexachlorobutadiene	**ND**		ug/L	0.50			ND	-		
Hexachlorobenzene	**ND**		ug/L	0.50			ND	-		
Fluorene	**ND**		ug/L	0.50			ND	-		
Fluoranthene	**ND**		ug/L	0.50			ND	-		
Pyrene	**ND**		ug/L	0.50			ND	-		
Chrysene	**ND**		ug/L	0.50			ND	-		
Pentachlorophenol	**ND**		ug/L	0.50			ND	-		
Benzo(k)fluoranthene	**ND**		ug/L	0.50			ND	-		
Benzo(ghi)perylene	**ND**		ug/L	0.50			ND	-		
Benzo(b)fluoranthene	**ND**		ug/L	0.50			ND	-		
Benzo(a)pyrene	**ND**		ug/L	0.50			ND	-		
Benz(a)anthracene	**ND**		ug/L	0.50			ND	-		
Anthracene	**ND**		ug/L	0.50			ND	-		
Acenaphthylene	**ND**		ug/L	0.50			ND	-		
Acenaphthene	**ND**		ug/L	0.50			ND	-		
2-Methylnaphthalene	**ND**		ug/L	0.50			ND	-		
Dibenz(a,h)anthracene	**ND**		ug/L	0.50			ND	-		
Surrogate: % 2,4,6-Tribromophenol	*80*		ug/L		*7.5*		*80*	*15-110*		
Surrogate: % 2-Fluorobiphenyl	*80*		ug/L		*5*		*80*	*30-130*		
Surrogate: % 2-Fluorophenol	*56*		ug/L		*7.5*		*56*	*15-110*		
Surrogate: % Nitrobenzene-d5	*71*		ug/L		*5*		*71*	*30-130*		
Surrogate: % Phenol-d5	*48*		ug/L		*7.5*		*48*	*15-110*		
Surrogate: % Terphenyl-d14	*78*		ug/L		*5*		*78*	*30-130*		
LCS (CC21515-LCS)					Prepared: 28-Dec-18 Analyzed: 02-Jan-19					
Hexachlorobenzene	**3.640**		ug/L	0.50	5		73	30-130		20
Phenanthrene	**3.402**		ug/L	0.50	5		68	30-130		20
Pentachlorophenol	**4.295**		ug/L	0.50	5		86	30-130		20
N-Nitrosodimethylamine	**2.878**		ug/L	0.05	5		58	30-130		20
Nitrobenzene	**2.888**		ug/L	0.50	5		58	30-130		20
Naphthalene	**3.061**		ug/L	0.50	5		61	30-130		20
Indeno(1,2,3-cd)pyrene	**3.591**		ug/L	0.50	5		72	30-130		20

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D (SIM)										
Batch 461615B - SW3520C										
LCS (CC21515-LCS)					Prepared: 28-Dec-18 Analyzed: 02-Jan-19					
2-Methylnaphthalene	**3.014**		ug/L	0.50	5		60	30-130		20
Hexachlorobutadiene	**2.544**		ug/L	0.50	5		51	30-130		20
Acenaphthene	**3.573**		ug/L	0.50	5		71	30-130		20
Fluorene	**3.471**		ug/L	0.50	5		69	30-130		20
Fluoranthene	**3.444**		ug/L	0.50	5		69	30-130		20
Dibenz(a,h)anthracene	**3.874**		ug/L	0.50	5		77	30-130		20
Chrysene	**3.571**		ug/L	0.50	5		71	30-130		20
Bis(2-chloroethyl)ether	**2.787**		ug/L	0.50	5		56	30-130		20
Benzo(k)fluoranthene	**3.657**		ug/L	0.50	5		73	30-130		20
Benzo(ghi)perylene	**3.587**		ug/L	0.50	5		72	30-130		20
Benzo(b)fluoranthene	**3.435**		ug/L	0.50	5		69	30-130		20
Benzo(a)pyrene	**3.147**		ug/L	0.50	5		63	30-130		20
Benz(a)anthracene	**3.169**		ug/L	0.50	5		63	30-130		20
Anthracene	**3.406**		ug/L	0.50	5		68	30-130		20
Pyrene	**3.549**		ug/L	0.50	5		71	30-130		20
Acenaphthylene	**3.241**		ug/L	0.50	5		65	30-130		20
Hexachlorocyclopentadiene	**1.375**	I	ug/L	0.50	5		28	30-130		20
Surrogate: % Phenol-d5	*3.495*		ug/L		*7.5*		*47*	*15-110*		
Surrogate: % 2,4,6-Tribromophenol	*5.248*		ug/L		*7.5*		*70*	*15-110*		
Surrogate: % 2-Fluorobiphenyl	*3.466*		ug/L		*5*		*69*	*30-130*		
Surrogate: % 2-Fluorophenol	*3.152*		ug/L		*7.5*		*42*	*15-110*		
Surrogate: % Nitrobenzene-d5	*2.704*	r	ug/L		*5*		*54*	*30-130*		
Surrogate: % Terphenyl-d14	*3.260*		ug/L		*5*		*65*	*30-130*		
LCSD (CC21515-LCSD)					Prepared: 28-Dec-18 Analyzed: 03-Jan-19					
Fluorene	**3.840**		ug/L	0.50	5		77	30-130	7.3	20
Hexachlorobenzene	**4.196**		ug/L	0.50	5		84	30-130	4.7	20
Benzo(b)fluoranthene	**3.879**		ug/L	0.50	5		78	30-130	12.2	20
Pyrene	**3.875**		ug/L	0.50	5		78	30-130	10.3	20
Hexachlorobutadiene	**2.991**		ug/L	0.50	5		60	30-130	16.2	20
Phenanthrene	**3.868**		ug/L	0.50	5		77	30-130	7.3	20
Pentachlorophenol	**5.084**		ug/L	0.50	5		102	30-130	11.3	20
N-Nitrosodimethylamine	**3.214**		ug/L	0.05	5		64	30-130	1.7	20
Nitrobenzene	**3.542**		ug/L	0.50	5		71	30-130	20.2	20
Naphthalene	**3.429**		ug/L	0.50	5		69	30-130	4.5	20
Indeno(1,2,3-cd)pyrene	**3.991**		ug/L	0.50	5		80	30-130	11.5	20
Hexachlorocyclopentadiene	**1.509**		ug/L	0.50	5		30	30-130	3.1	20
Fluoranthene	**3.839**		ug/L	0.50	5		77	30-130	11.0	20
Benzo(k)fluoranthene	**4.115**		ug/L	0.50	5		82	30-130	11.6	20
Dibenz(a,h)anthracene	**4.212**		ug/L	0.50	5		84	30-130	12.6	20
2-Methylnaphthalene	**3.230**		ug/L	0.50	5		65	30-130	4.2	20
Acenaphthene	**4.039**		ug/L	0.50	5		81	30-130	13.2	20
Acenaphthylene	**3.633**		ug/L	0.50	5		73	30-130	11.6	20
Anthracene	**3.925**		ug/L	0.50	5		79	30-130	15.0	20
Benzo(a)pyrene	**3.559**		ug/L	0.50	5		71	30-130	9.4	20
Benzo(ghi)perylene	**3.884**		ug/L	0.50	5		78	30-130	10.5	20
Bis(2-chloroethyl)ether	**3.023**		ug/L	0.50	5		60	30-130	6.9	20
Chrysene	**4.046**		ug/L	0.50	5		81	30-130	13.2	20
Benz(a)anthracene	**3.682**		ug/L	0.50	5		74	30-130	8.2	20
Surrogate: % Nitrobenzene-d5	*3.399*	r	ug/L		*5*		*68*	*30-130*		
Surrogate: % 2,4,6-Tribromophenol	*6.251*		ug/L		*7.5*		*83*	*15-110*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D (SIM)										
Batch 461615B - SW3520C										
LCSD (CC21515-LCSD)						Prepared: 28-Dec-18 Analyzed: 03-Jan-19				
Surrogate: % Phenol-d5	*3.608*		ug/L		*7.5*		*48*	*15-110*		
Surrogate: % 2-Fluorophenol	*3.599*		ug/L		*7.5*		*48*	*15-110*		
Surrogate: % Terphenyl-d14	*3.579*		ug/L		*5*		*72*	*30-130*		
Surrogate: % 2-Fluorobiphenyl	*3.688*		ug/L		*5*		*74*	*30-130*		
SW8270D MOD(SIM)										
Batch 461581A - SW3520C										
BLK (CC20774-BLK)						Prepared: 28-Dec-18 Analyzed: 31-Dec-18				
Dibenz(a,h)anthracene	**ND**		ug/L	0.10			ND	-		
Benzo(b)fluoranthene	**ND**		ug/L	0.02			ND	-		
Pyrene	**ND**		ug/L	0.50			ND	-		
Phenanthrene	**ND**		ug/L	0.07			ND	-		
Naphthalene	**ND**		ug/L	0.50			ND	-		
Indeno(1,2,3-cd)pyrene	**ND**		ug/L	0.02			ND	-		
Fluorene	**ND**		ug/L	0.50			ND	-		
Fluoranthene	**ND**		ug/L	0.50			ND	-		
2-Methylnaphthalene	**ND**		ug/L	0.50			ND	-		
Benzo(ghi)perylene	**ND**		ug/L	0.48			ND	-		
Benzo(a)pyrene	**ND**		ug/L	0.02			ND	-		
Benz(a)anthracene	**ND**		ug/L	0.02			ND	-		
Anthracene	**ND**		ug/L	0.50			ND	-		
Acenaphthylene	**ND**		ug/L	0.30			ND	-		
Acenaphthene	**ND**		ug/L	0.50			ND	-		
Chrysene	**ND**		ug/L	0.02			ND	-		
Benzo(k)fluoranthene	**ND**		ug/L	0.02			ND	-		
Surrogate: % 2-Fluorobiphenyl	*31*		ug/L		*5*		*31*	*30-130*		
Surrogate: % Nitrobenzene-d5	*4*		ug/L		*5*		*4*	*30-130*		
Surrogate: % Terphenyl-d14	*74*		ug/L		*5*		*74*	*30-130*		
LCS (CC20774-LCS)						Prepared: 28-Dec-18 Analyzed: 31-Dec-18				
Acenaphthylene	**3.118**	r	ug/L	0.30	10		31	30-130		20
Phenanthrene	**7.200**		ug/L	0.07	10		72	30-130		20
Dibenz(a,h)anthracene	**6.865**		ug/L	0.10	10		69	30-130		20
Naphthalene	**2.942**	I	ug/L	0.50	10		29	30-130		20
Indeno(1,2,3-cd)pyrene	**3.669**	r	ug/L	0.02	10		37	30-130		20
Fluorene	**6.814**		ug/L	0.50	10		68	30-130		20
Fluoranthene	**7.249**		ug/L	0.50	10		72	30-130		20
Pyrene	**5.995**	r	ug/L	0.50	10		60	30-130		20
2-Methylnaphthalene	**4.371**		ug/L	0.50	10		44	30-130		20
Benzo(k)fluoranthene	**6.485**	r	ug/L	0.02	10		65	30-130		20
Benzo(ghi)perylene	**3.260**	r	ug/L	0.48	10		33	30-130		20
Benzo(b)fluoranthene	**7.086**		ug/L	0.02	10		71	30-130		20
Benzo(a)pyrene	**3.397**	r	ug/L	0.02	10		34	30-130		20
Anthracene	**7.223**		ug/L	0.50	10		72	30-130		20
Acenaphthene	**6.535**		ug/L	0.50	10		65	30-130		20
Benz(a)anthracene	**6.978**		ug/L	0.02	10		70	30-130		20
Chrysene	**7.389**		ug/L	0.02	10		74	30-130		20
Surrogate: % Nitrobenzene-d5	*1.798*		ug/L		*5*		*36*	*30-130*		
Surrogate: % 2-Fluorobiphenyl	*2.563*		ug/L		*5*		*51*	*30-130*		
Surrogate: % Terphenyl-d14	*4.016*		ug/L		*5*		*80*	*30-130*		
LCSD (CC20774-LCSD)						Prepared: 28-Dec-18 Analyzed: 31-Dec-18				

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW8270D MOD(SIM)										
Batch 461581A - SW3520C										
LCSD (CC20774-LCSD)					Prepared: 28-Dec-18 Analyzed: 31-Dec-18					
Benzo(a)pyrene	**7.729**	r	ug/L	0.02	10		77	30-130	77.5	20
Dibenz(a,h)anthracene	**8.433**		ug/L	0.10	10		84	30-130	19.6	20
Phenanthrene	**7.434**		ug/L	0.07	10		74	30-130	2.7	20
Naphthalene	**2.493**	I	ug/L	0.50	10		25	30-130	14.8	20
Indeno(1,2,3-cd)pyrene	**7.635**	r	ug/L	0.02	10		76	30-130	69.0	20
Fluorene	**6.870**		ug/L	0.50	10		69	30-130	1.5	20
Pyrene	**7.979**	r	ug/L	0.50	10		80	30-130	28.6	20
Fluoranthene	**7.828**		ug/L	0.50	10		78	30-130	8.0	20
Chrysene	**7.944**		ug/L	0.02	10		79	30-130	6.5	20
Benzo(k)fluoranthene	**8.066**	r	ug/L	0.02	10		81	30-130	21.9	20
Benzo(b)fluoranthene	**7.746**		ug/L	0.02	10		77	30-130	8.1	20
Benz(a)anthracene	**7.789**		ug/L	0.02	10		78	30-130	10.8	20
Anthracene	**7.690**		ug/L	0.50	10		77	30-130	6.7	20
Acenaphthylene	**5.719**	r	ug/L	0.30	10		57	30-130	59.1	20
Acenaphthene	**6.744**		ug/L	0.50	10		67	30-130	3.0	20
2-Methylnaphthalene	**4.218**		ug/L	0.50	10		42	30-130	4.7	20
Benzo(ghi)perylene	**6.705**	r	ug/L	0.48	10		67	30-130	68.0	20
Surrogate: % Terphenyl-d14	*4.107*		ug/L		*5*		*82*	*30-130*		
Surrogate: % Nitrobenzene-d5	*1.520*		ug/L		*5*		*30*	*30-130*		
Surrogate: % 2-Fluorobiphenyl	*2.570*		ug/L		*5*		*51*	*30-130*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 335.4										
Batch 19007102101A - METHOD										
Laboratory Dup (LRP957589D007102101A)			**Source: SC52856-31**			Prepared & Analyzed: 07-Jan-19				
Total Cyanide (water)	< 0.010		mg/l	0.010		BRL		-	0	20
Matrix Spike (MSP957589R007102101A)			**Source: SC52856-31**			Prepared & Analyzed: 07-Jan-19				
Total Cyanide (water)	**0.21**		mg/l	0.010	0.20	BRL	104	90-110		
Blank (P00702AB007102101A)						Prepared & Analyzed: 07-Jan-19				
Total Cyanide (water)	< 0.010		mg/l	0.010				-		
LCS (P00702AQ007102101A)						Prepared & Analyzed: 07-Jan-19				
Total Cyanide (water)	**0.19**		mg/l	0.010	0.20		97	90-110		
SW-846 6010C										
Batch 190031404408 - SW-846 3005A										
Blank (P00304HB003404408)						Prepared: 07-Jan-19 Analyzed: 08-Jan-19				
Lead	< 0.0150		mg/l	0.0150				-		
Selenium	< 0.0500		mg/l	0.0500				-		
Chromium	< 0.0150		mg/l	0.0150				-		
Cadmium	< 0.0050		mg/l	0.0050				-		
Arsenic	< 0.0500		mg/l	0.0500				-		
Silver	< 0.0100		mg/l	0.0100				-		
Barium	< 0.0050		mg/l	0.0050				-		
LCS (P00304HQ003404408)						Prepared: 07-Jan-19 Analyzed: 08-Jan-19				
Chromium	**0.188**		mg/l	0.0150	0.200		94	87-110		
Silver	**0.0540**		mg/l	0.0100	0.0500		108	80-120		
Selenium	**0.140**		mg/l	0.0500	0.150		93	80-120		
Lead	**0.148**		mg/l	0.0150	0.150		99	87-113		
Cadmium	**0.0504**		mg/l	0.0050	0.0500		101	90-111		
Barium	**1.97**		mg/l	0.0050	2.00		98	87-111		
Arsenic	**0.147**		mg/l	0.0500	0.150		98	80-120		
SW-846 7470A										
Batch 190030571309 - METHOD										
Blank (P00371IB003571309)						Prepared & Analyzed: 07-Jan-19				
Mercury	< 0.00020		mg/l	0.00020				-		
LCS (P00371IQ003571309)						Prepared & Analyzed: 07-Jan-19				
Mercury	**0.00086**		mg/l	0.00020	0.0010		86	80-114		
SW-846 8260C										
Batch L190031AA - SW-846 5030C										
LCS (LCSL93QL190031AA)						Prepared & Analyzed: 03-Jan-19				
1,2-Dichloroethane	**23**		ug/l	1	20		114	73-124		
Vinyl Chloride	**19**		ug/l	1	20		94	56-120		
cis-1,3-Dichloropropene	**22**		ug/l	1	20		111	75-120		
1,1,1-Trichloroethane	**22**		ug/l	1	20		111	67-126		
1,1,2,2-Tetrachloroethane	**21**		ug/l	1	20		107	72-120		
1,1,2-Trichloroethane	**24**		ug/l	1	20		119	80-120		
1,1-Dichloroethane	**22**		ug/l	1	20		110	80-120		
1,1-Dichloroethene	**23**		ug/l	1	20		116	80-131		
1,2-Dichlorobenzene	**22**		ug/l	5	20		112	80-120		
Carbon Tetrachloride	**22**		ug/l	1	20		109	64-134		
Methylene Chloride	**22**		ug/l	1	20		110	80-120		
Dichlorodifluoromethane	**17**		ug/l	1	20		86	41-127		
Chloromethane	**18**		ug/l	1	20		92	56-121		
trans-1,2-Dichloroethene	**23**		ug/l	1	20		116	80-120		
trans-1,3-Dichloropropene	**22**		ug/l	1	20		108	67-120		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190031AA - SW-846 5030C										
LCS (LCSL93QL190031AA)					Prepared & Analyzed: 03-Jan-19					
cis-1,2-Dichloroethene	**23**		ug/l	1	20		116	80-120		
Trichloroethene	**22**		ug/l	1	20		112	80-120		
Chloroform	**23**		ug/l	1	20		115	80-120		
Tetrachloroethene	**22**		ug/l	1	20		112	80-120		
Chlorobenzene	**23**		ug/l	1	20		114	80-120		
Dibromochloromethane	**23**		ug/l	1	20		114	71-120		
Bromomethane	**16**		ug/l	1	20		82	53-128		
Bromoform	**19**		ug/l	4	20		95	51-120		
Bromodichloromethane	**23**		ug/l	1	20		113	71-120		
Trichlorofluoromethane	**19**		ug/l	1	20		95	55-135		
1,4-Dioxane	**640**		ug/l	250	500		127	63-146		
1,4-Dichlorobenzene	**22**		ug/l	5	20		111	80-120		
1,3-Dichlorobenzene	**22**		ug/l	5	20		111	80-120		
1,2-Dichloropropane	**22**		ug/l	1	20		110	80-120		
Chloroethane	**18**		ug/l	1	20		91	55-123		
Surrogate: Toluene-d8	*50*		ug/l		*50*		*101*	*80-120*		
Surrogate: Dibromofluoromethane	*50*		ug/l		*50*		*100*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*52*		ug/l		*50*		*103*	*80-120*		
Surrogate: 4-Bromofluorobenzene	*51*		ug/l		*50*		*102*	*80-120*		
Matrix Spike (MSP957580RL190031AA)			**Source: SC52856-22**		Prepared & Analyzed: 03-Jan-19					
1,2-Dichlorobenzene	**24**		ug/l	5	20	BRL	118	80-120		
1,1,1-Trichloroethane	**24**		ug/l	1	20	BRL	122	67-126		
1,1,2,2-Tetrachloroethane	**22**		ug/l	1	20	BRL	108	72-120		
1,1,2-Trichloroethane	**24**		ug/l	1	20	BRL	122	80-120		
1,1-Dichloroethane	**23**		ug/l	1	20	BRL	117	80-120		
1,1-Dichloroethene	**27**		ug/l	1	20	BRL	133	80-131		
Chloromethane	**18**		ug/l	1	20	BRL	92	56-121		
Tetrachloroethene	**25**		ug/l	1	20	BRL	126	80-120		
Chloroethane	**19**		ug/l	1	20	BRL	95	55-123		
1,2-Dichloroethane	**24**		ug/l	1	20	BRL	118	73-124		
Vinyl Chloride	**20**		ug/l	1	20	0.6	99	56-120		
Trichlorofluoromethane	**21**		ug/l	1	20	BRL	104	55-135		
Trichloroethene	**25**		ug/l	1	20	0.5	123	80-120		
trans-1,3-Dichloropropene	**22**		ug/l	1	20	BRL	110	67-120		
trans-1,2-Dichloroethene	**25**		ug/l	1	20	BRL	127	80-120		
Methylene Chloride	**24**		ug/l	1	20	BRL	118	80-120		
Dichlorodifluoromethane	**19**		ug/l	1	20	BRL	96	41-127		
Dibromochloromethane	**24**		ug/l	1	20	BRL	119	71-120		
cis-1,3-Dichloropropene	**22**		ug/l	1	20	BRL	112	75-120		
cis-1,2-Dichloroethene	**28**		ug/l	1	20	3	122	80-120		
Bromodichloromethane	**24**		ug/l	1	20	BRL	119	71-120		
Chlorobenzene	**24**		ug/l	1	20	BRL	121	80-120		
Carbon Tetrachloride	**24**		ug/l	1	20	BRL	122	64-134		
Chloroform	**24**		ug/l	1	20	BRL	122	80-120		
Bromomethane	**17**		ug/l	1	20	BRL	85	53-128		
Bromoform	**20**		ug/l	4	20	BRL	99	51-120		
1,4-Dichlorobenzene	**24**		ug/l	5	20	BRL	119	80-120		
1,3-Dichlorobenzene	**24**		ug/l	5	20	BRL	119	80-120		
1,4-Dioxane	**610**		ug/l	250	500	BRL	122	63-146		
1,2-Dichloropropane	**23**		ug/l	1	20	BRL	114	80-120		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190031AA - SW-846 5030C										
Matrix Spike (MSP957580RL190031AA)			**Source: SC52856-22**			Prepared & Analyzed: 03-Jan-19				
Surrogate: 1,2-Dichloroethane-d4	*50*		ug/l		*50*		*99*	*80-120*		
Surrogate: Toluene-d8	*51*		ug/l		*50*		*101*	*80-120*		
Surrogate: 4-Bromofluorobenzene	*51*		ug/l		*50*		*102*	*80-120*		
Surrogate: Dibromofluoromethane	*50*		ug/l		*50*		*99*	*80-120*		
Matrix Spike Dup (SDP957580ML190031AA)			**Source: SC52856-22**			Prepared & Analyzed: 03-Jan-19				
Chloroform	**26**		ug/l	1	20	BRL	128	80-120	4	30
cis-1,2-Dichloroethene	**29**		ug/l	1	20	3	128	80-120	4	30
Chloroethane	**20**		ug/l	1	20	BRL	98	55-123	3	30
cis-1,3-Dichloropropene	**24**		ug/l	1	20	BRL	119	75-120	6	30
Dibromochloromethane	**25**		ug/l	1	20	BRL	124	71-120	4	30
Chlorobenzene	**25**		ug/l	1	20	BRL	125	80-120	3	30
Chloromethane	**19**		ug/l	1	20	BRL	94	56-121	3	30
Dichlorodifluoromethane	**19**		ug/l	1	20	BRL	93	41-127	4	30
Methylene Chloride	**24**		ug/l	1	20	BRL	122	80-120	3	30
Tetrachloroethene	**26**		ug/l	1	20	BRL	128	80-120	1	30
trans-1,2-Dichloroethene	**26**		ug/l	1	20	BRL	132	80-120	3	30
Trichloroethene	**26**		ug/l	1	20	0.5	129	80-120	4	30
Carbon Tetrachloride	**25**		ug/l	1	20	BRL	126	64-134	3	30
1,2-Dichlorobenzene	**24**		ug/l	5	20	BRL	122	80-120	3	30
Vinyl Chloride	**21**		ug/l	1	20	0.6	102	56-120	4	30
Trichlorofluoromethane	**22**		ug/l	1	20	BRL	109	55-135	4	30
trans-1,3-Dichloropropene	**23**		ug/l	1	20	BRL	114	67-120	3	30
1,1-Dichloroethane	**24**		ug/l	1	20	BRL	122	80-120	4	30
1,1,1-Trichloroethane	**25**		ug/l	1	20	BRL	127	67-126	4	30
1,1,2,2-Tetrachloroethane	**24**		ug/l	1	20	BRL	118	72-120	9	30
1,1,2-Trichloroethane	**25**		ug/l	1	20	BRL	126	80-120	4	30
Bromomethane	**18**		ug/l	1	20	BRL	90	53-128	5	30
1,1-Dichloroethene	**27**		ug/l	1	20	BRL	133	80-131	0	30
1,2-Dichloroethane	**24**		ug/l	1	20	BRL	122	73-124	3	30
Bromoform	**20**		ug/l	4	20	BRL	101	51-120	1	30
1,3-Dichlorobenzene	**25**		ug/l	5	20	BRL	124	80-120	4	30
1,4-Dichlorobenzene	**24**		ug/l	5	20	BRL	122	80-120	2	30
1,4-Dioxane	**660**		ug/l	250	500	BRL	132	63-146	8	30
Bromodichloromethane	**25**		ug/l	1	20	BRL	125	71-120	5	30
1,2-Dichloropropane	**24**		ug/l	1	20	BRL	120	80-120	5	30
Surrogate: Dibromofluoromethane	*50*		ug/l		*50*		*100*	*80-120*		
Surrogate: 4-Bromofluorobenzene	*51*		ug/l		*50*		*101*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*52*		ug/l		*50*		*104*	*80-120*		
Surrogate: Toluene-d8	*51*		ug/l		*50*		*101*	*80-120*		
Blank (VBLKL93BL190031AA)						Prepared & Analyzed: 03-Jan-19				
1,2-Dichlorobenzene	< 5		ug/l	5				-		
Vinyl Chloride	< 1		ug/l	1				-		
1,1-Dichloroethene	< 1		ug/l	1				-		
1,1-Dichloroethane	< 1		ug/l	1				-		
1,1,2-Trichloroethane	< 1		ug/l	1				-		
1,1,2,2-Tetrachloroethane	< 1		ug/l	1				-		
trans-1,3-Dichloropropene	< 1		ug/l	1				-		
1,1,1-Trichloroethane	< 1		ug/l	1				-		
Dichlorodifluoromethane	< 1		ug/l	1				-		
Trichloroethene	< 1		ug/l	1				-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190031AA - SW-846 5030C										
Blank (VBLKL93BL190031AA)						Prepared & Analyzed: 03-Jan-19				
Tetrachloroethene	< 1		ug/l	1				-		
Trichlorofluoromethane	< 1		ug/l	1				-		
Methylene Chloride	< 1		ug/l	1				-		
1,2-Dichloroethane	< 1		ug/l	1				-		
Dibromochloromethane	< 1		ug/l	1				-		
cis-1,3-Dichloropropene	< 1		ug/l	1				-		
cis-1,2-Dichloroethene	< 1		ug/l	1				-		
Chloromethane	< 1		ug/l	1				-		
Chloroform	< 1		ug/l	1				-		
Chloroethane	< 1		ug/l	1				-		
Chlorobenzene	< 1		ug/l	1				-		
1,3-Dichlorobenzene	< 5		ug/l	5				-		
Carbon Tetrachloride	< 1		ug/l	1				-		
1,2-Dichloropropane	< 1		ug/l	1				-		
1,4-Dichlorobenzene	< 5		ug/l	5				-		
1,4-Dioxane	< 250		ug/l	250				-		
trans-1,2-Dichloroethene	< 1		ug/l	1				-		
Bromodichloromethane	< 1		ug/l	1				-		
Bromoform	< 4		ug/l	4				-		
Bromomethane	< 1		ug/l	1				-		
Surrogate: 4-Bromofluorobenzene	*49*		ug/l		*50*		*99*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*50*		ug/l		*50*		*101*	*80-120*		
Surrogate: Dibromofluoromethane	*49*		ug/l		*50*		*98*	*80-120*		
Surrogate: Toluene-d8	*50*		ug/l		*50*		*101*	*80-120*		
Batch L190071AA - SW-846 5030C										
LCS (LCSL07QL190071AA)						Prepared & Analyzed: 07-Jan-19				
1,2-Dibromoethane	**23**		ug/l	1	20		117	77-120		
1,1-Dichloropropene	**23**		ug/l	5	20		113	78-120		
1,2-Dibromo-3-chloropropane	**22**		ug/l	5	20		109	47-131		
1,2,4-Trimethylbenzene	**23**		ug/l	5	20		114	75-120		
1,2,4-Trichlorobenzene	**21**		ug/l	5	20		105	63-120		
1,2,3-Trichloropropane	**23**		ug/l	5	20		114	75-124		
1,2,3-Trichlorobenzene	**20**		ug/l	5	20		101	66-120		
1,1-Dichloroethene	**22**		ug/l	1	20		112	80-131		
1,1-Dichloroethane	**22**		ug/l	1	20		109	80-120		
1,1,2-Trichloroethane	**23**		ug/l	1	20		117	80-120		
1,1,2,2-Tetrachloroethane	**21**		ug/l	1	20		103	72-120		
1,1,1-Trichloroethane	**23**		ug/l	1	20		115	67-126		
n-Propylbenzene	**23**		ug/l	5	20		114	79-121		
1,2-Dichlorobenzene	**22**		ug/l	5	20		112	80-120		
Acetone	**180**		ug/l	20	150		119	54-157		
1,1,1,2-Tetrachloroethane	**22**		ug/l	1	20		111	78-120		
Hexachlorobutadiene	**19**		ug/l	5	20		93	63-120		
Naphthalene	**19**		ug/l	5	20		96	53-124		
Dichlorodifluoromethane	**15**		ug/l	1	20		73	41-127		
di-Isopropyl ether	**19**		ug/l	1	20		93	70-124		
Ethanol	**480**	J.	ug/l	750	500		96	31-180		
Ethyl ether	**18**		ug/l	5	20		90	59-141		
Ethyl t-butyl ether	**19**		ug/l	1	20		93	68-121		
Dibromochloromethane	**24**		ug/l	1	20		118	71-120		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190071AA - SW-846 5030C										
LCS (LCSL07QL190071AA)					Prepared & Analyzed: 07-Jan-19					
Freon 113	**21**		ug/l	10	20		107	73-139		
Cyclohexane	**18**		ug/l	5	20		90	68-126		
Isopropylbenzene	**23**		ug/l	5	20		115	80-120		
m+p-Xylene	**46**		ug/l	5	40		114	80-120		
Methyl Acetate	**17**		ug/l	5	20		86	54-136		
Methyl Tertiary Butyl Ether	**20**		ug/l	1	20		101	69-122		
Methylcyclohexane	**18**		ug/l	5	20		90	67-121		
p-Isopropyltoluene	**22**		ug/l	5	20		111	76-120		
Ethylbenzene	**23**		ug/l	1	20		113	80-120		
Carbon Tetrachloride	**23**		ug/l	1	20		115	64-134		
Acrylonitrile	**93**		ug/l	20	100		93	60-129		
Benzene	**22**		ug/l	1	20		111	80-120		
Bromobenzene	**22**		ug/l	5	20		111	80-120		
Bromochloromethane	**21**		ug/l	5	20		105	80-120		
Bromodichloromethane	**24**		ug/l	1	20		119	71-120		
Bromoform	**20**		ug/l	4	20		101	51-120		
Dibromomethane	**23**		ug/l	1	20		117	80-120		
Carbon Disulfide	**20**		ug/l	5	20		101	65-128		
n-Butylbenzene	**21**		ug/l	5	20		106	76-120		
Chlorobenzene	**23**		ug/l	1	20		115	80-120		
Chloroethane	**17**		ug/l	1	20		85	55-123		
Chloroform	**24**		ug/l	1	20		119	80-120		
Chloromethane	**15**		ug/l	1	20		75	56-121		
cis-1,2-Dichloroethene	**23**		ug/l	1	20		114	80-120		
cis-1,3-Dichloropropene	**23**		ug/l	1	20		113	75-120		
Bromomethane	**16**		ug/l	1	20		78	53-128		
1,4-Dioxane	**610**		ug/l	250	500		122	63-146		
Xylene (Total)	**68**		ug/l	5	60		113	80-120		
Methylene Chloride	**22**		ug/l	1	20		110	80-120		
4-Methyl-2-pentanone	**96**		ug/l	10	100		96	62-133		
4-Chlorotoluene	**22**		ug/l	5	20		110	80-120		
2-Hexanone	**94**		ug/l	10	100		94	56-135		
2-Chlorotoluene	**22**		ug/l	5	20		110	80-120		
1,2-Dichloroethane	**25**		ug/l	1	20		123	73-124		
2,2-Dichloropropane	**20**		ug/l	1	20		101	55-142		
Vinyl Chloride	**16**		ug/l	1	20		80	56-120		
1,4-Dichlorobenzene	**22**		ug/l	5	20		112	80-120		
1,3-Dichloropropane	**22**		ug/l	1	20		109	80-120		
1,3-Dichlorobenzene	**22**		ug/l	5	20		112	80-120		
1,3,5-Trimethylbenzene	**23**		ug/l	5	20		114	75-120		
1,3,5-Trichlorobenzene	**21**		ug/l	5	20		105	66-123		
1,2-Dichloropropane	**21**		ug/l	1	20		105	80-120		
2-Butanone	**140**		ug/l	10	150		93	59-135		
Tetrahydrofuran	**120**		ug/l	10	100		124	54-144		
o-Xylene	**22**		ug/l	1	20		112	80-120		
sec-Butylbenzene	**22**		ug/l	5	20		110	77-120		
Styrene	**23**		ug/l	5	20		114	80-120		
t-Amyl methyl ether	**19**		ug/l	5	20		96	66-120		
t-Butyl alcohol	**200**		ug/l	50	200		102	60-130		
Tetrachloroethene	**23**		ug/l	1	20		115	80-120		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190071AA - SW-846 5030C										
LCS (LCSL07QL190071AA)					Prepared & Analyzed: 07-Jan-19					
Trichlorofluoromethane	**18**		ug/l	1	20		92	55-135		
Toluene	**22**		ug/l	1	20		112	80-120		
trans-1,2-Dichloroethene	**23**		ug/l	1	20		116	80-120		
trans-1,3-Dichloropropene	**22**		ug/l	1	20		111	67-120		
trans-1,4-Dichloro-2-butene	**110**		ug/l	50	100		111	33-143		
Trichloroethene	**23**		ug/l	1	20		113	80-120		
tert-Butylbenzene	**22**		ug/l	5	20		110	78-120		
Surrogate: Toluene-d8	*50*		ug/l		*50*		*100*	*80-120*		
Surrogate: Dibromofluoromethane	*51*		ug/l		*50*		*103*	*80-120*		
Surrogate: 4-Bromofluorobenzene	*51*		ug/l		*50*		*103*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*50*		ug/l		*50*		*101*	*80-120*		
LCSD (LCSL07YL190071AA)					Prepared & Analyzed: 07-Jan-19					
Dibromomethane	**23**		ug/l	1	20		115	80-120	2	30
Ethanol	**460**	J.	ug/l	750	500		92	31-180	4	30
Methyl Tertiary Butyl Ether	**21**		ug/l	1	20		103	69-122	2	30
Methyl Acetate	**17**		ug/l	5	20		87	54-136	1	30
m+p-Xylene	**46**		ug/l	5	40		114	80-120	0	30
Isopropylbenzene	**23**		ug/l	5	20		115	80-120	1	30
Hexachlorobutadiene	**20**		ug/l	5	20		99	63-120	6	30
Freon 113	**22**		ug/l	10	20		110	73-139	2	30
Ethylbenzene	**23**		ug/l	1	20		115	80-120	1	30
Chloroethane	**17**		ug/l	1	20		86	55-123	1	30
Ethyl ether	**18**		ug/l	5	20		90	59-141	1	30
n-Butylbenzene	**21**		ug/l	5	20		107	76-120	1	30
di-Isopropyl ether	**19**		ug/l	1	20		95	70-124	2	30
Dichlorodifluoromethane	**15**		ug/l	1	20		74	41-127	1	30
Dibromochloromethane	**24**		ug/l	1	20		120	71-120	1	30
Cyclohexane	**18**		ug/l	5	20		91	68-126	1	30
cis-1,3-Dichloropropene	**22**		ug/l	1	20		112	75-120	0	30
cis-1,2-Dichloroethene	**23**		ug/l	1	20		117	80-120	3	30
Chloromethane	**16**		ug/l	1	20		79	56-121	5	30
Chloroform	**24**		ug/l	1	20		119	80-120	1	30
Ethyl t-butyl ether	**19**		ug/l	1	20		96	68-121	3	30
tert-Butylbenzene	**22**		ug/l	5	20		108	78-120	2	30
1,1,1,2-Tetrachloroethane	**22**		ug/l	1	20		110	78-120	1	30
Vinyl Chloride	**17**		ug/l	1	20		83	56-120	4	30
Trichlorofluoromethane	**18**		ug/l	1	20		91	55-135	1	30
Trichloroethene	**23**		ug/l	1	20		115	80-120	1	30
trans-1,4-Dichloro-2-butene	**110**		ug/l	50	100		113	33-143	2	30
trans-1,3-Dichloropropene	**22**		ug/l	1	20		111	67-120	0	30
trans-1,2-Dichloroethene	**23**		ug/l	1	20		116	80-120	1	30
Toluene	**23**		ug/l	1	20		113	80-120	2	30
Xylene (Total)	**68**		ug/l	5	60		114	80-120	0	30
Tetrachloroethene	**23**		ug/l	1	20		113	80-120	2	30
Methylene Chloride	**22**		ug/l	1	20		110	80-120	0	30
t-Butyl alcohol	**220**		ug/l	50	200		111	60-130	8	30
t-Amyl methyl ether	**20**		ug/l	5	20		98	66-120	2	30
Styrene	**23**		ug/l	5	20		115	80-120	1	30
sec-Butylbenzene	**23**		ug/l	5	20		113	77-120	2	30
p-Isopropyltoluene	**23**		ug/l	5	20		113	76-120	2	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190071AA - SW-846 5030C										
LCSD (LCSL07YL190071AA)					Prepared & Analyzed: 07-Jan-19					
o-Xylene	**22**		ug/l	1	20		112	80-120	1	30
n-Propylbenzene	**23**		ug/l	5	20		115	79-121	1	30
Methylcyclohexane	**18**		ug/l	5	20		91	67-121	1	30
Tetrahydrofuran	**130**		ug/l	10	100		130	54-144	4	30
1,2,4-Trichlorobenzene	**21**		ug/l	5	20		107	63-120	2	30
1,3-Dichlorobenzene	**23**		ug/l	5	20		113	80-120	1	30
1,3,5-Trimethylbenzene	**23**		ug/l	5	20		116	75-120	2	30
1,3,5-Trichlorobenzene	**21**		ug/l	5	20		107	66-123	1	30
1,2-Dichloropropane	**21**		ug/l	1	20		107	80-120	1	30
1,2-Dichloroethane	**24**		ug/l	1	20		122	73-124	1	30
1,2-Dichlorobenzene	**23**		ug/l	5	20		114	80-120	1	30
1,2-Dibromoethane	**23**		ug/l	1	20		117	77-120	0	30
1,3-Dichloropropane	**22**		ug/l	1	20		112	80-120	2	30
1,2,4-Trimethylbenzene	**23**		ug/l	5	20		115	75-120	1	30
1,1,2-Trichloroethane	**24**		ug/l	1	20		120	80-120	2	30
1,2,3-Trichloropropane	**23**		ug/l	5	20		113	75-124	1	30
1,2,3-Trichlorobenzene	**21**		ug/l	5	20		104	66-120	2	30
1,1-Dichloropropene	**23**		ug/l	5	20		113	78-120	0	30
1,1-Dichloroethene	**23**		ug/l	1	20		115	80-131	2	30
1,1-Dichloroethane	**22**		ug/l	1	20		108	80-120	1	30
Chlorobenzene	**23**		ug/l	1	20		114	80-120	0	30
1,1,2,2-Tetrachloroethane	**21**		ug/l	1	20		105	72-120	2	30
Naphthalene	**20**		ug/l	5	20		98	53-124	2	30
1,2-Dibromo-3-chloropropane	**22**		ug/l	5	20		109	47-131	1	30
Bromoform	**20**		ug/l	4	20		100	51-120	0	30
1,1,1-Trichloroethane	**23**		ug/l	1	20		116	67-126	1	30
1,4-Dichlorobenzene	**23**		ug/l	5	20		113	80-120	0	30
Carbon Tetrachloride	**23**		ug/l	1	20		113	64-134	2	30
Bromomethane	**16**		ug/l	1	20		78	53-128	0	30
Bromodichloromethane	**24**		ug/l	1	20		119	71-120	0	30
Bromochloromethane	**21**		ug/l	5	20		105	80-120	0	30
Bromobenzene	**22**		ug/l	5	20		111	80-120	1	30
Benzene	**22**		ug/l	1	20		111	80-120	0	30
Acrylonitrile	**93**		ug/l	20	100		93	60-129	0	30
Acetone	**180**		ug/l	20	150		118	54-157	1	30
2-Butanone	**140**		ug/l	10	150		92	59-135	1	30
4-Chlorotoluene	**23**		ug/l	5	20		113	80-120	3	30
2-Hexanone	**93**		ug/l	10	100		93	56-135	1	30
2-Chlorotoluene	**22**		ug/l	5	20		112	80-120	2	30
Carbon Disulfide	**20**		ug/l	5	20		102	65-128	1	30
1,4-Dioxane	**660**		ug/l	250	500		132	63-146	8	30
2,2-Dichloropropane	**21**		ug/l	1	20		104	55-142	2	30
4-Methyl-2-pentanone	**95**		ug/l	10	100		95	62-133	1	30
Surrogate: 4-Bromofluorobenzene	*51*		ug/l		*50*		*103*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*50*		ug/l		*50*		*100*	*80-120*		
Surrogate: Toluene-d8	*50*		ug/l		*50*		*101*	*80-120*		
Surrogate: Dibromofluoromethane	*51*		ug/l		*50*		*102*	*80-120*		
Blank (VBLKL07BL190071AA)					Prepared & Analyzed: 07-Jan-19					
cis-1,3-Dichloropropene	< 1		ug/l	1				-		
cis-1,2-Dichloroethene	< 1		ug/l	1				-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190071AA - SW-846 5030C										
Blank (VBLKL07BL190071AA)						Prepared & Analyzed: 07-Jan-19				
Chloromethane	< 1		ug/l	1				-		
Chloroform	< 1		ug/l	1				-		
Chlorobenzene	< 1		ug/l	1				-		
Ethanol	< 750		ug/l	750				-		
Carbon Tetrachloride	< 1		ug/l	1				-		
Carbon Disulfide	< 5		ug/l	5				-		
Chloroethane	< 1		ug/l	1				-		
Cyclohexane	< 5		ug/l	5				-		
Freon 113	< 10		ug/l	10				-		
Dibromochloromethane	< 1		ug/l	1				-		
Dibromomethane	< 1		ug/l	1				-		
di-Isopropyl ether	< 1		ug/l	1				-		
Ethyl ether	< 5		ug/l	5				-		
Bromomethane	< 1		ug/l	1				-		
2,2-Dichloropropane	< 1		ug/l	1				-		
Ethyl t-butyl ether	< 1		ug/l	1				-		
Ethylbenzene	< 1		ug/l	1				-		
Dichlorodifluoromethane	< 1		ug/l	1				-		
2-Hexanone	< 10		ug/l	10				-		
Hexachlorobutadiene	< 5		ug/l	5				-		
1,2-Dichloropropane	< 1		ug/l	1				-		
1,2-Dichloroethane	< 1		ug/l	1				-		
1,3,5-Trichlorobenzene	< 5		ug/l	5				-		
1,3,5-Trimethylbenzene	< 5		ug/l	5				-		
1,3-Dichlorobenzene	< 5		ug/l	5				-		
1,3-Dichloropropane	< 1		ug/l	1				-		
1,4-Dichlorobenzene	< 5		ug/l	5				-		
2-Chlorotoluene	< 5		ug/l	5				-		
2-Butanone	< 10		ug/l	10				-		
Bromoform	< 4		ug/l	4				-		
4-Chlorotoluene	< 5		ug/l	5				-		
4-Methyl-2-pentanone	< 10		ug/l	10				-		
Acetone	< 20		ug/l	20				-		
Acrylonitrile	< 20		ug/l	20				-		
Benzene	< 1		ug/l	1				-		
Bromobenzene	< 5		ug/l	5				-		
Bromochloromethane	< 5		ug/l	5				-		
Bromodichloromethane	< 1		ug/l	1				-		
1,4-Dioxane	< 250		ug/l	250				-		
1,2,3-Trichloropropane	< 5		ug/l	5				-		
trans-1,3-Dichloropropene	< 1		ug/l	1				-		
1,1,1-Trichloroethane	< 1		ug/l	1				-		
Trichloroethene	< 1		ug/l	1				-		
Trichlorofluoromethane	< 1		ug/l	1				-		
Vinyl Chloride	< 1		ug/l	1				-		
Xylene (Total)	< 5		ug/l	5				-		
1,2-Dibromoethane	< 1		ug/l	1				-		
1,2-Dibromo-3-chloropropane	< 5		ug/l	5				-		
Isopropylbenzene	< 5		ug/l	5				-		
1,2,4-Trichlorobenzene	< 5		ug/l	5				-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190071AA - SW-846 5030C										
Blank (VBLKL07BL190071AA)					Prepared & Analyzed: 07-Jan-19					
trans-1,2-Dichloroethene	< 1		ug/l	1				-		
1,2,3-Trichlorobenzene	< 5		ug/l	5				-		
1,1-Dichloropropene	< 5		ug/l	5				-		
1,1-Dichloroethene	< 1		ug/l	1				-		
1,1-Dichloroethane	< 1		ug/l	1				-		
1,1,2-Trichloroethane	< 1		ug/l	1				-		
1,1,2,2-Tetrachloroethane	< 1		ug/l	1				-		
1,1,1,2-Tetrachloroethane	< 1		ug/l	1				-		
1,2-Dichlorobenzene	< 5		ug/l	5				-		
1,2,4-Trimethylbenzene	< 5		ug/l	5				-		
o-Xylene	< 1		ug/l	1				-		
m+p-Xylene	< 5		ug/l	5				-		
Methyl Acetate	< 5		ug/l	5				-		
Methyl Tertiary Butyl Ether	< 1		ug/l	1				-		
Methylcyclohexane	< 5		ug/l	5				-		
Methylene Chloride	< 1		ug/l	1				-		
Naphthalene	< 5		ug/l	5				-		
n-Butylbenzene	< 5		ug/l	5				-		
trans-1,4-Dichloro-2-butene	< 50		ug/l	50				-		
n-Propylbenzene	< 5		ug/l	5				-		
p-Isopropyltoluene	< 5		ug/l	5				-		
sec-Butylbenzene	< 5		ug/l	5				-		
Styrene	< 5		ug/l	5				-		
t-Amyl methyl ether	< 5		ug/l	5				-		
t-Butyl alcohol	< 50		ug/l	50				-		
tert-Butylbenzene	< 5		ug/l	5				-		
Tetrachloroethene	< 1		ug/l	1				-		
Tetrahydrofuran	< 10		ug/l	10				-		
Toluene	< 1		ug/l	1				-		
Surrogate: Toluene-d8	*50*		ug/l		*50*		*99*	*80-120*		
Surrogate: 4-Bromofluorobenzene	*50*		ug/l		*50*		*101*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*51*		ug/l		*50*		*102*	*80-120*		
Surrogate: Dibromofluoromethane	*51*		ug/l		*50*		*102*	*80-120*		
Batch L190082AA - SW-846 5030C										
LCS (LCSL14QL190082AA)					Prepared & Analyzed: 08-Jan-19					
1,2,3-Trichlorobenzene	**20**		ug/l	5	20		102	66-120		
Ethanol	**500**	J.	ug/l	750	500		100	31-180		
Methylene Chloride	**22**		ug/l	1	20		110	80-120		
Methylcyclohexane	**20**		ug/l	5	20		99	67-121		
Methyl Tertiary Butyl Ether	**20**		ug/l	1	20		101	69-122		
Methyl Acetate	**18**		ug/l	5	20		90	54-136		
Isopropylbenzene	**23**		ug/l	5	20		116	80-120		
Freon 113	**24**		ug/l	10	20		122	73-139		
Ethylbenzene	**23**		ug/l	1	20		115	80-120		
Chloroform	**24**		ug/l	1	20		122	80-120		
Ethyl ether	**20**		ug/l	5	20		102	59-141		
Trichlorofluoromethane	**20**		ug/l	1	20		101	55-135		
di-Isopropyl ether	**19**		ug/l	1	20		94	70-124		
Dichlorodifluoromethane	**17**		ug/l	1	20		87	41-127		
Dibromomethane	**23**		ug/l	1	20		116	80-120		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190082AA - SW-846 5030C										
LCS (LCSL14QL190082AA)					Prepared & Analyzed: 08-Jan-19					
Dibromochloromethane	**23**		ug/l	1	20		116	71-120		
Cyclohexane	**20**		ug/l	5	20		99	68-126		
cis-1,3-Dichloropropene	**22**		ug/l	1	20		112	75-120		
cis-1,2-Dichloroethene	**23**		ug/l	1	20		115	80-120		
Chloromethane	**16**		ug/l	1	20		82	56-121		
Ethyl t-butyl ether	**19**		ug/l	1	20		95	68-121		
tert-Butylbenzene	**20**		ug/l	5	20		100	78-120		
1,1,1,2-Tetrachloroethane	**22**		ug/l	1	20		110	78-120		
1,1-Dichloroethene	**24**		ug/l	1	20		119	80-131		
n-Butylbenzene	**21**		ug/l	5	20		107	76-120		
n-Propylbenzene	**23**		ug/l	5	20		116	79-121		
o-Xylene	**22**		ug/l	1	20		112	80-120		
p-Isopropyltoluene	**23**		ug/l	5	20		115	76-120		
sec-Butylbenzene	**23**		ug/l	5	20		114	77-120		
Styrene	**23**		ug/l	5	20		114	80-120		
Naphthalene	**20**		ug/l	5	20		98	53-124		
t-Butyl alcohol	**210**		ug/l	50	200		106	60-130		
Vinyl Chloride	**17**		ug/l	1	20		87	56-120		
Tetrachloroethene	**23**		ug/l	1	20		114	80-120		
Tetrahydrofuran	**120**		ug/l	10	100		119	54-144		
Toluene	**23**		ug/l	1	20		113	80-120		
trans-1,2-Dichloroethene	**23**		ug/l	1	20		117	80-120		
trans-1,3-Dichloropropene	**22**		ug/l	1	20		109	67-120		
trans-1,4-Dichloro-2-butene	**110**		ug/l	50	100		106	33-143		
Trichloroethene	**23**		ug/l	1	20		115	80-120		
Hexachlorobutadiene	**20**		ug/l	5	20		98	63-120		
t-Amyl methyl ether	**19**		ug/l	5	20		96	66-120		
1,2,4-Trimethylbenzene	**23**		ug/l	5	20		115	75-120		
1,4-Dichlorobenzene	**23**		ug/l	5	20		113	80-120		
1,3-Dichloropropane	**22**		ug/l	1	20		111	80-120		
1,3-Dichlorobenzene	**22**		ug/l	5	20		112	80-120		
1,3,5-Trimethylbenzene	**23**		ug/l	5	20		115	75-120		
1,3,5-Trichlorobenzene	**21**		ug/l	5	20		107	66-123		
1,2-Dichloropropane	**22**		ug/l	1	20		108	80-120		
1,2-Dichloroethane	**24**		ug/l	1	20		122	73-124		
1,2-Dichlorobenzene	**23**		ug/l	5	20		113	80-120		
1,4-Dioxane	**640**		ug/l	250	500		128	63-146		
1,2-Dibromo-3-chloropropane	**21**		ug/l	5	20		107	47-131		
1,2,4-Trichlorobenzene	**21**		ug/l	5	20		105	63-120		
Chloroethane	**17**		ug/l	1	20		87	55-123		
1,2,3-Trichloropropane	**23**		ug/l	5	20		114	75-124		
m+p-Xylene	**46**		ug/l	5	40		114	80-120		
1,1-Dichloropropene	**23**		ug/l	5	20		115	78-120		
1,1-Dichloroethane	**21**		ug/l	1	20		105	80-120		
1,1,2-Trichloroethane	**23**		ug/l	1	20		116	80-120		
1,1,2,2-Tetrachloroethane	**21**		ug/l	1	20		106	72-120		
1,1,1-Trichloroethane	**23**		ug/l	1	20		117	67-126		
1,2-Dibromoethane	**23**		ug/l	1	20		115	77-120		
Bromoform	**19**		ug/l	4	20		97	51-120		
Carbon Tetrachloride	**23**		ug/l	1	20		117	64-134		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190082AA - SW-846 5030C										
LCS (LCSL14QL190082AA)					Prepared & Analyzed: 08-Jan-19					
Chlorobenzene	**23**		ug/l	1	20		114	80-120		
Xylene (Total)	**68**		ug/l	5	60		113	80-120		
2,2-Dichloropropane	**21**		ug/l	1	20		105	55-142		
Carbon Disulfide	**21**		ug/l	5	20		104	65-128		
Bromomethane	**16**		ug/l	1	20		81	53-128		
Bromodichloromethane	**24**		ug/l	1	20		119	71-120		
Bromochloromethane	**21**		ug/l	5	20		104	80-120		
Bromobenzene	**22**		ug/l	5	20		112	80-120		
Benzene	**22**		ug/l	1	20		111	80-120		
Acrylonitrile	**95**		ug/l	20	100		95	60-129		
2-Butanone	**140**		ug/l	10	150		95	59-135		
4-Methyl-2-pentanone	**96**		ug/l	10	100		96	62-133		
Acetone	**160**		ug/l	20	150		104	54-157		
4-Chlorotoluene	**22**		ug/l	5	20		112	80-120		
2-Chlorotoluene	**22**		ug/l	5	20		112	80-120		
2-Hexanone	**96**		ug/l	10	100		96	56-135		
Surrogate: Dibromofluoromethane	*51*		ug/l		*50*		*101*	*80-120*		
Surrogate: 4-Bromofluorobenzene	*51*		ug/l		*50*		*103*	*80-120*		
Surrogate: Toluene-d8	*50*		ug/l		*50*		*100*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*51*		ug/l		*50*		*101*	*80-120*		
LCSD (LCSL14YL190082AA)					Prepared & Analyzed: 08-Jan-19					
2-Hexanone	**93**		ug/l	10	100		93	56-135	3	30
1,3-Dichloropropane	**22**		ug/l	1	20		110	80-120	1	30
1,3-Dichlorobenzene	**22**		ug/l	5	20		110	80-120	2	30
1,4-Dioxane	**650**		ug/l	250	500		131	63-146	2	30
2,2-Dichloropropane	**21**		ug/l	1	20		103	55-142	2	30
1,4-Dichlorobenzene	**22**		ug/l	5	20		108	80-120	4	30
2-Butanone	**140**		ug/l	10	150		92	59-135	4	30
2-Chlorotoluene	**22**		ug/l	5	20		111	80-120	1	30
4-Chlorotoluene	**22**		ug/l	5	20		112	80-120	1	30
4-Methyl-2-pentanone	**94**		ug/l	10	100		94	62-133	2	30
1,3,5-Trimethylbenzene	**22**		ug/l	5	20		112	75-120	2	30
Acetone	**170**		ug/l	20	150		114	54-157	9	30
1,1-Dichloroethene	**23**		ug/l	1	20		116	80-131	3	30
Acrylonitrile	**92**		ug/l	20	100		92	60-129	3	30
1,2,4-Trichlorobenzene	**21**		ug/l	5	20		103	63-120	2	30
Benzene	**22**		ug/l	1	20		110	80-120	1	30
Methylene Chloride	**22**		ug/l	1	20		108	80-120	2	30
1,1,1-Trichloroethane	**23**		ug/l	1	20		117	67-126	0	30
1,1,2,2-Tetrachloroethane	**21**		ug/l	1	20		105	72-120	1	30
1,1,2-Trichloroethane	**23**		ug/l	1	20		114	80-120	1	30
1,1-Dichloroethane	**22**		ug/l	1	20		108	80-120	2	30
1,2,3-Trichlorobenzene	**21**		ug/l	5	20		103	66-120	1	30
1,2,3-Trichloropropane	**22**		ug/l	5	20		112	75-124	3	30
1,3,5-Trichlorobenzene	**21**		ug/l	5	20		106	66-123	1	30
1,2,4-Trimethylbenzene	**22**		ug/l	5	20		112	75-120	3	30
1,2-Dibromo-3-chloropropane	**21**		ug/l	5	20		107	47-131	0	30
1,2-Dibromoethane	**23**		ug/l	1	20		114	77-120	1	30
1,2-Dichlorobenzene	**22**		ug/l	5	20		111	80-120	2	30
1,2-Dichloroethane	**24**		ug/l	1	20		120	73-124	2	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190082AA - SW-846 5030C										
LCSD (LCSL14YL190082AA)					Prepared & Analyzed: 08-Jan-19					
1,2-Dichloropropane	**21**		ug/l	1	20		106	80-120	2	30
1,1-Dichloropropene	**23**		ug/l	5	20		114	78-120	1	30
t-Butyl alcohol	**210**		ug/l	50	200		104	60-130	2	30
Methyl Tertiary Butyl Ether	**20**		ug/l	1	20		101	69-122	1	30
Methyl Acetate	**17**		ug/l	5	20		87	54-136	3	30
1,1,1,2-Tetrachloroethane	**22**		ug/l	1	20		110	78-120	1	30
Methylcyclohexane	**20**		ug/l	5	20		98	67-121	1	30
Naphthalene	**20**		ug/l	5	20		98	53-124	0	30
n-Butylbenzene	**21**		ug/l	5	20		105	76-120	2	30
n-Propylbenzene	**23**		ug/l	5	20		113	79-121	2	30
o-Xylene	**22**		ug/l	1	20		110	80-120	2	30
p-Isopropyltoluene	**22**		ug/l	5	20		111	76-120	3	30
sec-Butylbenzene	**22**		ug/l	5	20		111	77-120	3	30
Isopropylbenzene	**23**		ug/l	5	20		114	80-120	2	30
t-Amyl methyl ether	**19**		ug/l	5	20		96	66-120	0	30
Hexachlorobutadiene	**19**		ug/l	5	20		96	63-120	1	30
tert-Butylbenzene	**20**		ug/l	5	20		98	78-120	2	30
Tetrachloroethene	**23**		ug/l	1	20		114	80-120	1	30
Tetrahydrofuran	**130**		ug/l	10	100		128	54-144	7	30
Toluene	**22**		ug/l	1	20		111	80-120	2	30
trans-1,2-Dichloroethene	**23**		ug/l	1	20		114	80-120	2	30
trans-1,3-Dichloropropene	**21**		ug/l	1	20		107	67-120	1	30
trans-1,4-Dichloro-2-butene	**100**		ug/l	50	100		103	33-143	3	30
Trichloroethene	**23**		ug/l	1	20		115	80-120	0	30
Trichlorofluoromethane	**20**		ug/l	1	20		99	55-135	2	30
Vinyl Chloride	**17**		ug/l	1	20		87	56-120	0	30
Xylene (Total)	**67**		ug/l	5	60		111	80-120	2	30
Styrene	**22**		ug/l	5	20		111	80-120	3	30
Cyclohexane	**20**		ug/l	5	20		99	68-126	0	30
Bromochloromethane	**21**		ug/l	5	20		103	80-120	2	30
Bromodichloromethane	**23**		ug/l	1	20		116	71-120	2	30
Bromoform	**19**		ug/l	4	20		96	51-120	1	30
Bromomethane	**16**		ug/l	1	20		79	53-128	2	30
Carbon Disulfide	**21**		ug/l	5	20		103	65-128	1	30
Carbon Tetrachloride	**23**		ug/l	1	20		117	64-134	0	30
Chlorobenzene	**22**		ug/l	1	20		111	80-120	2	30
Chloroethane	**18**		ug/l	1	20		88	55-123	0	30
Chloroform	**24**		ug/l	1	20		119	80-120	2	30
Chloromethane	**17**		ug/l	1	20		84	56-121	3	30
m+p-Xylene	**45**		ug/l	5	40		112	80-120	2	30
cis-1,3-Dichloropropene	**22**		ug/l	1	20		108	75-120	3	30
Ethanol	**530**	J.	ug/l	750	500		105	31-180	6	30
Dibromochloromethane	**23**		ug/l	1	20		114	71-120	2	30
Freon 113	**23**		ug/l	10	20		117	73-139	4	30
Dibromomethane	**23**		ug/l	1	20		114	80-120	2	30
Dichlorodifluoromethane	**17**		ug/l	1	20		87	41-127	0	30
Ethylbenzene	**22**		ug/l	1	20		112	80-120	3	30
di-Isopropyl ether	**19**		ug/l	1	20		94	70-124	0	30
Bromobenzene	**22**		ug/l	5	20		110	80-120	2	30
Ethyl t-butyl ether	**19**		ug/l	1	20		96	68-121	1	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190082AA - SW-846 5030C										
LCSD (LCSL14YL190082AA)					Prepared & Analyzed: 08-Jan-19					
cis-1,2-Dichloroethene	**23**		ug/l	1	20		116	80-120	0	30
Ethyl ether	**20**		ug/l	5	20		102	59-141	0	30
Surrogate: 4-Bromofluorobenzene	*52*		ug/l		*50*		*103*	*80-120*		
Surrogate: Toluene-d8	*50*		ug/l		*50*		*99*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*52*		ug/l		*50*		*103*	*80-120*		
Surrogate: Dibromofluoromethane	*51*		ug/l		*50*		*103*	*80-120*		
Blank (VBLKL14BL190082AA)					Prepared & Analyzed: 08-Jan-19					
1,4-Dioxane	< 250		ug/l	250				-		
Ethyl ether	< 5		ug/l	5				-		
Methylcyclohexane	< 5		ug/l	5				-		
Methyl Tertiary Butyl Ether	< 1		ug/l	1				-		
Methyl Acetate	< 5		ug/l	5				-		
m+p-Xylene	< 5		ug/l	5				-		
Isopropylbenzene	< 5		ug/l	5				-		
Hexachlorobutadiene	< 5		ug/l	5				-		
Freon 113	< 10		ug/l	10				-		
1,1,1,2-Tetrachloroethane	< 1		ug/l	1				-		
Ethyl t-butyl ether	< 1		ug/l	1				-		
n-Butylbenzene	< 5		ug/l	5				-		
Ethanol	< 750		ug/l	750				-		
di-Isopropyl ether	< 1		ug/l	1				-		
Dichlorodifluoromethane	< 1		ug/l	1				-		
Dibromomethane	< 1		ug/l	1				-		
Dibromochloromethane	< 1		ug/l	1				-		
Cyclohexane	< 5		ug/l	5				-		
1,3-Dichloropropane	< 1		ug/l	1				-		
cis-1,2-Dichloroethene	< 1		ug/l	1				-		
Ethylbenzene	< 1		ug/l	1				-		
tert-Butylbenzene	< 5		ug/l	5				-		
Xylene (Total)	< 5		ug/l	5				-		
Vinyl Chloride	< 1		ug/l	1				-		
Trichlorofluoromethane	< 1		ug/l	1				-		
Trichloroethene	< 1		ug/l	1				-		
trans-1,4-Dichloro-2-butene	< 50		ug/l	50				-		
trans-1,3-Dichloropropene	< 1		ug/l	1				-		
trans-1,2-Dichloroethene	< 1		ug/l	1				-		
Toluene	< 1		ug/l	1				-		
Methylene Chloride	< 1		ug/l	1				-		
Tetrachloroethene	< 1		ug/l	1				-		
Naphthalene	< 5		ug/l	5				-		
t-Butyl alcohol	< 50		ug/l	50				-		
t-Amyl methyl ether	< 5		ug/l	5				-		
Styrene	< 5		ug/l	5				-		
sec-Butylbenzene	< 5		ug/l	5				-		
p-Isopropyltoluene	< 5		ug/l	5				-		
o-Xylene	< 1		ug/l	1				-		
n-Propylbenzene	< 5		ug/l	5				-		
Chloromethane	< 1		ug/l	1				-		
Tetrahydrofuran	< 10		ug/l	10				-		
1,2,4-Trichlorobenzene	< 5		ug/l	5				-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch L190082AA - SW-846 5030C										
Blank (VBLKL14BL190082AA)						Prepared & Analyzed: 08-Jan-19				
1,3-Dichlorobenzene	< 5		ug/l	5				-		
cis-1,3-Dichloropropene	< 1		ug/l	1				-		
1,3,5-Trichlorobenzene	< 5		ug/l	5				-		
1,2-Dichloropropane	< 1		ug/l	1				-		
1,2-Dichloroethane	< 1		ug/l	1				-		
1,2-Dichlorobenzene	< 5		ug/l	5				-		
1,2-Dibromoethane	< 1		ug/l	1				-		
Chloroform	< 1		ug/l	1				-		
1,2,4-Trimethylbenzene	< 5		ug/l	5				-		
1,4-Dichlorobenzene	< 5		ug/l	5				-		
1,2,3-Trichloropropane	< 5		ug/l	5				-		
1,2,3-Trichlorobenzene	< 5		ug/l	5				-		
1,1-Dichloropropene	< 5		ug/l	5				-		
1,1-Dichloroethene	< 1		ug/l	1				-		
1,1-Dichloroethane	< 1		ug/l	1				-		
1,1,2-Trichloroethane	< 1		ug/l	1				-		
1,1,2,2-Tetrachloroethane	< 1		ug/l	1				-		
1,1,1-Trichloroethane	< 1		ug/l	1				-		
1,2-Dibromo-3-chloropropane	< 5		ug/l	5				-		
Bromobenzene	< 5		ug/l	5				-		
Chloroethane	< 1		ug/l	1				-		
Chlorobenzene	< 1		ug/l	1				-		
Carbon Tetrachloride	< 1		ug/l	1				-		
Carbon Disulfide	< 5		ug/l	5				-		
Bromomethane	< 1		ug/l	1				-		
Bromoform	< 4		ug/l	4				-		
1,3,5-Trimethylbenzene	< 5		ug/l	5				-		
Bromochloromethane	< 5		ug/l	5				-		
2,2-Dichloropropane	< 1		ug/l	1				-		
Benzene	< 1		ug/l	1				-		
Acrylonitrile	< 20		ug/l	20				-		
Acetone	< 20		ug/l	20				-		
4-Methyl-2-pentanone	< 10		ug/l	10				-		
4-Chlorotoluene	< 5		ug/l	5				-		
2-Hexanone	< 10		ug/l	10				-		
2-Chlorotoluene	< 5		ug/l	5				-		
2-Butanone	< 10		ug/l	10				-		
Bromodichloromethane	< 1		ug/l	1				-		
Surrogate: Toluene-d8	*49*		ug/l		*50*		*99*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*52*		ug/l		*50*		*104*	*80-120*		
Surrogate: Dibromofluoromethane	*51*		ug/l		*50*		*102*	*80-120*		
Surrogate: 4-Bromofluorobenzene	*50*		ug/l		*50*		*101*	*80-120*		
Batch W190072AA - SW-846 5030C										
LCS (LCSW25QW190072AA)						Prepared & Analyzed: 07-Jan-19				
1,2-Dichloroethane	**22**		ug/l	1	20		112	73-124		
Chloroform	**22**		ug/l	1	20		112	80-120		
1,1,2,2-Tetrachloroethane	**19**		ug/l	1	20		95	72-120		
1,1,2-Trichloroethane	**22**		ug/l	1	20		108	80-120		
1,1-Dichloroethane	**22**		ug/l	1	20		108	80-120		
1,1-Dichloroethene	**25**		ug/l	1	20		123	80-131		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch W190072AA - SW-846 5030C										
LCS (LCSW25QW190072AA)						Prepared & Analyzed: 07-Jan-19				
1,2-Dichlorobenzene	**21**		ug/l	5	20		107	80-120		
1,2-Dichloropropane	**21**		ug/l	1	20		104	80-120		
1,3-Dichlorobenzene	**21**		ug/l	5	20		107	80-120		
1,4-Dichlorobenzene	**21**		ug/l	5	20		107	80-120		
1,4-Dioxane	**530**		ug/l	250	500		105	63-146		
Bromodichloromethane	**23**		ug/l	1	20		113	71-120		
Bromoform	**20**		ug/l	4	20		102	51-120		
Bromomethane	**18**		ug/l	1	20		88	53-128		
Carbon Tetrachloride	**28**		ug/l	1	20		141	64-134		
Chloroethane	**18**		ug/l	1	20		92	55-123		
Dichlorodifluoromethane	**18**		ug/l	1	20		91	41-127		
Vinyl Chloride	**19**		ug/l	1	20		94	56-120		
Trichlorofluoromethane	**21**		ug/l	1	20		103	55-135		
Trichloroethene	**22**		ug/l	1	20		111	80-120		
trans-1,3-Dichloropropene	**21**		ug/l	1	20		103	67-120		
trans-1,2-Dichloroethene	**24**		ug/l	1	20		119	80-120		
Chlorobenzene	**22**		ug/l	1	20		111	80-120		
Methylene Chloride	**22**		ug/l	1	20		112	80-120		
1,1,1-Trichloroethane	**25**		ug/l	1	20		124	67-126		
Dibromochloromethane	**22**		ug/l	1	20		112	71-120		
cis-1,3-Dichloropropene	**22**		ug/l	1	20		108	75-120		
cis-1,2-Dichloroethene	**23**		ug/l	1	20		116	80-120		
Chloromethane	**18**		ug/l	1	20		89	56-121		
Tetrachloroethene	**24**		ug/l	1	20		119	80-120		
Surrogate: 4-Bromofluorobenzene	*50*		ug/l		*50*		*100*	*80-120*		
Surrogate: Dibromofluoromethane	*52*		ug/l		*50*		*104*	*80-120*		
Surrogate: Toluene-d8	*49*		ug/l		*50*		*98*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*51*		ug/l		*50*		*103*	*80-120*		
Blank (VBLKW25BW190072AA)						Prepared & Analyzed: 07-Jan-19				
1,2-Dichloropropane	< 1		ug/l	1				-		
Carbon Tetrachloride	< 1		ug/l	1				-		
Vinyl Chloride	< 1		ug/l	1				-		
Bromoform	< 4		ug/l	4				-		
Bromodichloromethane	< 1		ug/l	1				-		
1,4-Dioxane	< 250		ug/l	250				-		
Trichlorofluoromethane	< 1		ug/l	1				-		
1,3-Dichlorobenzene	< 5		ug/l	5				-		
Chlorobenzene	< 1		ug/l	1				-		
1,2-Dichloroethane	< 1		ug/l	1				-		
1,2-Dichlorobenzene	< 5		ug/l	5				-		
1,1-Dichloroethene	< 1		ug/l	1				-		
1,1-Dichloroethane	< 1		ug/l	1				-		
1,1,2-Trichloroethane	< 1		ug/l	1				-		
1,1,2,2-Tetrachloroethane	< 1		ug/l	1				-		
1,4-Dichlorobenzene	< 5		ug/l	5				-		
Dichlorodifluoromethane	< 1		ug/l	1				-		
1,1,1-Trichloroethane	< 1		ug/l	1				-		
Trichloroethene	< 1		ug/l	1				-		
trans-1,3-Dichloropropene	< 1		ug/l	1				-		
trans-1,2-Dichloroethene	< 1		ug/l	1				-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8260C										
Batch W190072AA - SW-846 5030C										
Blank (VBLKW25BW190072AA)						Prepared & Analyzed: 07-Jan-19				
Tetrachloroethene	< 1		ug/l	1				-		
Bromomethane	< 1		ug/l	1				-		
Methylene Chloride	< 1		ug/l	1				-		
Chloroethane	< 1		ug/l	1				-		
Dibromochloromethane	< 1		ug/l	1				-		
cis-1,3-Dichloropropene	< 1		ug/l	1				-		
cis-1,2-Dichloroethene	< 1		ug/l	1				-		
Chloromethane	< 1		ug/l	1				-		
Chloroform	< 1		ug/l	1				-		
Surrogate: Dibromofluoromethane	*52*		ug/l		*50*		*104*	*80-120*		
Surrogate: 4-Bromofluorobenzene	*47*		ug/l		*50*		*94*	*80-120*		
Surrogate: Toluene-d8	*47*		ug/l		*50*		*95*	*80-120*		
Surrogate: 1,2-Dichloroethane-d4	*53*		ug/l		*50*		*107*	*80-120*		

Notes and Definitions

J	Estimated Below RL
J.	Estimated value
l	This parameter is outside laboratory lcs/lcsd specified recovery limits.
m	This parameter is outside laboratory ms/msd specified recovery limits.
r	This parameter is outside laboratory rpd specified recovery limits.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference
[2C]	Indicates concentration was reported from the secondary, confirmation column.

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

SCS28560 - BM

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CHAIN OF CUSTODY RECORD

Page 1 of 4

Special Handling:

- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Day Environmental, Inc
1563 Lyell Avenue
Rochester NY 14606

Telephone #: 585 454 0210
Project Mgr: C. Hampton

Invoice To: SAME

P.O No.: _____ Quote #: _____

Project No: 5529S-18
Site Name: 415 & 441 Chandler St
Location: Jamestown State: NY
Sampler(s): C. Hampton

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= None 12= _____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= _____ X2= _____ X3= _____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Halocarbons 8260	TCLP CP-51 VOC x 8260	PCB x 8082	TCLP CP-51 SVOC x 8270	Check if chlorinated
SCS28560 01	TB-01 (11')	12/19/18	14:50	G	SO	2		1		X				✓
02	TB-01 (12.5')	12/19/18	15:10			2		1		X				✓
03	TB-02 (11.5')	12/19/18	10:15			2		1		X				✓
04	TB-03 (9')	12/20/18	08:20			2		1		X				✓
05	TB-04 (11.5')	12/20/18	07:50			2		1		X				✓
06	TB-04 (12.9')	12/20/18	08:00			2		1		X				✓
07	TB-05 (12.5')	12/19/18	16:45			2		1		X				✓
08	TB-10 (4')	12/18/18	12:00			2		1			X			✓
09	TB-10 (4-5')	12/18/18	12:05				1					X		✓
10	TB-19 (7-8')	12/17/18	10:35				1					X	X	✓

List Preservative Code below: 7,9,11 | 7,9,A | 11 | 11

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? [ ] Yes [ ] No
CT DPH RCP Report? [ ] Yes [ ] No
[ ] Standard [ ] No QC [ ] DQA*
[ ] ASP A* [X] ASP B*
[ ] NJ Reduced* [ ] NJ Full*
[ ] Tier II* [ ] Tier IV*
[ ] Other: _____
State-specific reporting standards:

Frozen 12/19/18
Frozen 12/19/18
Frozen 12/19/18
Frozen 12/20/18
Frozen 12/20/18
Frozen 12/20/18
Frozen 12/19/18
Frozen 12/18/18
Frozen 12/18/18
Frozen 12/17/18

Relinquished by:	Received by:	Date:	Time:
Charles Hampton	FedEx	12/27/18	1630
FedEx	Ground	12/28/18	1036

Temp °C: Observed 1.1 | Correction Factor 0 | Corrected 1.1 | IR ID # 01

[X] EDD format: Standard
[X] E-mail to: champton@daymail.net

Condition upon receipt: Custody Seals: [ ] Present [X] Intact [ ] Broken
[ ] Ambient [X] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

SC52856 By

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CHAIN OF CUSTODY RECORD

Page 2 of 4

Special Handling:

- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Day Environmental, Inc
1563 Lyell Avenue
Rochester, NY 14606

Telephone #: 585 454 0210
Project Mgr: C. Hampton

Invoice To: SAME

P.O No.: _____ Quote #: _____

Project No: 55295-18
Site Name: 415 & 441 Chandler St
Location: Jamestown State: NY
Sampler(s): C. Hampton

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= None 12= _____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= _____ X2= _____ X3= _____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	List Preservative Code below: 9,11(SC) / 2(GW)	Analysis: Halocarbons 8260	Analysis: TCL+CP-5L VOC +8260	Analysis: PCB + 8082	Analysis: TCL+CP-5L SVOC +8270	Analysis: RCRA metals	Analysis: Total Cyanide	Check if chlorinated	QA/QC Reporting Notes: * additional charges may appply
SC52856-11	TB-21 (5-6')	12/17/18	15:30	G	SO		1						X	X			X	Frozen 12/17/18
12	TB-22 (13')	12/20/18	10:45		SO	3		1			X						☑	Frozen 12/20/18
13	MW-A	12/27/18	09:53		GW	3					X						☑	
14	MW-B	12/27/18	11:09		GW	3					X						☑	
15	MW-C	12/27/18	08:40		GW	3	2		2			X	X	X	X	X	☑	
16	MW-D	12/27/18	10:00		GW	3	2		2			X	X	X	X	X	☑	
17	MW-E	12/27/18	08:56		GW	3					X						☑	
18	MW-F	12/27/18	10:30		GW	3					X						☑	
19	MW-G	12/27/18	09:17		GW	3					X						☑	
20	MW-H	12/27/18	07:25		GW	3			1		X				X		☐	

QA/QC Reporting Notes:
MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☒ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
Charles Hampton	Fed Ex	12/27/18	1630
Jacob	[illegible]	12/28/18	1036

Temp °C: Observed 1.1 / Correction Factor 0 / Corrected 1.1 / IR ID # 01

☒ EDD format: Standard
☒ E-mail to: champton@daygmail.net

Condition upon receipt: Custody Seals: ☑ Present ☑ Intact ☐ Broken
☐ Ambient ☑ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

SC52856 Bay

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CHAIN OF CUSTODY RECORD

Page 3 of 4

Special Handling:

- [x] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Day Environmental, Inc
1563 Lyell Avenue
Rochester, NY 14606

Telephone #: 585 454 0210
Project Mgr: C. Hampton

Invoice To: SAME

P.O No.: _____ Quote #: _____

Project No: 55295-18
Site Name: 415 & 441 Chandler St
Location: Jamestown State: NY
Sampler(s): C. Hampton

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= None 12= _____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= _____ X2= _____ X3= _____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	TCL+CP-51 VOC + 8260	TCL+CP-51 SVOC + 8270	CP-51 SVOC + 8270	RCRA metals	Total Cyanide 9260	Hydrocarbons +
						List Preservative Code below:				2	11	11	4	5	2
SC52856-21	MW-I	12/27/18	11:25	G	GW	3									X
22	MW-J	12/26/18	13:44			3									X
23	MW-K	12/27/18	14:20			3	1		1	X	X		X		
24	MW-L	12/26/18	17:10			3	1			X		X			
25	MW-N	12/26/18	16:22			3	1			X		X			
26	MW-O	12/26/18	10:01			3			2	X			X	X	
27	MW-P	12/26/18	11:06			3			2	X			X	X	
28	MW-Q	12/26/18	11:05			3			2	X			X	X	
29	MW-R	12/26/18	12:35			3			2	X			X	X	
30	MW-S	12/26/18	12:31						2				X	X	

Check if chlorinated

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? [ ] Yes [ ] No
CT DPH RCP Report? [ ] Yes [ ] No
[ ] Standard [ ] No QC [ ] DQA*
[ ] ASP A* [x] ASP B*
[ ] NJ Reduced* [ ] NJ Full*
[ ] Tier II* [ ] Tier IV*
[ ] Other: _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
Charles Hampton	Fed Ex	12/27/18	1630
[signature]	[signature]	12/28/18	1036

Temp °C: Observed 1.1; Correction Factor 0; Corrected 1.1; IR ID # 01

[x] EDD format: Standard
[x] E-mail to: champton@daymail.net

Condition upon receipt: Custody Seals: [ ] Present [ ] Intact [ ] Broken
[ ] Ambient [x] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

SC52856

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CHAIN OF CUSTODY RECORD

Page 4 of 4

Special Handling:

- [x] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Day Environmental, Inc.
1563 Lyell Avenue
Rochester, NY 14606

Telephone #: 585 454 0210
Project Mgr: C. Hampton

Invoice To: SAME

P.O No.: _____ Quote #: _____

Project No: 55295-18
Site Name: 415+441 Chandler St
Location: Jamestown State: NY
Sampler(s): C. Hampton

F=Field Filtered 1=Na_2S2O_3 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= None 12= _____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= _____ X2= _____ X3= _____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	Containers: # of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Analysis: TCL RCP 57 VOC + 8260	CP-51 +8270 SVOC	RCRA Metals	Total Cyanide	Check if chlorinated
SC52856-31	MW-T	12/26/18	14:15	G	GW	3			2	X		X	X	
32	TB-11 (GW)	12/26/18	16:20			3	1			X	X			
33	TB-18 (GW)	12/26/18	10:15			3				X				
34	Trip Blank 12/27/18	—	—	—	—	6				X				
35	Trip Blank 12/27/18	—	—	—	—	9				X				

List Preservative Code below: 2 | 11 | 4 | 5

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? [ ] Yes [ ] No
CT DPH RCP Report? [ ] Yes [ ] No
[ ] Standard [ ] No QC [ ] DQA*
[ ] ASP A* [x] ASP B*
[ ] NJ Reduced* [ ] NJ Full*
[ ] Tier II* [ ] Tier IV*
[ ] Other: _____
State-specific reporting standards:

Relinquished by:	Received by:	Date:	Time:
Charles Hampton	Fed Ex	12/27/18	1630
		12/28/18	1036

Temp °C: Observed 1.1; Correction Factor 0; Corrected 1.1; IR ID # 01

[x] EDD format: Standard
[x] E-mail to: Champton@daymail.net

Condition upon receipt: Custody Seals: [x] Present [x] Intact [ ] Broken
[ ] Ambient [x] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

SCS28560 - BM

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CHAIN OF CUSTODY RECORD

Page 1 of 4

Special Handling:

- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Day Environmental, Inc
1563 Lyell Avenue
Rochester NY 14606

Telephone #: 585 454 0210
Project Mgr: C. Hampton

Invoice To: SAME

P.O No.: _____ Quote #: _____

Project No: 5529S-18
Site Name: 415 & 441 Chandler St
Location: Jamestown State: NY
Sampler(s): C. Hampton

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH_3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= None 12= _____

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1= _____ X2= _____ X3= _____

G= Grab C=Composite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Halocarbons 8260	TCLP+CP-51 VOC + 8260	PCB + 8082 TCLP+CP-51	SVOC + 8270	Check if chlorinated
SCS28560 01	TB-01 (11')	12/19/18	14:50	G	SO	3		1		X				✓
02	TB-01 (12.5')	12/19/18	15:10			3		1		X				✓
03	TB-02 (11.5')	12/19/18	10:15			3		1		X				✓
04	TB-03 (9')	12/20/18	08:20			3		1		X				✓
05	TB-04 (11.5')	12/20/18	07:50			3		1		X				✓
06	TB-04 (12.9')	12/20/18	08:00			3		1		X				✓
07	TB-05 (12.5')	12/19/18	16:45			3		1		X				✓
08	TB-10 (4')	12/18/18	12:00			3		1			X			✓
09	TB-10 (4-5')	12/18/18	12:05			Jar	1					X		✓
10	TB-19 (7-8')	12/17/18	10:35			12/31	1					X	X	✓

List Preservative Code below: 7,9,11 | 7,9,11 | 11 | 11

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? [ ] Yes [ ] No
CT DPH RCP Report? [ ] Yes [ ] No
[ ] Standard [ ] No QC [ ] DQA*
[ ] ASP A* [X] ASP B*
[ ] NJ Reduced* [ ] NJ Full*
[ ] Tier II* [ ] Tier IV*
[ ] Other: _____
State-specific reporting standards:

Frozen 12/19/18
Frozen 12/19/18
Frozen 12/19/18
Frozen 12/20/18
Frozen 12/20/18
Frozen 12/20/18
Frozen 12/19/18
Frozen 12/18/18
Frozen 12/14/18
Frozen 12/17/18

Relinquished by:	Received by:	Date:	Time:
Charles Hampton	FedEx	12/27/18	1630
FedEx	[signature]	11/28/18	1036

Temp °C: Observed 1.1 | Correction Factor 0 | Corrected 1.1 | IR ID # 01

[X] EDD format: Standard
[X] E-mail to: champton@dayenv.net

Condition upon receipt: Custody Seals: [ ] Present [ ] Intact [ ] Broken
[ ] Ambient [ ] Iced [ ] Refrigerated [ ] DI VOA Frozen [ ] Soil Jar Frozen

Recipient's Phone Number
( )

Company

Dept./Floor/Suite

Street Address

City

State

ORIGIN ID:EHTA (585) 454-0210
ATTN: JEFF DANZINGER
DAY ENVIRONMENTAL, INC.
1563 LYELL AVENUE

ROCHESTER, NY 14606
UNITED STATES US

SHIP DATE: 10DEC18
ACTWGT: 40.00 LB MAN
CAD: 0654830/CAFE3211

COURIER: PLACE ASTRA LABEL HERE

TO ROBERT BRISTOL
EUROFINS SPECTRUM ANALYTICAL, INC.
11 ALMGREN DRIVE

AGAWAM MA 01001
(413) 789-9018
REF: # 46127 SAMPLE RETURNS

14 MW

RMA:

FedEx
Express

FRI - 28 DEC 10:30A
PRIORITY OVERNIGHT

FedEx
TRK# 0221 4663 8817 6421

01001
MA-US BDL

EB EHTA

Part # 1

RT 746 1
ST 8 10:30 A
6421
12.28

NOT LIFT USING THIS TAG

DO NOT LIFT USING THIS TAG

ALIGN FEDEX AIRBILL POUCH HERE

ORIGIN ID:EHTA (585) 454-0210
ATTN: JEFF DANZINGER
DAY ENVIRONMENTAL, INC.
1563 LYELL AVENUE

ROCHESTER, NY 14606
UNITED STATES US

SHIP DATE: 10DEC18
ACTWGT: 40.00 LB MAN
CAD: 0654830/CAFE3211

TO ROBERT BRISTOL
EUROFINS SPECTRUM ANALYTICAL, INC.
11 ALMGREN DRIVE

AGAWAM MA 01001
(413) 789-9018
REF: # 46127 SAMPLE RETURNS

RMA:

FedEx
Express

FedEx
TRK# 0221 4663 8817 6410

FRI - 28 DEC 10:30A
PRIORITY OVERNIGHT

EB EHTA

01001
MA-US BDL

#117036 12/27 552J2/E4AF/DCA5

RT 746 1 10:30 A
12.28

DO NOT [illegible] THIS TAG

Please Print

[illegible]

[illegible]

Room

e cannot deliver to P.O. Boxes or P.O. Zip Codes)

Zip

FedEx

ORIGIN ID:EHTA (585) 454-0210
ATTN: JEFF DANZINGER
DAY ENVIRONMENTAL, INC.
1563 LYELL AVENUE

ROCHESTER, NY 14606
UNITED STATES US

SHIP DATE: 10DEC18
ACTWGT: 40.00 LB MAN
CAD: 0654830/CAFE3211

HERE

TO ROBERT BRISTOL
EUROFINS SPECTRUM ANALYTICAL, INC.
11 ALMGREN DRIVE

AGAWAM MA 01001
(413) 789-9018
REF: # 46127 SAMPLE RETURNS

RMA:

FedEx Express

FedEx
TRK# 0221 4663 8817 6400

FRI - 28 DEC 10:30A
PRIORITY OVERNIGHT

EB EHTA

01001
MA-US BDL

*117036 12/27 552J2/E4AF/DCA5

46 1 A
10:30 6400
12.28
8

Batch Summary

'[none]'

Subcontracted Analyses

SC52856-01 (TB-01 (11'))
SC52856-02 (TB-01 (12.5'))
SC52856-03 (TB-02 (11.5'))
SC52856-04 (TB-03 (9'))
SC52856-05 (TB-04 (11.5'))
SC52856-06 (TB-04 (12.9'))
SC52856-07 (TB-05 (12.5'))
SC52856-08 (TB-10 (4'))
SC52856-09 (TB-10 (4-5'))
SC52856-10 (TB-19 (7-8'))
SC52856-11 (TB-21 (5-6'))
SC52856-12 (TB-22 (13'))

190030571309

Subcontracted Analyses

P00371IB003571309
P00371IQ003571309
SC52856-15 (MW-C)
SC52856-16 (MW-D)
SC52856-20 (MW-H)
SC52856-23 (MW-K)
SC52856-26 (MW-O)
SC52856-27 (MW-P)
SC52856-28 (MW-Q)
SC52856-29 (MW-R)
SC52856-30 (MW-S)
SC52856-31 (MW-T)

190031404408

Subcontracted Analyses

P00304HB003404408
P00304HQ003404408
SC52856-15 (MW-C)
SC52856-16 (MW-D)
SC52856-20 (MW-H)
SC52856-23 (MW-K)
SC52856-26 (MW-O)
SC52856-27 (MW-P)
SC52856-28 (MW-Q)
SC52856-29 (MW-R)
SC52856-30 (MW-S)
SC52856-31 (MW-T)

19007102101A

Subcontracted Analyses

LRP957589D007102101A
MSP957589R007102101A
P00702AB007102101A
P00702AQ007102101A
SC52856-15 (MW-C)
SC52856-16 (MW-D)
SC52856-26 (MW-O)
SC52856-27 (MW-P)
SC52856-28 (MW-Q)
SC52856-29 (MW-R)
SC52856-30 (MW-S)
SC52856-31 (MW-T)

461562A

Subcontracted Analyses

CC21618-BLK
CC21618-LCS
CC21618-LCSD
CC21618-MS
CC21618-MSD
SC52856-10 (TB-19 (7-8'))
SC52856-11 (TB-21 (5-6'))

461564A

Subcontracted Analyses

CC21618-BLK
CC21618-LCS
CC21618-LCSD
CC21618-MS
CC21618-MSD
SC52856-09 (TB-10 (4-5'))
SC52856-10 (TB-19 (7-8'))
SC52856-11 (TB-21 (5-6'))

461572A

Subcontracted Analyses

CC21102-BLK
CC21102-LCS
CC21102-LCSD
SC52856-15 (MW-C)
SC52856-16 (MW-D)

461581A

Subcontracted Analyses

CC20774-BLK
CC20774-LCS
CC20774-LCSD
SC52856-24 (MW-L)
SC52856-25 (MW-N)
SC52856-32 (TB-11 (GW))

461615A

Subcontracted Analyses

CC21515-BLK
CC21515-LCS
CC21515-LCSD
SC52856-15 (MW-C)
SC52856-16 (MW-D)
SC52856-23 (MW-K)

461615B

Subcontracted Analyses

CC21515-BLK
CC21515-LCS
CC21515-LCSD
SC52856-15 (MW-C)
SC52856-16 (MW-D)
SC52856-23 (MW-K)

461716A

Subcontracted Analyses

CC21270-BLK
CC21270-LCS
CC21270-LCSD
CC21270-MS
CC21270-MSD
SC52856-02 (TB-01 (12.5'))
SC52856-03 (TB-02 (11.5'))
SC52856-12 (TB-22 (13'))
SC52856-34 (Trip Blank 12/27/18)

461826A

Subcontracted Analyses

CC21618-BLK
CC21618-LCS
CC21618-LCSD
CC21618-MS
CC21618-MSD
SC52856-01 (TB-01 (11'))
SC52856-02RE1 (TB-01 (12.5'))
SC52856-03RE1 (TB-02 (11.5'))
SC52856-04 (TB-03 (9'))
SC52856-05 (TB-04 (11.5'))
SC52856-06 (TB-04 (12.9'))
SC52856-07 (TB-05 (12.5'))
SC52856-08 (TB-10 (4'))
SC52856-12RE1 (TB-22 (13'))

461964A

Subcontracted Analyses

CC21849-BLK
CC21849-LCS
CC21849-LCSD
CC21849-MS
CC21849-MSD
SC52856-01RE1 (TB-01 (11'))
SC52856-05RE1 (TB-04 (11.5'))
SC52856-07RE1 (TB-05 (12.5'))

L190031AA

Subcontracted Analyses

LCSL93QL190031AA
MSP957580RL190031AA
SC52856-22 (MW-J)
SDP957580ML190031AA
VBLKL93BL190031AA

L190071AA

Subcontracted Analyses

LCSL07QL190071AA
LCSL07YL190071AA
SC52856-16 (MW-D)
SC52856-19 (MW-G)
SC52856-20 (MW-H)
SC52856-21 (MW-I)
SC52856-23 (MW-K)
SC52856-35 (Trip Blank 12/27/18)
VBLKL07BL190071AA

L190082AA

Subcontracted Analyses

LCSL14QL190082AA
LCSL14YL190082AA
SC52856-15 (MW-C)
SC52856-17 (MW-E)
SC52856-18 (MW-F)
SC52856-24 (MW-L)
SC52856-25 (MW-N)
SC52856-26 (MW-O)
SC52856-27 (MW-P)
SC52856-28 (MW-Q)
SC52856-29 (MW-R)
SC52856-31 (MW-T)
SC52856-32 (TB-11 (GW))
SC52856-33 (TB-18 (GW))
VBLKL14BL190082AA

W190072AA

Subcontracted Analyses

LCSW25QW190072AA
SC52856-13 (MW-A)
SC52856-14 (MW-B)
VBLKW25BW190072AA

EUROFINS SPECTRUM ANALYTICAL
LABORATORY REPORT
SC52917

☑ Final Report
☐ Revised Report

Report Date:
18-Jan-19 11:11

Laboratory Report
SC52917

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, NY 14606
Attn: Charles Hampton

Project: 415+441 Chandler St - Jamestown, NY
Project #: 5529S-18

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2972/2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00348
USDA # P330-15-00375
Vermont # VT-11393

Authorized by:

Dawn Wojcik
Laboratory Director

Eurofins Spectrum Analytical holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 29 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Spectrum Analytical, Inc.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our 'Quality' web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC52917

Project: 415+441 Chandler St - Jamestown, NY

Project Number: 5529S-18

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC52917-01	MW-C	Ground Water	02-Jan-19 07:55	03-Jan-19 10:47
SC52917-02	MW-H	Ground Water	02-Jan-19 09:00	03-Jan-19 10:47
SC52917-03	MW-P	Ground Water	02-Jan-19 11:15	03-Jan-19 10:47
SC52917-04	MW-Q	Ground Water	02-Jan-19 10:05	03-Jan-19 10:47
SC52917-05	MW-R	Ground Water	02-Jan-19 12:15	03-Jan-19 10:47
SC52917-06	Duplicate	Ground Water	02-Jan-19 00:00	03-Jan-19 10:47
SC52917-07	FB20190102	DI/PFA Free H2O	02-Jan-19 12:45	03-Jan-19 10:47

CASE NARRATIVE:

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 1.1 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA 537 modified

Laboratory Control Samples:

LCS0081Q19008001

Estimated value

- Perfluorobutanoic acid
- Perfluoropentanoic acid

Samples:

SC52917-01 *MW-C*

Estimated value

- Perfluorononanoic acid
- Perfluorooctanesulfonamide

SC52917-02 *MW-H*

Estimated value

- 6:2 fluorotelomersulfonate
- Perfluoroheptanesulfonate
- Perfluorohexanesulfonate

SC52917-03 *MW-P*

Estimated value

- Perfluorobutanoic acid
- Perfluoroheptanesulfonate
- Perfluoroheptanoic acid
- Perfluorohexanoic acid
- Perfluorononanoic acid

SC52917-04 *MW-Q*

Estimated value

- Perfluorobutanesulfonate
- Perfluorobutanoic acid
- Perfluorohexanesulfonate
- Perfluorohexanoic acid
- Perfluorooctanoic acid

SC52917-05 *MW-R*

EPA 537 modified

Samples:

SC52917-05 *MW-R*

Estimated value

Perfluorohexanesulfonate

SC52917-06 *Duplicate*

Estimated value

Perfluorobutanesulfonate
Perfluorobutanoic acid
Perfluoroheptanesulfonate
Perfluorohexanesulfonate
Perfluorooctanoic acid

LCS0143Y19014013

Estimated value

Perfluorobutanoic acid

SW-846 8270D SIM

Samples:

SC52917-02 *MW-H*

Estimated value

1,4-Dioxane

Sample Acceptance Check Form

Client:	Day Environmental, Inc.
Project:	415+441 Chandler St - Jamestown, NY / 5529S-18
Work Order:	SC52917
Sample(s) received on:	1/3/2019

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
Were custody seals present?	☑	☐	☐
Were custody seals intact?	☑	☐	☐
Were samples received at a temperature of ≤ 6°C?	☑	☐	☐
Were samples cooled on ice upon transfer to laboratory representative?	☑	☐	☐
Were sample containers received intact?	☑	☐	☐
Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
Were samples accompanied by a Chain of Custody document?	☑	☐	☐
Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☑	☐	☐
Did sample container labels agree with Chain of Custody document?	☑	☐	☐
Were samples received within method-specific holding times?	☑	☐	☐

Summary of Hits

Lab ID: SC52917-01 **Client ID:** MW-C

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Perfluorobutanesulfonate	10		0.86	ng/l	EPA 537 modified
Perfluoroheptanesulfonate	5.7		1.7	ng/l	EPA 537 modified
Perfluoroheptanoic acid	2.7		0.86	ng/l	EPA 537 modified
Perfluorohexanesulfonate	21		1.7	ng/l	EPA 537 modified
Perfluorononanoic acid	0.54	J.	1.7	ng/l	EPA 537 modified
Perfluorooctanesulfonamide	0.68	J.	2.6	ng/l	EPA 537 modified
Perfluoro-octanesulfonate	130		1.7	ng/l	EPA 537 modified
Perfluorooctanoic acid	8.0		0.86	ng/l	EPA 537 modified
1,4-Dioxane	4		0.2	ug/l	SW-846 8270D SIM

Lab ID: SC52917-02 **Client ID:** MW-H

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
6:2 fluorotelomersulfonate	1.8	J.	1.9	ng/l	EPA 537 modified
Perfluorobutanesulfonate	3.1		0.93	ng/l	EPA 537 modified
Perfluorobutanoic acid	6.7		5.6	ng/l	EPA 537 modified
Perfluoroheptanesulfonate	0.55	J.	1.9	ng/l	EPA 537 modified
Perfluoroheptanoic acid	1.0		0.93	ng/l	EPA 537 modified
Perfluorohexanesulfonate	1.6	J.	1.9	ng/l	EPA 537 modified
Perfluorohexanoic acid	2.3		1.9	ng/l	EPA 537 modified
Perfluoro-octanesulfonate	23		1.9	ng/l	EPA 537 modified
Perfluorooctanoic acid	2.7		0.93	ng/l	EPA 537 modified
1,4-Dioxane	0.2	J.	0.2	ug/l	SW-846 8270D SIM

Lab ID: SC52917-03 **Client ID:** MW-P

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Perfluorobutanesulfonate	1.6		0.86	ng/l	EPA 537 modified
Perfluorobutanoic acid	3.0	J.	5.2	ng/l	EPA 537 modified
Perfluoroheptanesulfonate	1.6	J.	1.7	ng/l	EPA 537 modified
Perfluoroheptanoic acid	0.55	J.	0.86	ng/l	EPA 537 modified
Perfluorohexanesulfonate	4.5		1.7	ng/l	EPA 537 modified
Perfluorohexanoic acid	0.68	J.	1.7	ng/l	EPA 537 modified
Perfluorononanoic acid	0.79	J.	1.7	ng/l	EPA 537 modified
Perfluoro-octanesulfonate	300		17	ng/l	EPA 537 modified
Perfluorooctanoic acid	2.0		0.86	ng/l	EPA 537 modified

Lab ID: SC52917-04 **Client ID:** MW-Q

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Perfluorobutanesulfonate	0.63	J.	0.95	ng/l	EPA 537 modified
Perfluorobutanoic acid	3.8	J.	5.7	ng/l	EPA 537 modified
Perfluorohexanesulfonate	1.5	J.	1.9	ng/l	EPA 537 modified
Perfluorohexanoic acid	0.39	J.	1.9	ng/l	EPA 537 modified
Perfluoro-octanesulfonate	11		1.9	ng/l	EPA 537 modified
Perfluorooctanoic acid	0.64	J.	0.95	ng/l	EPA 537 modified

Lab ID: SC52917-05 **Client ID:** MW-R

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Perfluorobutanesulfonate	2.2		0.85	ng/l	EPA 537 modified
Perfluorobutanoic acid	12		5.1	ng/l	EPA 537 modified
Perfluoroheptanoic acid	1.1		0.85	ng/l	EPA 537 modified
Perfluorohexanesulfonate	0.44	J.	1.7	ng/l	EPA 537 modified
Perfluorohexanoic acid	1.8		1.7	ng/l	EPA 537 modified
Perfluoro-octanesulfonate	2.6		1.7	ng/l	EPA 537 modified
Perfluorooctanoic acid	5.4		0.85	ng/l	EPA 537 modified

Lab ID: SC52917-06 **Client ID:** Duplicate

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Perfluorobutanesulfonate	0.63	J.	0.95	ng/l	EPA 537 modified
Perfluorobutanoic acid	4.9	J.	5.7	ng/l	EPA 537 modified
Perfluoroheptanesulfonate	0.44	J.	1.9	ng/l	EPA 537 modified
Perfluorohexanesulfonate	1.2	J.	1.9	ng/l	EPA 537 modified
Perfluoro-octanesulfonate	9.7		1.9	ng/l	EPA 537 modified
Perfluorooctanoic acid	0.60	J.	0.95	ng/l	EPA 537 modified

Lab ID: SC52917-07 **Client ID:** FB20190102

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
6:2 fluorotelomersulfonate	12		1.7	ng/l	EPA 537 modified

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-C SC52917-01	5529S-18	Ground Water	02-Jan-19 07:55	03-Jan-19

Subcontracted Analyses

Subcontracted Analyses
Prepared by method METHOD

Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
27619-97-2	6:2 fluorotelomersulfonate	< 1.7		ng/l	1.7	0.86	1	EPA 537 modified	14-Jan-19 14:30	16-Jan-19 12:58	10670	19014013	
39108-34-4	8:2 fluorotelomersulfonate	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
2991-50-6	NEtFOSAA	< 2.6		ng/l	2.6	0.86	1	"	"	"	"	"	
2355-31-9	NMeFOSAA	< 2.6		ng/l	2.6	0.86	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	**130**		ng/l	1.7	0.35	1	"	"	"	"	"	
375-73-5	Perfluorobutanesulfonate	**10**		ng/l	0.86	0.26	1	"	"	"	"	"	
375-22-4	Perfluorobutanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
335-77-3	Perfluorodecanesulfonate	< 1.7		ng/l	1.7	0.52	1	"	"	"	"	"	
335-76-2	Perfluorodecanoic acid	< 1.7		ng/l	1.7	0.78	1	"	"	"	"	"	
307-55-1	Perfluorododecanoic acid	< 1.7		ng/l	1.7	0.43	1	"	"	"	"	"	
375-92-8	Perfluoroheptanesulfonate	**5.7**		ng/l	1.7	0.35	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	**2.7**		ng/l	0.86	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	**21**		ng/l	1.7	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	**0.54**	J.	ng/l	1.7	0.35	1	"	"	"	"	"	
754-91-6	Perfluorooctanesulfonamide	**0.68**	J.	ng/l	2.6	0.43	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**8.0**		ng/l	0.86	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
376-06-7	Perfluorotetradecanoic acid	< 0.86		ng/l	0.86	0.26	1	"	"	"	"	"	
72629-94-8	Perfluorotridecanoic acid	< 0.86		ng/l	0.86	0.35	1	"	"	"	"	"	
2058-94-8	Perfluoroundecanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	

Surrogate recoveries:

27619-97-2L	*13C2-6:2-FTS*	*110*			*32-170 %*			"	"	"	"	"	
39108-34-4L	*13C2-8:2-FTS*	*128*			*27-164 %*			"	"	"	"	"	
307-55-1L	*13C2-PFDoDA*	*62*			*39-130 %*			"	"	"	"	"	
376-06-7L	*13C2-PFTeDA*	*61*			*26-119 %*			"	"	"	"	"	
375-73-5L	*13C3-PFBS*	*368*			*26-148 %*			"	"	"	"	"	
355-46-4L	*13C3-PFHxS*	*68*			*34-126 %*			"	"	"	"	"	
375-22-4L	*13C4-PFBA*	*77*			*33-123 %*			"	"	"	"	"	
375-85-9L	*13C4-PFHpA*	*53*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*41*			*35-138 %*			"	"	"	"	"	
2706-90-3L	*13C5-PFPeA*	*139*			*31-157 %*			"	"	"	"	"	
335-76-2LC6	*13C6-PFDA*	*86*			*47-125 %*			"	"	"	"	"	
2058-94-8LC7	*13C7-PFUnDA*	*71*			*30-128 %*			"	"	"	"	"	
335-67-1L	*13C8-PFOA*	*88*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*94*			*50-121 %*			"	"	"	"	"	
754-91-6L	*13C8-PFOSA*	*44*			*11-127 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*85*			*41-144 %*			"	"	"	"	"	
2355-31-9L	*d3-NMeFOSAA*	*113*			*30-127 %*			"	"	"	"	"	
2991-50-6L	*d5-NEtFOSAA*	*111*			*30-142 %*			"	"	"	"	"	

Subcontracted Analyses

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-C SC52917-01	5529S-18	Ground Water	02-Jan-19 07:55	03-Jan-19

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
123-91-1	1,4-Dioxane	4		ug/l	0.2	0.05	1	SW-846 8270D SIM	07-Jan-19 21:05	09-Jan-19 05:29	10670	007WAA0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*95*			*42-123 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*65*			*44-120 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*83*			*51-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-H	5529S-18	Ground Water	02-Jan-19 09:00	03-Jan-19
SC52917-02				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
27619-97-2	6:2 fluorotelomersulfonate	**1.8**	J.	ng/l	1.9	0.93	1	EPA 537 modified	08-Jan-19 07:50	09-Jan-19 21:56	10670	19008001	
39108-34-4	8:2 fluorotelomersulfonate	< 5.6		ng/l	5.6	1.9	1	"	"	"	"	"	
2991-50-6	NEtFOSAA	< 2.8		ng/l	2.8	0.93	1	"	"	"	"	"	
2355-31-9	NMeFOSAA	< 2.8		ng/l	2.8	0.93	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	**23**		ng/l	1.9	0.37	1	"	"	"	"	"	
375-73-5	Perfluorobutanesulfonate	**3.1**		ng/l	0.93	0.28	1	"	"	"	"	"	
375-22-4	Perfluorobutanoic acid	**6.7**		ng/l	5.6	1.9	1	"	"	"	"	"	
335-77-3	Perfluorodecanesulfonate	< 1.9		ng/l	1.9	0.56	1	"	"	"	"	"	
335-76-2	Perfluorodecanoic acid	< 1.9		ng/l	1.9	0.84	1	"	"	"	"	"	
307-55-1	Perfluorododecanoic acid	< 1.9		ng/l	1.9	0.47	1	"	"	"	"	"	
375-92-8	Perfluoroheptanesulfonate	**0.55**	J.	ng/l	1.9	0.37	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	**1.0**		ng/l	0.93	0.37	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	**1.6**	J.	ng/l	1.9	0.37	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	**2.3**		ng/l	1.9	0.37	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.9		ng/l	1.9	0.37	1	"	"	"	"	"	
754-91-6	Perfluorooctanesulfonamide	< 2.8		ng/l	2.8	0.47	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**2.7**		ng/l	0.93	0.28	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.6		ng/l	5.6	1.9	1	"	"	"	"	"	
376-06-7	Perfluorotetradecanoic acid	< 0.93		ng/l	0.93	0.28	1	"	"	"	"	"	
72629-94-8	Perfluorotridecanoic acid	< 0.93		ng/l	0.93	0.37	1	"	"	"	"	"	
2058-94-8	Perfluoroundecanoic acid	< 1.9		ng/l	1.9	0.37	1	"	"	"	"	"	
Surrogate recoveries:													
27619-97-2L	*13C2-6:2-FTS*	*114*			*32-170 %*			"	"	"	"	"	
39108-34-4L	*13C2-8:2-FTS*	*96*			*27-164 %*			"	"	"	"	"	
307-55-1L	*13C2-PFDoDA*	*63*			*39-130 %*			"	"	"	"	"	
376-06-7L	*13C2-PFTeDA*	*68*			*26-119 %*			"	"	"	"	"	
375-73-5L	*13C3-PFBS*	*147*			*26-148 %*			"	"	"	"	"	
355-46-4L	*13C3-PFHxS*	*77*			*34-126 %*			"	"	"	"	"	
375-22-4L	*13C4-PFBA*	*80*			*33-123 %*			"	"	"	"	"	
375-85-9L	*13C4-PFHpA*	*55*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*61*			*35-138 %*			"	"	"	"	"	
2706-90-3L	*13C5-PFPeA*	*91*			*31-157 %*			"	"	"	"	"	
335-76-2LC6	*13C6-PFDA*	*74*			*47-125 %*			"	"	"	"	"	
2058-94-8LC7	*13C7-PFUnDA*	*71*			*30-128 %*			"	"	"	"	"	
335-67-1L	*13C8-PFOA*	*88*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*78*			*50-121 %*			"	"	"	"	"	
754-91-6L	*13C8-PFOSA*	*44*			*11-127 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*81*			*41-144 %*			"	"	"	"	"	
2355-31-9L	*d3-NMeFOSAA*	*62*			*30-127 %*			"	"	"	"	"	
2991-50-6L	*d5-NEtFOSAA*	*70*			*30-142 %*			"	"	"	"	"	

Subcontracted Analyses

This laboratory report is not valid without an authorized signature on the cover page.

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-H SC52917-02	5529S-18	Ground Water	02-Jan-19 09:00	03-Jan-19

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
123-91-1	1,4-Dioxane	**0.2**	J.	ug/l	0.2	0.05	1	SW-846 8270D SIM	07-Jan-19 21:05	09-Jan-19 06:00	10670	007WAA0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*90*			*42-123 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*70*			*44-120 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*81*			*51-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-P SC52917-03	5529S-18	Ground Water	02-Jan-19 11:15	03-Jan-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
27619-97-2	6:2 fluorotelomersulfonate	< 1.7		ng/l	1.7	0.86	1	EPA 537 modified	08-Jan-19 07:50	09-Jan-19 22:05	10670	19008001	
39108-34-4	8:2 fluorotelomersulfonate	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
2991-50-6	NEtFOSAA	< 2.6		ng/l	2.6	0.86	1	"	"	"	"	"	
2355-31-9	NMeFOSAA	< 2.6		ng/l	2.6	0.86	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	**300**		ng/l	17	3.5	10	"	"	10-Jan-19 23:17	"	"	
375-73-5	Perfluorobutanesulfonate	**1.6**		ng/l	0.86	0.26	1	"	"	09-Jan-19 22:05	"	"	
375-22-4	Perfluorobutanoic acid	**3.0**	J.	ng/l	5.2	1.7	1	"	"	"	"	"	
335-77-3	Perfluorodecanesulfonate	< 1.7		ng/l	1.7	0.52	1	"	"	"	"	"	
335-76-2	Perfluorodecanoic acid	< 1.7		ng/l	1.7	0.78	1	"	"	"	"	"	
307-55-1	Perfluorododecanoic acid	< 1.7		ng/l	1.7	0.43	1	"	"	"	"	"	
375-92-8	Perfluoroheptanesulfonate	**1.6**	J.	ng/l	1.7	0.35	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	**0.55**	J.	ng/l	0.86	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	**4.5**		ng/l	1.7	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	**0.68**	J.	ng/l	1.7	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	**0.79**	J.	ng/l	1.7	0.35	1	"	"	"	"	"	
754-91-6	Perfluorooctanesulfonamide	< 2.6		ng/l	2.6	0.43	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**2.0**		ng/l	0.86	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
376-06-7	Perfluorotetradecanoic acid	< 0.86		ng/l	0.86	0.26	1	"	"	"	"	"	
72629-94-8	Perfluorotridecanoic acid	< 0.86		ng/l	0.86	0.35	1	"	"	"	"	"	
2058-94-8	Perfluoroundecanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
Surrogate recoveries:													
27619-97-2L	*13C2-6:2-FTS*	*103*			*32-170 %*			"	"	"	"	"	
39108-34-4L	*13C2-8:2-FTS*	*90*			*27-164 %*			"	"	"	"	"	
307-55-1L	*13C2-PFDoDA*	*61*			*39-130 %*			"	"	"	"	"	
376-06-7L	*13C2-PFTeDA*	*44*			*26-119 %*			"	"	"	"	"	
375-73-5L	*13C3-PFBS*	*102*			*26-148 %*			"	"	"	"	"	
355-46-4L	*13C3-PFHxS*	*73*			*34-126 %*			"	"	"	"	"	
375-22-4L	*13C4-PFBA*	*87*			*33-123 %*			"	"	"	"	"	
375-85-9L	*13C4-PFHpA*	*54*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*78*			*35-138 %*			"	"	"	"	"	
2706-90-3L	*13C5-PFPeA*	*89*			*31-157 %*			"	"	"	"	"	
335-76-2LC6	*13C6-PFDA*	*73*			*47-125 %*			"	"	"	"	"	
2058-94-8LC7	*13C7-PFUnDA*	*70*			*30-128 %*			"	"	"	"	"	
335-67-1L	*13C8-PFOA*	*87*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*74*			*50-121 %*			"	"	"	"	"	
754-91-6L	*13C8-PFOSA*	*41*			*11-127 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*71*			*41-144 %*			"	"	"	"	"	
2355-31-9L	*d3-NMeFOSAA*	*68*			*30-127 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-P SC52917-03	5529S-18	Ground Water	02-Jan-19 11:15	03-Jan-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
2991-50-6L	*d5-NEtFOSAA*	*72*			*30-142 %*			EPA 537 modified	08-Jan-19 07:50	-Jan-19 22:(	10670	19008001	
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
123-91-1	1,4-Dioxane	< 0.2		ug/l	0.2	0.05	1	SW-846 8270D SIM	07-Jan-19 21:05	09-Jan-19 06:32	10670	007WAA0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*86*			*42-123 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*53*			*44-120 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*80*			*51-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-Q SC52917-04	5529S-18	Ground Water	02-Jan-19 10:05	03-Jan-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
27619-97-2	6:2 fluorotelomersulfonate	< 1.9		ng/l	1.9	0.95	1	EPA 537 modified	08-Jan-19 07:50	09-Jan-19 22:14	10670	19008001	
39108-34-4	8:2 fluorotelomersulfonate	< 5.7		ng/l	5.7	1.9	1	"	"	"	"	"	
2991-50-6	NEtFOSAA	< 2.8		ng/l	2.8	0.95	1	"	"	"	"	"	
2355-31-9	NMeFOSAA	< 2.8		ng/l	2.8	0.95	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	**11**		ng/l	1.9	0.38	1	"	"	"	"	"	
375-73-5	Perfluorobutanesulfonate	**0.63**	J.	ng/l	0.95	0.28	1	"	"	"	"	"	
375-22-4	Perfluorobutanoic acid	**3.8**	J.	ng/l	5.7	1.9	1	"	"	"	"	"	
335-77-3	Perfluorodecanesulfonate	< 1.9		ng/l	1.9	0.57	1	"	"	"	"	"	
335-76-2	Perfluorodecanoic acid	< 1.9		ng/l	1.9	0.85	1	"	"	"	"	"	
307-55-1	Perfluorododecanoic acid	< 1.9		ng/l	1.9	0.47	1	"	"	"	"	"	
375-92-8	Perfluoroheptanesulfonate	< 1.9		ng/l	1.9	0.38	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	< 0.95		ng/l	0.95	0.38	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	**1.5**	J.	ng/l	1.9	0.38	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	**0.39**	J.	ng/l	1.9	0.38	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.9		ng/l	1.9	0.38	1	"	"	"	"	"	
754-91-6	Perfluorooctanesulfonamide	< 2.8		ng/l	2.8	0.47	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**0.64**	J.	ng/l	0.95	0.28	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.7		ng/l	5.7	1.9	1	"	"	"	"	"	
376-06-7	Perfluorotetradecanoic acid	< 0.95		ng/l	0.95	0.28	1	"	"	"	"	"	
72629-94-8	Perfluorotridecanoic acid	< 0.95		ng/l	0.95	0.38	1	"	"	"	"	"	
2058-94-8	Perfluoroundecanoic acid	< 1.9		ng/l	1.9	0.38	1	"	"	"	"	"	
Surrogate recoveries:													
27619-97-2L	*13C2-6:2-FTS*	*110*			*32-170 %*			"	"	"	"	"	
39108-34-4L	*13C2-8:2-FTS*	*100*			*27-164 %*			"	"	"	"	"	
307-55-1L	*13C2-PFDoDA*	*72*			*39-130 %*			"	"	"	"	"	
376-06-7L	*13C2-PFTeDA*	*68*			*26-119 %*			"	"	"	"	"	
375-73-5L	*13C3-PFBS*	*103*			*26-148 %*			"	"	"	"	"	
355-46-4L	*13C3-PFHxS*	*71*			*34-126 %*			"	"	"	"	"	
375-22-4L	*13C4-PFBA*	*86*			*33-123 %*			"	"	"	"	"	
375-85-9L	*13C4-PFHpA*	*53*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*74*			*35-138 %*			"	"	"	"	"	
2706-90-3L	*13C5-PFPeA*	*92*			*31-157 %*			"	"	"	"	"	
335-76-2LC6	*13C6-PFDA*	*76*			*47-125 %*			"	"	"	"	"	
2058-94-8LC7	*13C7-PFUnDA*	*74*			*30-128 %*			"	"	"	"	"	
335-67-1L	*13C8-PFOA*	*84*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*84*			*50-121 %*			"	"	"	"	"	
754-91-6L	*13C8-PFOSA*	*30*			*11-127 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*89*			*41-144 %*			"	"	"	"	"	
2355-31-9L	*d3-NMeFOSAA*	*68*			*30-127 %*			"	"	"	"	"	
2991-50-6L	*d5-NEtFOSAA*	*81*			*30-142 %*			"	"	"	"	"	
Subcontracted Analyses													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-Q SC52917-04	5529S-18	Ground Water	02-Jan-19 10:05	03-Jan-19

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
123-91-1	1,4-Dioxane	< 0.2		ug/l	0.2	0.05	1	SW-846 8270D SIM	07-Jan-19 21:05	09-Jan-19 09:41	10670	007WAA0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*87*			*42-123 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*60*			*44-120 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*76*			*51-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-R	5529S-18	Ground Water	02-Jan-19 12:15	03-Jan-19
SC52917-05				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
27619-97-2	6:2 fluorotelomersulfonate	< 1.7		ng/l	1.7	0.85	1	EPA 537 modified	08-Jan-19 07:50	09-Jan-19 22:41	10670	19008001	
39108-34-4	8:2 fluorotelomersulfonate	< 5.1		ng/l	5.1	1.7	1	"	"	"	"	"	
2991-50-6	NEtFOSAA	< 2.6		ng/l	2.6	0.85	1	"	"	"	"	"	
2355-31-9	NMeFOSAA	< 2.6		ng/l	2.6	0.85	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	**2.6**		ng/l	1.7	0.34	1	"	"	"	"	"	
375-73-5	Perfluorobutanesulfonate	**2.2**		ng/l	0.85	0.26	1	"	"	"	"	"	
375-22-4	Perfluorobutanoic acid	**12**		ng/l	5.1	1.7	1	"	"	"	"	"	
335-77-3	Perfluorodecanesulfonate	< 1.7		ng/l	1.7	0.51	1	"	"	"	"	"	
335-76-2	Perfluorodecanoic acid	< 1.7		ng/l	1.7	0.77	1	"	"	"	"	"	
307-55-1	Perfluorododecanoic acid	< 1.7		ng/l	1.7	0.43	1	"	"	"	"	"	
375-92-8	Perfluoroheptanesulfonate	< 1.7		ng/l	1.7	0.34	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	**1.1**		ng/l	0.85	0.34	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	**0.44**	J.	ng/l	1.7	0.34	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	**1.8**		ng/l	1.7	0.34	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.7		ng/l	1.7	0.34	1	"	"	"	"	"	
754-91-6	Perfluorooctanesulfonamide	< 2.6		ng/l	2.6	0.43	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**5.4**		ng/l	0.85	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.1		ng/l	5.1	1.7	1	"	"	"	"	"	
376-06-7	Perfluorotetradecanoic acid	< 0.85		ng/l	0.85	0.26	1	"	"	"	"	"	
72629-94-8	Perfluorotridecanoic acid	< 0.85		ng/l	0.85	0.34	1	"	"	"	"	"	
2058-94-8	Perfluoroundecanoic acid	< 1.7		ng/l	1.7	0.34	1	"	"	"	"	"	
Surrogate recoveries:													
27619-97-2L	*13C2-6:2-FTS*	*103*			*32-170 %*			"	"	"	"	"	
39108-34-4L	*13C2-8:2-FTS*	*91*			*27-164 %*			"	"	"	"	"	
307-55-1L	*13C2-PFDoDA*	*56*			*39-130 %*			"	"	"	"	"	
376-06-7L	*13C2-PFTeDA*	*59*			*26-119 %*			"	"	"	"	"	
375-73-5L	*13C3-PFBS*	*114*			*26-148 %*			"	"	"	"	"	
355-46-4L	*13C3-PFHxS*	*68*			*34-126 %*			"	"	"	"	"	
375-22-4L	*13C4-PFBA*	*74*			*33-123 %*			"	"	"	"	"	
375-85-9L	*13C4-PFHpA*	*49*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*53*			*35-138 %*			"	"	"	"	"	
2706-90-3L	*13C5-PFPeA*	*86*			*31-157 %*			"	"	"	"	"	
335-76-2LC6	*13C6-PFDA*	*64*			*47-125 %*			"	"	"	"	"	
2058-94-8LC7	*13C7-PFUnDA*	*64*			*30-128 %*			"	"	"	"	"	
335-67-1L	*13C8-PFOA*	*77*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*78*			*50-121 %*			"	"	"	"	"	
754-91-6L	*13C8-PFOSA*	*26*			*11-127 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*75*			*41-144 %*			"	"	"	"	"	
2355-31-9L	*d3-NMeFOSAA*	*60*			*30-127 %*			"	"	"	"	"	
2991-50-6L	*d5-NEtFOSAA*	*82*			*30-142 %*			"	"	"	"	"	

Subcontracted Analyses

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
MW-R SC52917-05	5529S-18	Ground Water	02-Jan-19 12:15	03-Jan-19

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
123-91-1	1,4-Dioxane	< 0.2		ug/l	0.2	0.05	1	SW-846 8270D SIM	07-Jan-19 21:05	09-Jan-19 07:03	10670	007WAA0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*82*			*42-123 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*38*			*44-120 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*70*			*51-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Duplicate SC52917-06	5529S-18	Ground Water	02-Jan-19 00:00	03-Jan-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
27619-97-2	6:2 fluorotelomersulfonate	< 1.9		ng/l	1.9	0.95	1	EPA 537 modified	08-Jan-19 07:50	09-Jan-19 22:50	10670	19008001	
39108-34-4	8:2 fluorotelomersulfonate	< 5.7		ng/l	5.7	1.9	1	"	"	"	"	"	
2991-50-6	NEtFOSAA	< 2.9		ng/l	2.9	0.95	1	"	"	"	"	"	
2355-31-9	NMeFOSAA	< 2.9		ng/l	2.9	0.95	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	**9.7**		ng/l	1.9	0.38	1	"	"	"	"	"	
375-73-5	Perfluorobutanesulfonate	**0.63**	J.	ng/l	0.95	0.29	1	"	"	"	"	"	
375-22-4	Perfluorobutanoic acid	**4.9**	J.	ng/l	5.7	1.9	1	"	"	"	"	"	
335-77-3	Perfluorodecanesulfonate	< 1.9		ng/l	1.9	0.57	1	"	"	"	"	"	
335-76-2	Perfluorodecanoic acid	< 1.9		ng/l	1.9	0.86	1	"	"	"	"	"	
307-55-1	Perfluorododecanoic acid	< 1.9		ng/l	1.9	0.48	1	"	"	"	"	"	
375-92-8	Perfluoroheptanesulfonate	**0.44**	J.	ng/l	1.9	0.38	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	< 0.95		ng/l	0.95	0.38	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	**1.2**	J.	ng/l	1.9	0.38	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.9		ng/l	1.9	0.38	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.9		ng/l	1.9	0.38	1	"	"	"	"	"	
754-91-6	Perfluorooctanesulfonamide	< 2.9		ng/l	2.9	0.48	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	**0.60**	J.	ng/l	0.95	0.29	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.7		ng/l	5.7	1.9	1	"	"	"	"	"	
376-06-7	Perfluorotetradecanoic acid	< 0.95		ng/l	0.95	0.29	1	"	"	"	"	"	
72629-94-8	Perfluorotridecanoic acid	< 0.95		ng/l	0.95	0.38	1	"	"	"	"	"	
2058-94-8	Perfluoroundecanoic acid	< 1.9		ng/l	1.9	0.38	1	"	"	"	"	"	
Surrogate recoveries:													
27619-97-2L	*13C2-6:2-FTS*	*103*			*32-170 %*			"	"	"	"	"	
39108-34-4L	*13C2-8:2-FTS*	*107*			*27-164 %*			"	"	"	"	"	
307-55-1L	*13C2-PFDoDA*	*75*			*39-130 %*			"	"	"	"	"	
376-06-7L	*13C2-PFTeDA*	*74*			*26-119 %*			"	"	"	"	"	
375-73-5L	*13C3-PFBS*	*101*			*26-148 %*			"	"	"	"	"	
355-46-4L	*13C3-PFHxS*	*73*			*34-126 %*			"	"	"	"	"	
375-22-4L	*13C4-PFBA*	*85*			*33-123 %*			"	"	"	"	"	
375-85-9L	*13C4-PFHpA*	*56*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*78*			*35-138 %*			"	"	"	"	"	
2706-90-3L	*13C5-PFPeA*	*94*			*31-157 %*			"	"	"	"	"	
335-76-2LC6	*13C6-PFDA*	*77*			*47-125 %*			"	"	"	"	"	
2058-94-8LC7	*13C7-PFUnDA*	*85*			*30-128 %*			"	"	"	"	"	
335-67-1L	*13C8-PFOA*	*87*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*87*			*50-121 %*			"	"	"	"	"	
754-91-6L	*13C8-PFOSA*	*24*			*11-127 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*88*			*41-144 %*			"	"	"	"	"	
2355-31-9L	*d3-NMeFOSAA*	*71*			*30-127 %*			"	"	"	"	"	
2991-50-6L	*d5-NEtFOSAA*	*86*			*30-142 %*			"	"	"	"	"	
Subcontracted Analyses													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Duplicate SC52917-06	5529S-18	Ground Water	02-Jan-19 00:00	03-Jan-19

CAS No.	*Analyte(s)*	*Result*	*Flag*	*Units*	**RDL*	*MDL*	*Dilution*	*Method Ref.*	*Prepared*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
123-91-1	1,4-Dioxane	< 0.2		ug/l	0.2	0.05	1	SW-846 8270D SIM	07-Jan-19 21:05	09-Jan-19 07:35	10670	007WAA0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*89*			*42-123 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*60*			*44-120 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*79*			*51-120 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
FB20190102	5529S-18	DI/PFA Free H2O	02-Jan-19 12:45	03-Jan-19
SC52917-07				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
Prepared by method METHOD													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
27619-97-2	6:2 fluorotelomersulfonate	12		ng/l	1.7	0.87	1	EPA 537 modified	08-Jan-19 07:50	09-Jan-19 23:09	10670	19008001	
39108-34-4	8:2 fluorotelomersulfonate	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
2991-50-6	NEtFOSAA	< 2.6		ng/l	2.6	0.87	1	"	"	"	"	"	
2355-31-9	NMeFOSAA	< 2.6		ng/l	2.6	0.87	1	"	"	"	"	"	
1763-23-1	Perfluoro-octanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
375-73-5	Perfluorobutanesulfonate	< 0.87		ng/l	0.87	0.26	1	"	"	"	"	"	
375-22-4	Perfluorobutanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
335-77-3	Perfluorodecanesulfonate	< 1.7		ng/l	1.7	0.52	1	"	"	"	"	"	
335-76-2	Perfluorodecanoic acid	< 1.7		ng/l	1.7	0.78	1	"	"	"	"	"	
307-55-1	Perfluorododecanoic acid	< 1.7		ng/l	1.7	0.44	1	"	"	"	"	"	
375-92-8	Perfluoroheptanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
375-85-9	Perfluoroheptanoic acid	< 0.87		ng/l	0.87	0.35	1	"	"	"	"	"	
355-46-4	Perfluorohexanesulfonate	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
307-24-4	Perfluorohexanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
375-95-1	Perfluorononanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
754-91-6	Perfluorooctanesulfonamide	< 2.6		ng/l	2.6	0.44	1	"	"	"	"	"	
335-67-1	Perfluorooctanoic acid	< 0.87		ng/l	0.87	0.26	1	"	"	"	"	"	
2706-90-3	Perfluoropentanoic acid	< 5.2		ng/l	5.2	1.7	1	"	"	"	"	"	
376-06-7	Perfluorotetradecanoic acid	< 0.87		ng/l	0.87	0.26	1	"	"	"	"	"	
72629-94-8	Perfluorotridecanoic acid	< 0.87		ng/l	0.87	0.35	1	"	"	"	"	"	
2058-94-8	Perfluoroundecanoic acid	< 1.7		ng/l	1.7	0.35	1	"	"	"	"	"	
Surrogate recoveries:													
27619-97-2L	*13C2-6:2-FTS*	*110*			*32-170 %*			"	"	"	"	"	
39108-34-4L	*13C2-8:2-FTS*	*105*			*27-164 %*			"	"	"	"	"	
307-55-1L	*13C2-PFDoDA*	*83*			*39-130 %*			"	"	"	"	"	
376-06-7L	*13C2-PFTeDA*	*77*			*26-119 %*			"	"	"	"	"	
375-73-5L	*13C3-PFBS*	*90*			*26-148 %*			"	"	"	"	"	
355-46-4L	*13C3-PFHxS*	*77*			*34-126 %*			"	"	"	"	"	
375-22-4L	*13C4-PFBA*	*91*			*33-123 %*			"	"	"	"	"	
375-85-9L	*13C4-PFHpA*	*55*			*35-126 %*			"	"	"	"	"	
307-24-4LC5	*13C5-PFHxA*	*96*			*35-138 %*			"	"	"	"	"	
2706-90-3L	*13C5-PFPeA*	*86*			*31-157 %*			"	"	"	"	"	
335-76-2LC6	*13C6-PFDA*	*87*			*47-125 %*			"	"	"	"	"	
2058-94-8LC7	*13C7-PFUnDA*	*93*			*30-128 %*			"	"	"	"	"	
335-67-1L	*13C8-PFOA*	*93*			*48-122 %*			"	"	"	"	"	
1763-23-1LC8	*13C8-PFOS*	*91*			*50-121 %*			"	"	"	"	"	
754-91-6L	*13C8-PFOSA*	*59*			*11-127 %*			"	"	"	"	"	
375-95-1LC9	*13C9-PFNA*	*92*			*41-144 %*			"	"	"	"	"	
2355-31-9L	*d3-NMeFOSAA*	*77*			*30-127 %*			"	"	"	"	"	
2991-50-6L	*d5-NEtFOSAA*	*94*			*30-142 %*			"	"	"	"	"	
Subcontracted Analyses													

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
FB20190102	5529S-18	DI/PFA Free H2O	02-Jan-19 12:45	03-Jan-19
SC52917-07				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses Prepared by method SW-846 3510C													
Analysis performed by Eurofins Lancaster Laboratories Environmental - 10670													
123-91-1	1,4-Dioxane	< 0.2		ug/l	0.2	0.05	1	SW-846 8270D SIM	07-Jan-19 21:05	09-Jan-19 08:06	10670	007WAA0	
Surrogate recoveries:													
38072-94-5	*1-Methylnaphthalene-d10*	*82*			*42-123 %*			"	"	"	"	"	
63466-71-7	*Benzo(a)pyrene-d12*	*71*			*44-120 %*			"	"	"	"	"	
93951-69-0	*Fluoranthene-d10*	*75*			*51-120 %*			"	"	"	"	"	

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 537 modified										
Batch 19008001 - METHOD										
Matrix Spike (9960448R)			**Source: SC52917-04**			Prepared: 08-Jan-19 Analyzed: 09-Jan-19				
Perfluorodecanoic acid	**5.1**		ng/l	2.0	5.4	BRL	95	73-142		
Perfluoroundecanoic acid	**5.5**		ng/l	2.0	5.4	BRL	103	66-137		
8:2 fluorotelomersulfonate	**15**		ng/l	5.9	15	BRL	97	60-150		
Perfluorononanoic acid	**5.0**		ng/l	2.0	5.4	BRL	92	70-130		
Perfluorohexanoic acid	**5.8**		ng/l	2.0	5.4	0.39	101	70-130		
Perfluorohexanesulfonate	**6.2**		ng/l	2.0	5.1	1.5	93	73-129		
Perfluoroheptanoic acid	**5.1**		ng/l	0.99	5.4	BRL	95	67-137		
Perfluorotetradecanoic acid	**4.9**		ng/l	0.99	5.4	BRL	91	78-133		
Perfluorododecanoic acid	**5.2**		ng/l	2.0	5.4	BRL	97	76-136		
Perfluorotridecanoic acid	**5.3**		ng/l	0.99	5.4	BRL	99	57-151		
Perfluorodecanesulfonate	**5.1**		ng/l	2.0	5.2	BRL	98	41-148		
Perfluorobutanoic acid	**11**		ng/l	5.9	5.4	3.8	134	58-155		
Perfluoro-octanesulfonate	**15**		ng/l	2.0	5.1	11	87	48-154		
Perfluorobutanesulfonate	**5.2**		ng/l	0.99	4.7	0.63	96	73-134		
NMeFOSAA	**4.7**		ng/l	3.0	5.4	BRL	88	58-157		
NEtFOSAA	**3.9**		ng/l	3.0	5.4	BRL	73	49-159		
6:2 fluorotelomersulfonate	**15**		ng/l	2.0	15	BRL	102	70-130		
Perfluoroheptanesulfonate	**6.8**		ng/l	2.0	5.1	BRL	133	50-145		
Perfluorooctanoic acid	**5.6**		ng/l	0.99	5.4	0.64	93	48-160		
Perfluoropentanoic acid	**6.1**		ng/l	5.9	5.4	BRL	114	53-161		
Perfluorooctanesulfonamide	**5.0**		ng/l	3.0	5.4	BRL	93	70-130		
Surrogate: 13C4-PFHpA	*10*		ng/l		*20*		*53*	*35-126*		
Surrogate: d3-NMeFOSAA	*15*		ng/l		*20*		*76*	*30-127*		
Surrogate: d5-NEtFOSAA	*17*		ng/l		*20*		*84*	*30-142*		
Surrogate: 13C2-6:2-FTS	*19*		ng/l		*19*		*102*	*32-170*		
Surrogate: 13C9-PFNA	*16*		ng/l		*20*		*81*	*41-144*		
Surrogate: 13C2-8:2-FTS	*17*		ng/l		*19*		*89*	*27-164*		
Surrogate: 13C2-PFDoDA	*15*		ng/l		*20*		*75*	*39-130*		
Surrogate: 13C2-PFTeDA	*15*		ng/l		*20*		*75*	*26-119*		
Surrogate: 13C3-PFBS	*18*		ng/l		*18*		*99*	*26-148*		
Surrogate: 13C4-PFBA	*16*		ng/l		*20*		*81*	*33-123*		
Surrogate: 13C5-PFHxA	*15*		ng/l		*20*		*76*	*35-138*		
Surrogate: 13C5-PFPeA	*16*		ng/l		*20*		*83*	*31-157*		
Surrogate: 13C6-PFDA	*15*		ng/l		*20*		*77*	*47-125*		
Surrogate: 13C7-PFUnDA	*15*		ng/l		*20*		*78*	*30-128*		
Surrogate: 13C8-PFOA	*17*		ng/l		*20*		*86*	*48-122*		
Surrogate: 13C8-PFOS	*14*		ng/l		*19*		*77*	*50-121*		
Surrogate: 13C8-PFOSA	*6.8*		ng/l		*20*		*34*	*11-127*		
Surrogate: 13C3-PFHxS	*13*		ng/l		*19*		*69*	*34-126*		
Matrix Spike Dup (9960449M)			**Source: SC52917-04**			Prepared: 08-Jan-19 Analyzed: 09-Jan-19				
Perfluorodecanoic acid	**5.3**		ng/l	1.9	5.2	BRL	103	73-142	5	30
Perfluoroheptanoic acid	**5.2**		ng/l	0.96	5.2	BRL	100	67-137	3	30
Perfluoroundecanoic acid	**4.6**		ng/l	1.9	5.2	BRL	89	66-137	18	30
Perfluorotridecanoic acid	**5.2**		ng/l	0.96	5.2	BRL	101	57-151	2	30
Perfluorotetradecanoic acid	**5.1**		ng/l	0.96	5.2	BRL	97	78-133	4	30
Perfluoropentanoic acid	**5.9**		ng/l	5.7	5.2	BRL	114	53-161	3	30
Perfluorooctanoic acid	**5.4**		ng/l	0.96	5.2	0.64	91	48-160	4	30
Perfluoro-octanesulfonate	**14**		ng/l	1.9	5.0	11	72	48-154	6	30
Perfluorooctanesulfonamide	**4.9**		ng/l	2.9	5.2	BRL	94	70-130	1	30
Perfluorononanoic acid	**4.9**		ng/l	1.9	5.2	BRL	93	70-130	2	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 537 modified										
Batch 19008001 - METHOD										
Matrix Spike Dup (9960449M)			**Source: SC52917-04**		Prepared: 08-Jan-19 Analyzed: 09-Jan-19					
Perfluorobutanoic acid	**9.5**		ng/l	5.7	5.2	3.8	109	58-155	15	30
Perfluorohexanesulfonate	**6.2**		ng/l	1.9	4.9	1.5	97	73-129	0	30
6:2 fluorotelomersulfonate	**15**		ng/l	1.9	15	BRL	100	70-130	5	30
Perfluoroheptanesulfonate	**6.7**		ng/l	1.9	5.0	BRL	134	50-145	2	30
Perfluorododecanoic acid	**5.3**		ng/l	1.9	5.2	BRL	102	76-136	2	30
Perfluorodecanesulfonate	**4.4**		ng/l	1.9	5.0	BRL	87	41-148	15	30
Perfluorobutanesulfonate	**5.0**		ng/l	0.96	4.6	0.63	95	73-134	3	30
NMeFOSAA	**5.3**		ng/l	2.9	5.2	BRL	101	58-157	10	30
NEtFOSAA	**4.4**		ng/l	2.9	5.2	BRL	84	49-159	11	30
8:2 fluorotelomersulfonate	**14**		ng/l	5.7	15	BRL	96	60-150	3	30
Perfluorohexanoic acid	**5.4**		ng/l	1.9	5.2	0.39	97	70-130	6	30
Surrogate: 13C4-PFHpA	*9.7*		ng/l		*19*		*51*	*35-126*		
Surrogate: 13C8-PFOA	*16*		ng/l		*19*		*85*	*48-122*		
Surrogate: 13C3-PFHxS	*12*		ng/l		*18*		*68*	*34-126*		
Surrogate: 13C2-6:2-FTS	*19*		ng/l		*18*		*104*	*32-170*		
Surrogate: d3-NMeFOSAA	*12*		ng/l		*19*		*62*	*30-127*		
Surrogate: 13C9-PFNA	*17*		ng/l		*19*		*87*	*41-144*		
Surrogate: 13C8-PFOS	*15*		ng/l		*18*		*84*	*50-121*		
Surrogate: d5-NEtFOSAA	*17*		ng/l		*19*		*90*	*30-142*		
Surrogate: 13C7-PFUnDA	*16*		ng/l		*19*		*81*	*30-128*		
Surrogate: 13C6-PFDA	*14*		ng/l		*19*		*74*	*47-125*		
Surrogate: 13C2-PFTeDA	*14*		ng/l		*19*		*73*	*26-119*		
Surrogate: 13C2-8:2-FTS	*17*		ng/l		*18*		*91*	*27-164*		
Surrogate: 13C8-PFOSA	*4.1*		ng/l		*19*		*21*	*11-127*		
Surrogate: 13C2-PFDoDA	*13*		ng/l		*19*		*70*	*39-130*		
Surrogate: 13C5-PFPeA	*17*		ng/l		*19*		*86*	*31-157*		
Surrogate: 13C3-PFBS	*19*		ng/l		*18*		*105*	*26-148*		
Surrogate: 13C4-PFBA	*16*		ng/l		*19*		*86*	*33-123*		
Surrogate: 13C5-PFHxA	*14*		ng/l		*19*		*75*	*35-138*		
Blank (BLK0080B19008001)					Prepared: 08-Jan-19 Analyzed: 09-Jan-19					
Perfluorooctanesulfonamide	< 3.0		ng/l	3.0				-		
Perfluorobutanesulfonate	< 1.0		ng/l	1.0				-		
Perfluorobutanoic acid	< 6.0		ng/l	6.0				-		
Perfluorotridecanoic acid	< 1.0		ng/l	1.0				-		
Perfluorotetradecanoic acid	< 1.0		ng/l	1.0				-		
Perfluoropentanoic acid	< 6.0		ng/l	6.0				-		
Perfluorooctanoic acid	< 1.0		ng/l	1.0				-		
Perfluoro-octanesulfonate	< 2.0		ng/l	2.0				-		
Perfluoroundecanoic acid	< 2.0		ng/l	2.0				-		
Perfluorononanoic acid	< 2.0		ng/l	2.0				-		
Perfluorohexanoic acid	< 2.0		ng/l	2.0				-		
Perfluorohexanesulfonate	< 2.0		ng/l	2.0				-		
Perfluoroheptanoic acid	< 1.0		ng/l	1.0				-		
Perfluoroheptanesulfonate	< 2.0		ng/l	2.0				-		
Perfluorododecanoic acid	< 2.0		ng/l	2.0				-		
Perfluorodecanesulfonate	< 2.0		ng/l	2.0				-		
NEtFOSAA	< 3.0		ng/l	3.0				-		
NMeFOSAA	< 3.0		ng/l	3.0				-		
Perfluorodecanoic acid	< 2.0		ng/l	2.0				-		
8:2 fluorotelomersulfonate	< 6.0		ng/l	6.0				-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 537 modified										
Batch 19008001 - METHOD										
Blank (BLK0080B19008001)						Prepared: 08-Jan-19 Analyzed: 09-Jan-19				
6:2 fluorotelomersulfonate	< 2.0		ng/l	2.0				-		
Surrogate: 13C3-PFHxS	*13*		ng/l		*19*		*67*	*34-126*		
Surrogate: 13C2-6:2-FTS	*22*		ng/l		*19*		*117*	*32-170*		
Surrogate: 13C2-8:2-FTS	*20*		ng/l		*19*		*103*	*27-164*		
Surrogate: 13C2-PFDoDA	*16*		ng/l		*20*		*80*	*39-130*		
Surrogate: 13C3-PFBS	*16*		ng/l		*19*		*84*	*26-148*		
Surrogate: 13C4-PFBA	*18*		ng/l		*20*		*91*	*33-123*		
Surrogate: 13C4-PFHpA	*10*		ng/l		*20*		*51*	*35-126*		
Surrogate: 13C5-PFHxA	*17*		ng/l		*20*		*86*	*35-138*		
Surrogate: 13C5-PFPeA	*17*		ng/l		*20*		*85*	*31-157*		
Surrogate: 13C7-PFUnDA	*18*		ng/l		*20*		*88*	*30-128*		
Surrogate: 13C8-PFOA	*18*		ng/l		*20*		*88*	*48-122*		
Surrogate: 13C8-PFOS	*17*		ng/l		*19*		*90*	*50-121*		
Surrogate: 13C8-PFOSA	*14*		ng/l		*20*		*70*	*11-127*		
Surrogate: 13C9-PFNA	*18*		ng/l		*20*		*92*	*41-144*		
Surrogate: d5-NEtFOSAA	*20*		ng/l		*20*		*100*	*30-142*		
Surrogate: 13C6-PFDA	*17*		ng/l		*20*		*87*	*47-125*		
Surrogate: d3-NMeFOSAA	*17*		ng/l		*20*		*83*	*30-127*		
Surrogate: 13C2-PFTeDA	*16*		ng/l		*20*		*82*	*26-119*		
LCS (LCS0081Q19008001)						Prepared: 08-Jan-19 Analyzed: 09-Jan-19				
Perfluoroundecanoic acid	**6.0**		ng/l	2.0	5.4		110	75-146		
Perfluorohexanesulfonate	**5.3**		ng/l	2.0	5.1		102	71-131		
Perfluorohexanoic acid	**6.0**		ng/l	2.0	5.4		111	75-135		
Perfluorononanoic acid	**5.9**		ng/l	2.0	5.4		108	72-148		
Perfluorooctanesulfonamide	**5.0**		ng/l	3.0	5.4		92	65-164		
Perfluoro-octanesulfonate	**4.7**		ng/l	2.0	5.2		91	67-138		
Perfluorooctanoic acid	**5.4**		ng/l	1.0	5.4		100	72-138		
Perfluoropentanoic acid	**5.9**	J.	ng/l	6.0	5.4		108	74-134		
Perfluorotridecanoic acid	**5.6**		ng/l	1.0	5.4		103	61-145		
Perfluoroheptanoic acid	**5.7**		ng/l	1.0	5.4		105	76-140		
Perfluorodecanesulfonate	**5.3**		ng/l	2.0	5.2		101	60-135		
Perfluorotetradecanoic acid	**5.2**		ng/l	1.0	5.4		96	74-135		
8:2 fluorotelomersulfonate	**12**		ng/l	6.0	15		79	66-148		
Perfluorododecanoic acid	**5.2**		ng/l	2.0	5.4		95	75-136		
Perfluoroheptanesulfonate	**6.2**		ng/l	2.0	5.2		120	64-135		
6:2 fluorotelomersulfonate	**16**		ng/l	2.0	15		108	66-155		
NEtFOSAA	**4.5**		ng/l	3.0	5.4		83	55-169		
NMeFOSAA	**5.3**		ng/l	3.0	5.4		97	44-147		
Perfluorobutanesulfonate	**4.7**		ng/l	1.0	4.8		98	73-128		
Perfluorobutanoic acid	**6.0**	J.	ng/l	6.0	5.4		110	74-142		
Perfluorodecanoic acid	**4.9**		ng/l	2.0	5.4		90	69-148		
Surrogate: 13C2-PFDoDA	*14*		ng/l		*20*		*68*	*39-130*		
Surrogate: 13C8-PFOS	*14*		ng/l		*19*		*72*	*50-121*		
Surrogate: 13C9-PFNA	*15*		ng/l		*20*		*76*	*41-144*		
Surrogate: 13C3-PFBS	*14*		ng/l		*19*		*76*	*26-148*		
Surrogate: 13C3-PFHxS	*12*		ng/l		*19*		*63*	*34-126*		
Surrogate: 13C2-8:2-FTS	*19*		ng/l		*19*		*97*	*27-164*		
Surrogate: 13C4-PFBA	*15*		ng/l		*20*		*75*	*33-123*		
Surrogate: 13C4-PFHpA	*10*		ng/l		*20*		*50*	*35-126*		
Surrogate: 13C2-PFTeDA	*14*		ng/l		*20*		*69*	*26-119*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 537 modified										
Batch 19008001 - METHOD										
LCS (LCS0081Q19008001)					Prepared: 08-Jan-19 Analyzed: 09-Jan-19					
Surrogate: 13C5-PFHxA	*15*		ng/l		*20*		*74*	*35-138*		
Surrogate: 13C5-PFPeA	*14*		ng/l		*20*		*70*	*31-157*		
Surrogate: 13C6-PFDA	*16*		ng/l		*20*		*79*	*47-125*		
Surrogate: 13C8-PFOA	*16*		ng/l		*20*		*80*	*48-122*		
Surrogate: 13C8-PFOSA	*3.0*		ng/l		*20*		*15*	*11-127*		
Surrogate: d3-NMeFOSAA	*14*		ng/l		*20*		*70*	*30-127*		
Surrogate: d5-NEtFOSAA	*17*		ng/l		*20*		*84*	*30-142*		
Surrogate: 13C2-6:2-FTS	*19*		ng/l		*19*		*98*	*32-170*		
Surrogate: 13C7-PFUnDA	*14*		ng/l		*20*		*68*	*30-128*		
Batch 19014013 - METHOD										
Blank (BLK0140B19014013)					Prepared: 14-Jan-19 Analyzed: 16-Jan-19					
Perfluorodecanesulfonate	< 2.0		ng/l	2.0				-		
6:2 fluorotelomersulfonate	< 2.0		ng/l	2.0				-		
Perfluorohexanesulfonate	< 2.0		ng/l	2.0				-		
Perfluoroundecanoic acid	< 2.0		ng/l	2.0				-		
NEtFOSAA	< 3.0		ng/l	3.0				-		
NMeFOSAA	< 3.0		ng/l	3.0				-		
Perfluorobutanoic acid	< 6.0		ng/l	6.0				-		
8:2 fluorotelomersulfonate	< 6.0		ng/l	6.0				-		
Perfluorodecanoic acid	< 2.0		ng/l	2.0				-		
Perfluorododecanoic acid	< 2.0		ng/l	2.0				-		
Perfluoroheptanesulfonate	< 2.0		ng/l	2.0				-		
Perfluoropentanoic acid	< 6.0		ng/l	6.0				-		
Perfluorotridecanoic acid	< 1.0		ng/l	1.0				-		
Perfluorobutanesulfonate	< 1.0		ng/l	1.0				-		
Perfluorotetradecanoic acid	< 1.0		ng/l	1.0				-		
Perfluorooctanoic acid	< 1.0		ng/l	1.0				-		
Perfluoro-octanesulfonate	< 2.0		ng/l	2.0				-		
Perfluorooctanesulfonamide	< 3.0		ng/l	3.0				-		
Perfluorononanoic acid	< 2.0		ng/l	2.0				-		
Perfluorohexanoic acid	< 2.0		ng/l	2.0				-		
Perfluoroheptanoic acid	< 1.0		ng/l	1.0				-		
Surrogate: 13C5-PFHxA	*17*		ng/l		*20*		*87*	*35-138*		
Surrogate: 13C2-6:2-FTS	*20*		ng/l		*19*		*103*	*32-170*		
Surrogate: 13C2-PFDoDA	*15*		ng/l		*20*		*76*	*39-130*		
Surrogate: 13C2-PFTeDA	*15*		ng/l		*20*		*73*	*26-119*		
Surrogate: 13C3-PFBS	*15*		ng/l		*19*		*81*	*26-148*		
Surrogate: 13C3-PFHxS	*15*		ng/l		*19*		*77*	*34-126*		
Surrogate: 13C4-PFBA	*17*		ng/l		*20*		*85*	*33-123*		
Surrogate: 13C4-PFHpA	*18*		ng/l		*20*		*89*	*35-126*		
Surrogate: 13C2-8:2-FTS	*22*		ng/l		*19*		*115*	*27-164*		
Surrogate: 13C5-PFPeA	*17*		ng/l		*20*		*86*	*31-157*		
Surrogate: 13C6-PFDA	*18*		ng/l		*20*		*90*	*47-125*		
Surrogate: 13C7-PFUnDA	*17*		ng/l		*20*		*85*	*30-128*		
Surrogate: 13C8-PFOA	*17*		ng/l		*20*		*86*	*48-122*		
Surrogate: 13C8-PFOS	*17*		ng/l		*19*		*88*	*50-121*		
Surrogate: 13C8-PFOSA	*13*		ng/l		*20*		*65*	*11-127*		
Surrogate: 13C9-PFNA	*21*		ng/l		*20*		*105*	*41-144*		
Surrogate: d5-NEtFOSAA	*16*		ng/l		*20*		*78*	*30-142*		
Surrogate: d3-NMeFOSAA	*16*		ng/l		*20*		*78*	*30-127*		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 537 modified										
Batch 19014013 - METHOD										
LCS (LCS0143Q19014013)					Prepared: 14-Jan-19 Analyzed: 16-Jan-19					
Perfluoroheptanoic acid	**5.7**		ng/l	1.0	5.4		106	76-140		
Perfluoro-octanesulfonate	**4.9**		ng/l	2.0	5.2		94	67-138		
NMeFOSAA	**5.6**		ng/l	3.0	5.4		104	44-147		
Perfluorobutanesulfonate	**4.7**		ng/l	1.0	4.8		99	73-128		
Perfluorobutanoic acid	**6.2**		ng/l	6.0	5.4		114	74-142		
Perfluorodecanesulfonate	**5.5**		ng/l	2.0	5.2		104	60-135		
Perfluorodecanoic acid	**5.8**		ng/l	2.0	5.4		107	69-148		
Perfluoroheptanesulfonate	**5.8**		ng/l	2.0	5.2		113	64-135		
NEtFOSAA	**4.6**		ng/l	3.0	5.4		85	55-169		
Perfluorononanoic acid	**5.8**		ng/l	2.0	5.4		106	72-148		
Perfluorohexanoic acid	**6.1**		ng/l	2.0	5.4		112	75-135		
Perfluorooctanoic acid	**5.8**		ng/l	1.0	5.4		107	72-138		
Perfluoropentanoic acid	**6.3**		ng/l	6.0	5.4		116	74-134		
Perfluorotetradecanoic acid	**6.6**		ng/l	1.0	5.4		121	74-135		
Perfluorotridecanoic acid	**5.4**		ng/l	1.0	5.4		99	61-145		
Perfluoroundecanoic acid	**5.9**		ng/l	2.0	5.4		108	75-146		
Perfluorododecanoic acid	**6.0**		ng/l	2.0	5.4		111	75-136		
Perfluorohexanesulfonate	**5.2**		ng/l	2.0	5.1		101	71-131		
Perfluorooctanesulfonamide	**5.6**		ng/l	3.0	5.4		102	65-164		
6:2 fluorotelomersulfonate	**17**		ng/l	2.0	15		110	66-155		
8:2 fluorotelomersulfonate	**17**		ng/l	6.0	15		109	66-148		
Surrogate: 13C4-PFHpA	*22*		ng/l		*20*		*112*	*35-126*		
Surrogate: 13C2-6:2-FTS	*25*		ng/l		*19*		*131*	*32-170*		
Surrogate: 13C2-PFTeDA	*16*		ng/l		*20*		*80*	*26-119*		
Surrogate: 13C3-PFBS	*19*		ng/l		*19*		*105*	*26-148*		
Surrogate: 13C3-PFHxS	*19*		ng/l		*19*		*100*	*34-126*		
Surrogate: 13C2-8:2-FTS	*28*		ng/l		*19*		*147*	*27-164*		
Surrogate: 13C4-PFBA	*21*		ng/l		*20*		*105*	*33-123*		
Surrogate: 13C2-PFDoDA	*20*		ng/l		*20*		*99*	*39-130*		
Surrogate: 13C5-PFHxA	*21*		ng/l		*20*		*103*	*35-138*		
Surrogate: 13C9-PFNA	*23*		ng/l		*20*		*116*	*41-144*		
Surrogate: d3-NMeFOSAA	*19*		ng/l		*20*		*97*	*30-127*		
Surrogate: d5-NEtFOSAA	*22*		ng/l		*20*		*111*	*30-142*		
Surrogate: 13C8-PFOSA	*16*		ng/l		*20*		*82*	*11-127*		
Surrogate: 13C8-PFOS	*21*		ng/l		*19*		*108*	*50-121*		
Surrogate: 13C8-PFOA	*22*		ng/l		*20*		*109*	*48-122*		
Surrogate: 13C7-PFUnDA	*21*		ng/l		*20*		*107*	*30-128*		
Surrogate: 13C6-PFDA	*23*		ng/l		*20*		*114*	*47-125*		
Surrogate: 13C5-PFPeA	*22*		ng/l		*20*		*108*	*31-157*		
LCSD (LCS0143Y19014013)					Prepared: 14-Jan-19 Analyzed: 16-Jan-19					
Perfluorobutanesulfonate	**5.1**		ng/l	1.0	4.8		106	73-128	7	30
NEtFOSAA	**5.5**		ng/l	3.0	5.4		102	55-169	18	30
Perfluorobutanoic acid	**6.0**	J.	ng/l	6.0	5.4		110	74-142	4	30
6:2 fluorotelomersulfonate	**15**		ng/l	2.0	15		98	66-155	12	30
Perfluorodecanesulfonate	**5.7**		ng/l	2.0	5.2		109	60-135	5	30
Perfluorodecanoic acid	**5.8**		ng/l	2.0	5.4		106	69-148	1	30
Perfluorododecanoic acid	**6.1**		ng/l	2.0	5.4		112	75-136	1	30
Perfluoroheptanesulfonate	**5.0**		ng/l	2.0	5.2		98	64-135	15	30
Perfluoroheptanoic acid	**5.6**		ng/l	1.0	5.4		102	76-140	3	30
8:2 fluorotelomersulfonate	**16**		ng/l	6.0	15		104	66-148	5	30

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
EPA 537 modified										
Batch 19014013 - METHOD										
LCSD (LCS0143Y19014013)					Prepared: 14-Jan-19 Analyzed: 16-Jan-19					
Perfluorohexanesulfonate	**4.8**		ng/l	2.0	5.1		93	71-131	8	30
Perfluorohexanoic acid	**5.8**		ng/l	2.0	5.4		107	75-135	5	30
Perfluorononanoic acid	**5.4**		ng/l	2.0	5.4		99	72-148	7	30
Perfluorooctanesulfonamide	**5.3**		ng/l	3.0	5.4		97	65-164	5	30
Perfluoro-octanesulfonate	**5.1**		ng/l	2.0	5.2		97	67-138	3	30
Perfluorooctanoic acid	**5.7**		ng/l	1.0	5.4		104	72-138	3	30
Perfluoropentanoic acid	**6.1**		ng/l	6.0	5.4		111	74-134	4	30
Perfluorotridecanoic acid	**6.1**		ng/l	1.0	5.4		111	61-145	11	30
NMeFOSAA	**5.7**		ng/l	3.0	5.4		105	44-147	1	30
Perfluoroundecanoic acid	**5.9**		ng/l	2.0	5.4		109	75-146	1	30
Perfluorotetradecanoic acid	**5.8**		ng/l	1.0	5.4		106	74-135	13	30
Surrogate: 13C4-PFHpA	*20*		ng/l		*20*		*102*	*35-126*		
Surrogate: 13C3-PFBS	*17*		ng/l		*19*		*91*	*26-148*		
Surrogate: 13C5-PFPeA	*20*		ng/l		*20*		*101*	*31-157*		
Surrogate: d5-NEtFOSAA	*20*		ng/l		*20*		*98*	*30-142*		
Surrogate: 13C2-8:2-FTS	*25*		ng/l		*19*		*129*	*27-164*		
Surrogate: 13C2-PFTeDA	*17*		ng/l		*20*		*84*	*26-119*		
Surrogate: 13C2-6:2-FTS	*25*		ng/l		*19*		*131*	*32-170*		
Surrogate: 13C3-PFHxS	*18*		ng/l		*19*		*95*	*34-126*		
Surrogate: 13C4-PFBA	*20*		ng/l		*20*		*99*	*33-123*		
Surrogate: 13C9-PFNA	*24*		ng/l		*20*		*119*	*41-144*		
Surrogate: 13C2-PFDoDA	*18*		ng/l		*20*		*90*	*39-130*		
Surrogate: d3-NMeFOSAA	*19*		ng/l		*20*		*96*	*30-127*		
Surrogate: 13C5-PFHxA	*19*		ng/l		*20*		*97*	*35-138*		
Surrogate: 13C8-PFOSA	*16*		ng/l		*20*		*80*	*11-127*		
Surrogate: 13C8-PFOS	*20*		ng/l		*19*		*103*	*50-121*		
Surrogate: 13C8-PFOA	*19*		ng/l		*20*		*97*	*48-122*		
Surrogate: 13C7-PFUnDA	*19*		ng/l		*20*		*97*	*30-128*		
Surrogate: 13C6-PFDA	*20*		ng/l		*20*		*102*	*47-125*		
SW-846 8270D SIM										
Batch 19007WAA026 - SW-846 3510C										
Matrix Spike (9960448R)			**Source: SC52917-04**		Prepared: 07-Jan-19 Analyzed: 09-Jan-19					
1,4-Dioxane	**0.8**		ug/l	0.2	1	BRL	84	70-130		
Surrogate: Fluoranthene-d10	*0.8*		ug/l		*1*		*81*	*51-120*		
Surrogate: Benzo(a)pyrene-d12	*0.6*		ug/l		*1*		*65*	*44-120*		
Surrogate: 1-Methylnaphthalene-d10	*0.9*		ug/l		*1*		*89*	*42-123*		
Matrix Spike Dup (9960449M)			**Source: SC52917-04**		Prepared: 07-Jan-19 Analyzed: 09-Jan-19					
1,4-Dioxane	**0.9**		ug/l	0.2	1	BRL	90	70-130	4	30
Surrogate: 1-Methylnaphthalene-d10	*1*		ug/l		*1*		*99*	*42-123*		
Surrogate: Benzo(a)pyrene-d12	*0.7*		ug/l		*1*		*67*	*44-120*		
Surrogate: Fluoranthene-d10	*0.9*		ug/l		*1*		*91*	*51-120*		
LCS (P7WALCSQ007WAA026)					Prepared: 07-Jan-19 Analyzed: 09-Jan-19					
1,4-Dioxane	**0.6**		ug/l	0.2	1		62	70-130		
Surrogate: Fluoranthene-d10	*0.9*		ug/l		*1*		*85*	*51-120*		
Surrogate: Benzo(a)pyrene-d12	*0.8*		ug/l		*1*		*76*	*44-120*		
Surrogate: 1-Methylnaphthalene-d10	*0.8*		ug/l		*1*		*81*	*42-123*		
Blank (PLKWA00B007WAA026)					Prepared: 07-Jan-19 Analyzed: 09-Jan-19					
1,4-Dioxane	< 0.2		ug/l	0.2				-		

Analyte(s)	Result	Flag	Units	*RDL	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
SW-846 8270D SIM										
Batch 19007WAA026 - SW-846 3510C										
Blank (PLKWA00B007WAA026)					Prepared: 07-Jan-19 Analyzed: 09-Jan-19					
Surrogate: Fluoranthene-d10	*0.8*		ug/l		*1*		*81*	*51-120*		
Surrogate: Benzo(a)pyrene-d12	*0.7*		ug/l		*1*		*73*	*44-120*		
Surrogate: 1-Methylnaphthalene-d10	*0.9*		ug/l		*1*		*87*	*42-123*		

Notes and Definitions

J.	Estimated value
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

SC 52917

eurofins | Spectrum Analytical

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- [X] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: _____

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Samples disposed after 30 days unless otherwise instructed.

Report To: Day Environmental, Inc
1563 Lyell Avenue
Rochester, NY 14606

Telephone #: 585 454 0210
Project Mgr: C. Hampton

Invoice To: SAME

P.O No.: — Quote #: —

Project No: 5529 s-18
Site Name: 415 & 441 Chandler St.
Location: Jamestown State: NY
Sampler(s): C. Hampton

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11= TRIZMA 12= None

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas

X1= DI/PFA Free H_2O X2= _____ X3= _____

G= Grab C=Compsite

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	List Preservative Code below: 12	11	Analysis: 1,4-Dioxane x 8270 SIM	NYSDEC PFAS x 537	Check if chlorinated
52917-01	MW-C	01/02/19	07:55	G	GW		2		2			X	X	☐
-02	MW-H		09:00				2		2			X	X	☐
-03	MW-P		11:15				2		2			X	X	☐
-04	MW-Q		10:05				6		6			X	X	☐
-05	MW-R		12:15				2		2			X	X	☐
-06	Duplicate		—				2		2			X	X	☐
-07	FB20190102		12:45	—	X		2		2			X	X	☐
														☐
														☐
														☐

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☐ No
CT DPH RCP Report? ☐ Yes ☐ No
☐ Standard ☐ No QC ☐ DQA*
☐ ASP A* ☒ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: _____
State-specific reporting standards:

Also MS/MSD

Relinquished by:	Received by:	Date:	Time:
Charles Hampton	FedEx	01/02/19	~15:00
Sealed	[signature]	1/3/19	1047

Temp °C: Observed 1.1 / Correction Factor 0 / Corrected 1.1 / DI ID # 01

☒ EDD format: NYSDEC EQUIS
☒ E-mail to: Champton@daymail.net

Condition upon receipt: Custody Seals: ☐ Present ☒ Intact ☐ Broken
☐ Ambient ☒ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

SVCS: PRIORITY OVERN

ORIGIN ID:EHTA (585) 454-0210
ATTN: CHARLES HAMPTON
DAY ENVIRONMENTAL, INC.
1563 LYELL AVE.

ROCHESTER, NY 14606
UNITED STATES US

SHIP DATE: 19DEC18
ACTWGT: 50.00 LB MAN
CAD: 0654830/CAFE3211

TO ROBERT BRISTOL
EUROFINS SPECTRUM ANALYTICAL, INC.
11 ALMGREN DRIVE

AGAWAM MA 01001
(413) 789-9018
REF: # 46181

RMA:

FedEx
Express

E

FedEx
TRK# 0221 4663 8817 7255

THU - 03 JAN 10:30A
PRIORITY OVERNIGHT

EB EHTA

01001
MA-US BDL

ORIGIN ID:EHTA (585) 454-0210
ATTN: CHARLES HAMPTON
DAY ENVIRONMENTAL, INC.
1563 LYELL AVE.

ROCHESTER, NY 14606
UNITED STATES US

TO ROBERT BRISTOL
EUROFINS SPECTRUM ANALYTICAL, INC.
11 ALMGREN DRIVE

AGAWAM MA 01001
(413) 789-9018
REF: # 46181

RMA:

FedEx
Express

FedEx
TRK# 0221 4663 8817 7233

THU - 03 JAN 10:30A
PRIORITY OVERNIGHT

EB EHTA

01001
MA-US BDL

#66139 01/02 552J2/D74C/DCA5

10:30 A
1
12
744

ORIGIN ID:EHTA (585) 454-0210
ATTN: CHARLES HAMPTON
DAY ENVIRONMENTAL, INC.
1563 LYELL AVE.

ROCHESTER, NY 14606
UNITED STATES US

TO ROBERT BRISTOL
EUROFINS SPECTRUM ANALYTICAL, INC.
11 ALMGREN DRIVE

AGAWAM MA 01001
(413) 789-9018
REF: # 46181

RMA:

FedEx Express

FedEx
TRK# 0221 4663 8817 7233

THU - 03 JAN 10:30A
PRIORITY OVERNIGHT

EB EHTA

01001
MA-US BDL

#66139 01/02 552J2/D74C/DCA5

Batch Summary

19007WAA026

Subcontracted Analyses

9960448R
9960449M
P7WALCSQ007WAA026
PLKWA00B007WAA026
SC52917-01 (MW-C)
SC52917-02 (MW-H)
SC52917-03 (MW-P)
SC52917-04 (MW-Q)
SC52917-05 (MW-R)
SC52917-06 (Duplicate)
SC52917-07 (FB20190102)

19008001

Subcontracted Analyses

9960448R
9960449M
BLK0080B19008001
LCS0081Q19008001
SC52917-02 (MW-H)
SC52917-03 (MW-P)
SC52917-04 (MW-Q)
SC52917-05 (MW-R)
SC52917-06 (Duplicate)
SC52917-07 (FB20190102)

19014013

Subcontracted Analyses

BLK0140B19014013
LCS0143Q19014013
LCS0143Y19014013
SC52917-01 (MW-C)

APPENDIX C

HEALTH AND SAFETY PLAN and
Community Air Monitoring Plan

441 CHANDLER STREET
JAMESTOWN, NEW YORK

NYSDEC SITE No.: (*TO BE DETERMINED*)

Prepared for: Weber-Knapp Company
441 Chandler Street
Jamestown, New York

Prepared by: Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

Project No. 5529S-18

Date: April, 2019

TABLE OF CONTENTS

ATTACHMENTS

1.0 INTRODUCTION

Day Environmental, Inc. (DAY) prepared this Health and Safety Plan (HASP) to outline policies and procedures to protect workers and the public from potential environmental hazards during the remedial investigation to be conducted at, and in the vicinity of, the property addressed 441 Chandler Street, City of Jamestown, County of Chautauqua, New York (the Site). The Project Locus map presented as Figure 1 shows general location of the Site.

Although the HASP focuses on the specific work activities planned for the Site, it must remain flexible due to the nature of this work. Conditions may change and unforeseen situations can arise that require deviations from the original HASP.

1.1 Site Location and Description

The Site consists of one tax parcel, approximately 2.65 acres in area, and it is located in an urban area in Jamestown, Chautauqua County, New York. The Site is currently developed with an approximate 105,000 square foot, combined one-story and two-story masonry construction building. Currently Weber-Knapp Company owns the Site and the property is used for sheet metal cutting and stamping, welding, metal turning, powder coat finishing and also offices. The remaining portions of the Site are currently covered with asphalt or concrete-paved parking/drive areas, covered storage areas, and/or vegetation (grass and landscaping beds). The Chadakoin River runs along the western edge of the Site.

1.2 Site History/Overview

The Site has been developed since at least 1902. A review of historical documentation indicates that past uses include apparent residential from at least 1902 to at least 1949; the Morse Avenue right-of-way (ROW) from at least 1902 to at least 1930; and the Weber Knapp Company from around 1910 to the present.

The Weber-Knapp Company constructed the building at the Site, starting with the southwest portion around 1910 with additions to the north and east [i.e., over the Morse Avenue Right-of-Way (ROW) and former residential properties] in 1941, 1953, 1960, 1964 and 1966.

The surrounding parcels are vacant or currently used for commercial, residential, or industrial purposes. The nearest residential area is approximately 70 feet northeast, at 562 Allen Street.

1.3 Planned Activities Covered by HASP

This HASP is intended to be used during intrusive environmental studies and subsequent remedial activities (if any) conducted at the Site that have the potential to encounter contaminated materials. Currently, identified activities to be completed at the Site that have the potential to encounter contaminated materials include:

- Site Preparation Activities
- Advancement of test borings and installation of groundwater monitoring wells

- Soil, Groundwater and Soil Vapor sample collection
- Management of Investigation Derived Waste (IDW)
- Activities to be completed as an Interim Remedial Measure (IRM), including:
    - removal of a portion of the concrete floor slab;
    - excavation, staging and loading of soil/fill materials;
    - as necessary, support systems will be installed to support existing building foundations during the soil removal process;
    - de-watering during excavation activities; and
    - backfill and restoration activities.

This HASP can be modified to cover other site activities as deemed appropriate. Site personnel implementing work the work described above must have the appropriate level of training required by OSHA including 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training and current 8-hour refresher training. The owner of the property, its contractors, and other workers at the Site will be responsible for the development and/or implementation of health and safety provisions associated with Site activities.

2.0 KEY PERSONNEL AND MANAGEMENT

The Project Manager (PM) and Site Safety Officer (SSO) are responsible for formulating health and safety requirements, and implementing the HASP.

2.1 Project Manager

The PM has the overall responsibility for the project and will coordinate with the SSO to ensure that the goals of the project are attained in a manner consistent with the HASP requirements.

2.2 Site Safety Officer

The SSO has responsibility for administering the HASP relative to site activities, and will be in the field while activities are in progress. The SSO's operational responsibilities will be monitoring, including personal and environmental monitoring, ensuring personal protective equipment (PPE) maintenance, and identification of protection levels. The air monitoring data obtained by the SSO will be available for review by regulatory agencies and other on-site personnel.

2.3 Employee Safety Responsibility

Each employee is responsible for personal safety as well as safety of others in the area. The employee will use the equipment provided in a safe and responsible manner as directed by the SSO.

2.4 Key Safety Personnel

The following individuals are anticipated to share responsibility for health and safety of DAY representatives at the Site.

DAY Project Manager	Raymond Kampff and/or David Day, P.E.
DAY Site Safety Officer	Charles Hampton, Heather McLennan, and/or Nathan Simon.

3.0 SAFETY RESPONSIBILITY

Contractors, consultants, state or local agencies, or other parties, and their employees, involved with this project will be responsible for their own safety while on-site. Their employees will be required to understand the information contained in this HASP, and must follow the recommendations that are made in this document. As an alternative, contractors, consultants, state or local agencies, or other parties, and their employees, involved with this project can utilize their own health and safety plan for this project as long as it is found acceptable to the New York State Department of Health (NYSDOH), NYSDEC and the Chautauqua County Department of Health and Human Services (CCDHHS).

4.0 JOB HAZARD ANALYSIS

There are many hazards associated with environmental work on a site, and this HASP discusses some of the anticipated hazards for this Site. The hazards listed below deal specifically with those hazards associated with the management of potentially contaminated media (e.g. soil, fill, groundwater, etc.).

4.1 Chemical Hazards

Chemical substances can enter the unprotected body by inhalation, skin absorption, ingestion, or injection (i.e., a puncture wound, etc.). A contaminant can cause damage to the point of contact or can act systemically, causing a toxic effect at a part of the body distant from the point of initial contact.

A list of selected constituents that have been detected at the Site at concentrations that exceed soil or groundwater standards, criteria and guidance (SCG) values are presented below. This list also presents the Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs), National Institute for Occupational Safety and Health (NIOSH) recommended exposure limits (RELs), and NIOSH immediately dangerous to life or health (IDLH) levels.

CONSTITUENT	OSHA PEL	NIOSH REL	IDLH
Tetrachloroethene (PCE)	678 mg/m^3	NA	1,017 mg/m^3
Trichloroethene (TCE)	537 mg/m^3	134.25 mg/m^3	5,370 mg/m^3
trans 1,2- Dichloroethene (trans 1,2-DCE)	790 mg/m^3	790 mg/m^3	3,970 mg/m^3
cis 1,2- Dichloroethene (cis 1,2-DCE)	790 mg/m^3	790 mg/m^3	3,970 mg/m^3
Vinyl Chloride	2.56 mg/m^3	NA	NA
1,1- Dichloroethene (1,1-DCE)	NA	NA	NA
Chloroethane	2,600 mg/m^3	NA	10,032 mg/m^3
Benz(a)anthracene	0.2 mg/m^3	0.1 mg/m^3	80 mg/m^3
Benzo(a)pyrene	0.2 mg/m^3	0.1 mg/m^3	80 mg/m^3
Benzo(b)fluoranthene	0.2 mg/m^3	0.1 mg/m^3	80 mg/m^3
Benzo(k)fluoranthene	0.2 mg/m^3	0.1 mg/m^3	80 mg/m^3
Chrysene	0.2 mg/m^3	0.1 mg/m^3	80 mg/m^3
Indeno(1,2,3-cd)pyrene	NA	NA	NA
Arsenic	0.010 mg/m^3	0.002 mg/m^3	5 mg/m^3

NA = Not Available mg/m^3 = milligram per cubic meter

The potential routes of exposure for these analytes and chemicals include inhalation, ingestion, skin absorption and/or skin/eye contact. The potential for exposure through any one of these

routes will depend on the activity conducted. The most likely routes of exposure for the anticipated environmental activities at the Site include inhalation and skin/eye contact.

4.2 Physical Hazards

There are physical hazards associated with this project, which might compound the chemical hazards. Hazard identification, training, adherence to the planned environmental measures, and careful housekeeping can prevent many problems or accidents arising from physical hazards. Potential physical hazards associated with this project and suggested preventative measures include:

- Slip/Trip/Fall Hazards – Some areas may have wet or frozen surfaces that will greatly increase the possibility of inadvertent slips. Caution must be exercised when using steps and stairs due to slippery surfaces in conjunction with the fall hazard. Good housekeeping practices are essential to minimize the trip hazards.
- Small Quantity Flammable Liquids – Small quantities of flammable liquids will be stored in "safety" cans and labeled according to contents.
- Electrical Hazards – Electrical devices and equipment shall be de-energized prior to working near them. All extension cords will be kept out of water, protected from crushing, and observed regularly to ensure structural integrity. Temporary electrical circuits will be protected with ground fault circuit interrupters. Only qualified electricians are authorized to work on electrical circuits. Heavy equipment (e.g., excavator, backhoe, drill rig) shall not be operated within 10 feet of high voltage lines, unless proper protection form the high voltage lines is provided by the appropriate utility company.
- Noise – Work around large equipment often creates excessive noise. The effects of noise can include:
    - Workers being startled, annoyed, or distracted;
    - Physical damage to the ear resulting in pain, or temporary and or/permanent hearing loss; or
    - Communication interference that may increase potential hazards due to the inability to warn of danger and proper safety precautions to be taken.

  Proper hearing protection will be worn as deemed necessary. In general, feasible administrative or engineering controls shall be utilized when on-site personnel are subjected to noise exceeding an 8-hour time weighted average (TWA) sound level of 90 decibels on the A-weighted scale (dBA). In addition, whenever employee noise exposures equal or exceed an 8-hour TWA sound level of 85 dBA, employers shall administer a continuing, effective hearing conservation program as described in the OSHA Regulation 29 Code of Federal Rules (CFR) Part 1910.95.
- Heavy Equipment – Each morning before start-up, heavy equipment will be checked to ensure safety equipment and devices are operational and ready for immediate use.
- Subsurface and Overhead Hazards – Before any excavation activity, efforts will be made to determine whether underground utilities and potential overhead hazards will

be encountered. Underground utility clearance must be obtained prior to subsurface work.

4.3 Environmental Hazards

Environmental factors such as weather, wild animals, insects, snakes and irritant plants can pose a hazard when performing outdoor tasks. The SSO shall make reasonable efforts to alleviate these hazards should they arise.

4.3.1 Heat Stress

The combination of warm ambient temperature and protective clothing increases the potential for heat stress. In particular,

- Heat rash
- Heat cramps
- Heat exhaustion
- Heat stroke

Site workers will be encouraged to increase consumption of water or electrolyte-containing beverages such as Gatorade® when the potential for heat stress exists. In addition, workers are encouraged to take rests whenever they feel any adverse effects that may be heat-related. The frequency of breaks may need to be increased upon worker recommendation to the SSO.

4.3.2 Exposure to Cold

With outdoor work in the winter months, the potential exists for hypothermia and frostbite. Protective clothing greatly reduces the possibility of hypothermia in workers. However, personnel will be instructed to wear warm clothing and to stop work to obtain more clothing if they become too cold. Employees will also be advised to change into dry clothes if their clothing becomes wet from perspiration or from exposure to precipitation.

5.0 SITE CONTROLS

To prevent migration of contamination caused through tracking by personnel or equipment, work areas, and personal protective equipment staging/decontamination areas will be specified prior to beginning operations.

5.1 Site Zones

In the area where contaminated materials present the potential for worker exposure (work zone), personnel entering the area must wear the mandated level of protection for the area. A "transition zone" shall be established where personnel can begin and complete personal and equipment decontamination procedures. This can reduce potential off-site migration of contaminated media. Contaminated equipment or clothing will not be allowed outside the transition zone (e.g., on clean portions of the Site) unless properly containerized for disposal. Operational support facilities will be located outside the transition zone (i.e., in a "support zone"), and normal work clothing and support equipment are appropriate in this area. If possible, the support zone should be located upwind of the work zone and transition zone.

5.2 General

The following items will be requirements to protect the health and safety of workers during implementation of activities that disturb contaminated material.

- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increased the probability of hand to mouth transfer and ingestion of contamination shall not occur in the work zone and/or transition zone during disturbance of contaminated material.
- Personnel admitted in the work zone shall be properly trained in health and safety techniques and equipment usage.
- No personnel shall be admitted in the work zone without the proper safety equipment.
- Proper decontamination procedures shall be followed before leaving the Site.

6.0 PROTECTIVE EQUIPMENT

This section addresses the various levels of PPE, which are or may be required at this job site. Personnel entering the work zone and transition zone shall be trained in the use of the anticipated PPE to be utilized.

6.1 Anticipated Protection Levels

The following table summarizes the protection levels (refer to Section 6.2) anticipated for tasks to be implemented during this project.

TASK	PROTECTION LEVEL	COMMENTS/MODIFICATIONS
Site mobilization	D	
Site preparation	D	
Intrusive work	C/Modified D/D	Based on air monitoring, and SSO discretion.
Decontamination Area	Modified D/D	
Site breakdown and demobilization	D	

It is anticipated that work conducted as part of this project will be performed in Level D or modified Level D PPE. If conditions are encountered that require Level A or Level B PPE, the work will immediately be stopped. The appropriate government agencies (e.g., NYSDEC, NYSDOH, MCDPH, etc.) will be notified and the proper health and safety measures will be implemented (e.g., develop and implement engineering controls, upgrade in PPE, etc.). If conditions are encountered that require Level C PPE, the work will be temporarily suspended and the work site will be evaluated to limit exposure prior to implementing Level C PPE.

6.2 Protection Level Descriptions

This section lists the minimum requirements for each protection level. Modifications to these requirements can be made upon approval of the SSO. If Level A, Level B, and/or Level C PPE is required, Site personnel that enter the work zone and/or transition zone must be properly trained and certified in the use of those levels of PPE.

6.2.1 Level D

Level D consists of the following:

- Safety glasses
- Hard hat when working with heavy equipment
- Steel-toed or composite-toed work boots
- Protective gloves during sampling or handling of potentially contaminated media

- Work clothing as prescribed by weather

6.2.2 Modified Level D

Modified Level D consists of the following:

- Safety glasses with side shields
- Hard hat when working with heavy equipment
- Steel-toed or composite-toed work boots
- Protective gloves during sampling or handling of potentially contaminated media
- Outer protective wear, such as Tyvek coverall [Tyveks (Sarans) and polyvinyl chloride (PVC) acid gear will be required when workers have a potential to be exposed to impacted liquids or impacted particulates]

6.2.3 Level C

Level C consists of the following:

- Air-purifying respirator with appropriate cartridges
- Outer protective wear, such as Tyvek coverall [Tyveks (Sarans) and PVC acid gear will be required when workers have a potential to be exposed to impacted liquids or particulates]
- Hard hat when working with heavy equipment
- Steel-toed or composite-toed work boots
- Nitrile, neoprene, or PVC overboots, if appropriate
- Nitrile, neoprene, or PVC gloves, if appropriate
- Face shield (when projectiles or splashes pose a hazard) and/or safety glasses with side shields.

6.2.4 Level B

Level B protection consists of the items required for Level C protection with the exception that an air-supplied respirator is used in place of the air-purifying respirator. Level B PPE is not anticipated to be required during this project. If the need for level B PPE becomes evident, activities in the affected area will be stopped until conditions are further evaluated, and any necessary modifications to the HASP have been approved by the PM and SSO. Subsequently, the appropriate safety measures (including Level B PPE) must be implemented prior to commencing site activities.

6.2.5 Level A

Level A protection consists of the items required for Level B protection with the addition of a fully encapsulating, vapor-proof suit capable of maintaining positive pressure. Level A PPE is not anticipated to be required during this project. If the need for level A PPE becomes evident, activities in the affected area will be stopped until conditions are further evaluated, and any necessary modifications to the HASP have been approved by the PM and SSO. Subsequently, the appropriate safety measures (including Level A PPE) must be implemented prior to commencing site activities.

6.3 Respiratory Protection

Any respirator used will meet the requirements of the OSHA 29 CFR 1910.134. Both the respirator and cartridges specified shall be fit-tested prior to use in accordance with OSHA regulations (29 CFR 1910). Air purifying respirators shall not be worn if contaminant levels exceed designated respirator cartridge use concentrations. The workers will wear respirators with approval for: organic vapors less than 1,000 ppm; and dusts, fumes and mists with a TWA less than 0.05 milligrams per cubic meter (mg/m^3).

No personnel who have facial hair, which interferes with respirator sealing surface, will be permitted to wear a respirator and will not be permitted to work in areas requiring respirator use.

Only workers who have been certified by a physician as being physically capable of respirator usage shall be issued a respirator. Personnel unable to pass a respiratory fit test or without medical clearance for respirator use will not be permitted to enter or work in areas that require respirator protection.

7.0 DECONTAMINATION PROCEDURES

This section describes the procedures necessary to ensure that both personnel and equipment are free from contamination when they leave the work site.

7.1 Personnel Decontamination

Personnel involved with activities that involve disturbing contaminated media will follow the decontamination procedures described herein to ensure that material which workers may have contacted in the work zone and/or transition zone does not result in personal exposure and is not spread to clean areas of the Site. This sequence describes the general decontamination procedure. The specific stages can vary depending on the Site, the task, and the protection level, etc.

1. Leave work zone and go to transition zone
2. Remove soil/debris from boots and gloves
3. Remove boots
4. Remove gloves
5. Remove Tyvek suit and discard, if applicable
6. Remove and wash respirator, if applicable
7. Go to support zone

7.2 Equipment Decontamination

In order to reduce the potential for cross-contamination of samples collected during this project, the following procedures will be implemented to ensure that the data collected (primarily the laboratory data) is acceptable.

It is anticipated that most of the materials used to assist in obtaining samples will be disposable one-time use materials (e.g., sampling containers, bailers, rope, pump tubing, latex gloves, etc.). However, when equipment must be re-used (e.g., drill rigs, static water level indicator, split spoon samplers, etc.), it will be decontaminated by at least one of the following methods:

- Steam clean the equipment within a dedicated decontamination area; or
- Rough wash in tap water; wash in mixture of tap water and Alconox-type soap; double rinse with deionized or distilled water; and air dry and/or dry with clean paper towel.

The decontamination area will be set-up in a location to minimize disturbance to properties surrounding the work area.

7.3 Disposal

Disposable clothing will be disposed in accordance with applicable regulations. Liquids (e.g., decontamination water, etc.) or solids (e.g., soil) generated by remedial activities will be disposed in accordance with applicable regulations.

8.0 AIR MONITORING

During activities that have the potential to disturb contaminated soil, fill material, or groundwater, air monitoring will be conducted in order to determine airborne particulate and contamination levels. This ensures that respiratory protection is adequate to protect personnel against the chemicals that are encountered and that chemical contaminants are not migrating off-site. Additional air monitoring may be conducted at the discretion of the SSO. Readings will be recorded and be available for review.

The following chart describes the direct reading instrumentation that will be utilized and appropriate action levels.

Monitoring Device	Action Level	Response/Level of PPE
PID Volatile Organic Compound Meter	< 1 ppm in breathing zone, sustained 5 minutes	Level D
	1-25 ppm in breathing zone, sustained 5 minutes	Cease work, implement measures to reduce air emissions when the work is performed, etc. If levels can not be brought below 1 ppm in the breathing zone, then upgrade PPE to Level C
	26-250 ppm in breathing zone, sustained 5 minutes	Level B, Stop work, evaluate the use of engineering controls, etc.
	>250 ppm in breathing zone	Level A, Stop work, evaluate the use of engineering controls, etc.
RTAM Particulate Meter	< 100 $\mu g/m^3$ over an integrated period not to exceed 15 minutes.	Continue working
	> 100 $\mu g/m^3$ over an integrated period not to exceed 15 minutes.	Cease work, implement dust suppression, change in way work performed, etc. If levels can not be brought below 150 $\mu g/m^3$, then upgrade PPE to Level C

$\mu g/m^3$ = microgram per cubic meter ppm = parts per million

8.1 Particulate Monitoring

During activities where contaminated materials (e.g., soil, fill, etc.) may be disturbed, air monitoring will include real-time monitoring for particulates using a real-time aerosol monitor (RTAM) particulate meter at the perimeter of the work zone in accordance with the Final DER-10 Technical Guidance for Site Investigation and Remediation (DER-10) dated May 2010. DER-10 uses an action level of 100 $\mu g/m^3$ (0.10 mg/m^3) over background conditions for an integrated

period not to exceed 15 minutes. If the action level is exceeded, or if visible dust is encountered, then work shall be discontinued until corrective actions are implemented. Corrective actions may include dust suppression, change in the way work is performed, and/or upgrade of personal protective equipment.

8.2 Volatile Organic Compound Monitoring

During activities where contaminated materials may be disturbed, a photoionization detector (PID) will be used to monitor total VOCs in the ambient air. The PID will prove useful as a direct reading instrument to aid in determining if current respiratory protection is adequate or needs to be upgraded. The SSO will take measurements before operations begin in an area to determine the concentration of VOCs naturally occurring in the air. This is referred to as a background level. Levels of VOCs will periodically be measured in the air at active work sites, and at the transition zone when levels are detected above background in the work zone.

8.3 Community Air Monitoring Plan

During activities that have the potential to disturb contaminated soil, fill material, or groundwater, this Community Air Monitoring Plan (CAMP) will be implemented. The CAMP includes real-time monitoring for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area when activities with the potential to release VOCs or dust are in progress at the Site. This CAMP is based on the NYSDOH Generic CAMP included as Appendix 1A DER-10. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, the intent pf this CAMP is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences/businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of project activities. [Note: CAMP will not be implemented during activities that have the potential to disturb contaminated materials that are performed inside the building at the site (i.e., in situations where migration of airborne contaminants via wind is not anticipated). In lieu of CAMP, the air monitoring described in Sections 8.2 and 8.3 will be conducted to provide a measure of protection for the on-site workers who are performing tasks in the vicinity of the work area, but not directly involved with the subject work activities.]

Continuous monitoring will be conducted during ground intrusive activities involving potentially contaminated soil, fill material or groundwater. Ground intrusive activities include, but are not limited to, excavation and transport of impacted materials during implementation of the IRM, advancement/installation of test borings or monitoring wells, etc.

Periodic monitoring for VOCs will be conducted during non-intrusive activities involving potentially contaminated soil, fill material or groundwater where deemed appropriate (e.g., during collection of soil samples or groundwater samples, etc.).

8.3.1 VOC Monitoring, Response Levels, and Actions

VOCs must be monitored at the downwind perimeter of the immediate work area (i.e., the work zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 ppm above background for the 15-minute average, work activities must be temporarily halted and monitoring must be continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source or vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less (but in no case less than 20 feet), is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

The 15-minute readings must be recorded and made available for NYSDEC and NYSDOH personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

8.3.2 Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind perimeter of the work zone at temporary particulate monitoring stations. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter ($\mu g/m^3$) greater than background (upwind perimeter) for the 15-minute period or if airborne dust

is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 μg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 μg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 μg/m^3 of the upwind level and in preventing visible dust migration.

Readings will be recorded and made available for review.

9.0 EMERGENCY CONTINGENCY PLAN

This section presents the emergency contingency plan (ECP) describing the procedures to be performed in the event of an emergency (e.g., fire, spill, tank/drum release, etc.). To provide first-line assistance to field personnel in the case of illness or injury, the following items will be made immediately available on the Site:

- First-aid kit;
- Portable emergency eye wash; and
- Supply of clean water.

9.1 Emergency Telephone Numbers

The following telephone numbers are listed in case there is an emergency at the Site:

Fire/Police Department:	911
Poison Control Center:	(800) 222-1222
NYSDEC	
Region 9: Headquarters	(716) 851-7220
Spill Hotline	(800) 457-7362
NYSDOH	
Public Health Duty Officer	(866) 881-2809
CCDHHS	
Environmental Health Division	(716) 753-4481
Weber Knapp Company	
Erik Dahlgren	(716) 484-9135 ext. 231
DAY ENVIRONMENTAL, INC.	
Raymond Kampff	Office - (585) 454-0210 x108
NEAREST HOSPITAL:	UPMC Chautauqua 207 Foote Avenue, Jamestown, NY 14701 (716) 487-0141 (Information) (716) 484-2121 (Ambulance)
Directions to the Hospital:	Head southeast on Chandler Street toward Allen Street. Turn right onto Allen Street. Turn Left onto Maple Street. Turn right onto Garfield Street. Garfield Street turns left and becomes Sherman Street. Turn right onto Prather Avenue. Turn right

into the hospital at 207 Foote Avenue, Jamestown, NY 14701.

9.2 Evacuation

Although unlikely, it is possible that a site emergency could require evacuating personnel from the Site. If required, the SSO will give the appropriate signal for site evacuation (i.e., hand signals, alarms, etc.).

All personnel shall exit the Site and shall congregate in an area designated by the SSO. The SSO shall ensure that all personnel are accounted for. If someone is missing, the SSO will alert emergency personnel. The appropriate government agencies will be notified as soon as possible regarding the evacuation, and any necessary measures that may be required to mitigate the reason for the evacuation.

9.3 Medical Emergency

In the event of a medical emergency involving illness or injury to one of the on-site personnel, Emergency Medical Services (EMS) and the appropriate government agencies should be notified immediately. The area in which the injury or illness occurred shall not be entered until the cause of the illness or injury is known. The nature of injury or illness shall be assessed. If the victim appears to be critically injured, administer first aid and/or cardio-pulmonary resuscitation (CPR) as needed. If appropriate, instantaneous real-time air monitoring shall be done in accordance with air monitoring outlined in Section 8.0 of this HASP.

9.4 Contamination Emergency

It is unlikely that a contamination emergency will occur; however, if such an emergency does occur, the specific work area shall be shut down and immediately secured. If an emergency rescue is needed, notify Police, Fire Department and EMS units immediately. Advise them of the situation and request an expedient response. The appropriate government agencies shall be notified immediately. The area in which the contamination occurred shall not be entered until the arrival of trained personnel who are properly equipped with the appropriate PPE and monitoring instrumentation as outlined in Section 8.0 of this HASP.

9.5 Fire Emergency

In the event of a fire on-site, all non-essential site personnel shall be evacuated to a safe, secure area. The Fire Department will be notified immediately, and advised of the situation and the identification of any hazardous materials involved. The appropriate government agencies shall be notified as soon as possible.

The four classes of fire along with their constituents are as follows:

Class A:	Wood, cloth, paper, rubber, many plastics, and ordinary combustible materials.
Class B:	Flammable liquids, gases and greases.
Class C:	Energized electrical equipment.
Class D:	Combustible metals such as magnesium, titanium, sodium, potassium.

Small fires on-site may be actively extinguished; however, extreme care shall be taken while in this operation. Approaches to the fire shall be done from the upwind side if possible. Distance from on-site personnel to the fire shall be close enough to ensure proper application of the extinguishing material but far enough away to ensure that the personnel are safe. The proper extinguisher shall be utilized for the Class(es) of fire present on the site. If possible, the fuel source shall be cut off or separated from the fire. Care must be taken when performing operations involving the shut-off of valves and manifolds, if present.

Examples of proper extinguishing agent as follows:

Class A:	Water Water with 1% Aqueous Film Forming Foam (AFFF) (Wet Water) Water with 6% AFFF or Fluorprotein Foam ABC Dry Chemical
Class B:	ABC Dry Chemical Purple K Carbon Dioxide Water with 6% AFFF
Class C:	ABC Dry Chemical Carbon Dioxide
Class D:	Metal-X Dry Powder

No attempt shall be made against large fires, these shall be handled by the Fire Department.

9.6 Spill or Air Release

In the event of a spill or air release of hazardous materials on-site, the specific area of the spill or release shall be shut down and immediately secured. The area in which the spill or release occurred shall not be entered until the cause can be determined and site safety can be evaluated. Non-essential site personnel shall be evacuated to a safe and secure area. The appropriate government agencies shall be notified as soon as possible. The spilled or released material shall be immediately indentified and appropriate containment measures shall be implemented, if

possible. Real-time air monitoring shall be implemented as outlined in Section 8.0 of this HASP. If the materials are unknown, Level B protection is mandatory. If warranted, samples of the materials shall be acquired to facilitate identification.

9.7 Locating Containerized Waste and/or Underground Storage Tanks

In the event that unanticipated containerized waster (e.g., drums) and/or underground storage tanks (USTs) are located during investigation and/or subsequent remedial activities, the work must be stopped in the specific area until site safety can be evaluated and addressed. Non-essential Site personnel shall not work in the immediate area until conditions including possible exposure hazards are addressed. The appropriate government agencies shall be notified as soon as possible. The SSO shall monitor the area as outlined in Section 8.0 of this HASP.

Prior to handling, unanticipated containers will be visually assessed by the SSO to gain as much information as possible about their contents. As a precautionary measure, personnel shall assume that unlabelled containers and/or tanks contain hazardous materials until their contents are characterized. To the extent possible based upon the nature of the containers encountered, actions may be taken to stabilize the area and prevent migration (e.g., placement of berms, etc.). Subsequent to initial visual assessment and any required stabilization, properly trained personnel will sample, test, remove, and dispose of any containers and/or tanks, and their contents. After visual assessment and air monitoring, if the material remains unknown, Level B protection (or higher) is mandatory.

10.0 ABBREVIATIONS

AFFF	Aqueous Film Forming Foams
CAMP	Community Air Monitoring Program
CCDHHS	Chautauqua County Department of Health and Human Services
CFR	Code of Federal Regulations
cis 1,2-DCE	cis 1,2-dichloroethene
CPR	Cardio-Pulmonary Resuscitation
DAY	Day Environmental, Inc.
dBA	Decibels on the A-Weighted Scale
ECP	Emergency Contingency Plan
EMS	Emergency Medical Service
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
IDLH	Immediately Dangerous to Life or Heath
IDW	Investigation Derived Waste
mg/m^3	Milligram Per Meter Cubed
NIOSH	National Institute for Occupational Safety and Health
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OSHA	Occupational Safety and Health Administration
PCE	Tetrachloroethene
PEL	Permissible Exposure Limit
PID	Photoionization Detector
PM	Project Manager
PM-10	Particulate Matter Less Than 10 Micrometers In Diameter
PPE	Personal Protection Equipment
ppm	Parts Per Million
PVC	Polyvinyl Chloride
REL	Recommended Exposure Limit
RTAM	Real-Time Aerosol Monitor
SCG	Standards, Criteria and Guidance
SSO	Site Safety Officer
TCE	Trichloroethene
TWA	Time-Weighted Average
UST	Underground Storage Tank
$\mu g/m^3$	Micrograms Per Meter Cubed
VOC	Volatile Organic Compound

ATTACHMENT 1

Figure 1 – Route for Emergency Services

from 441 Chandler St, Jamestown, NY 14701
to 207 Foote Ave, Jamestown, NY 14701

4 min (0.8 mile)

via Allen St

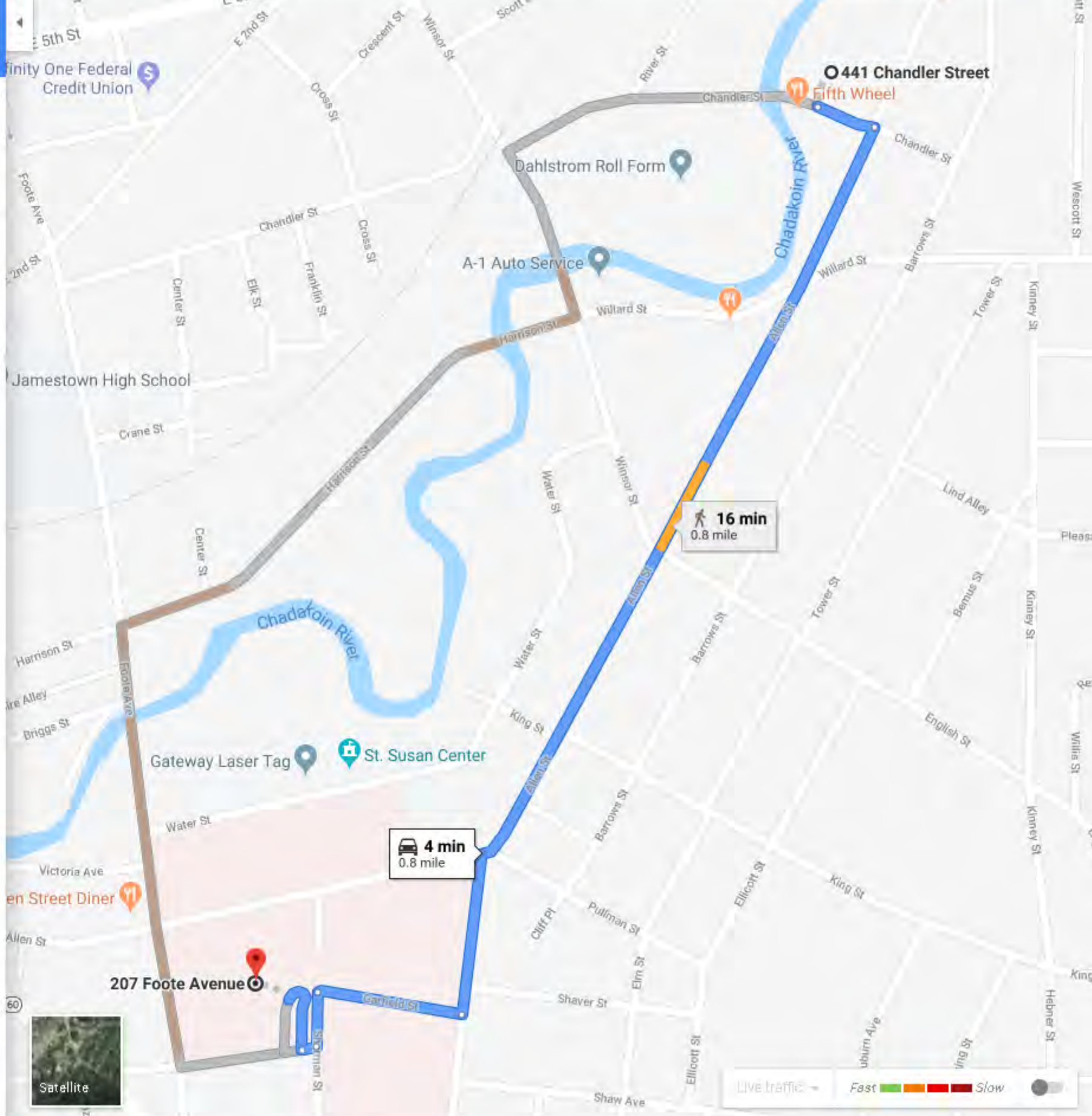
Fastest route

441 Chandler St
Jamestown, NY 14701

1. Head southeast on Chandler St toward Allen St
   190 ft
2. Turn right onto Allen St
   0.5 mi
3. Turn left onto Maple St
   0.1 mi
4. Turn right onto Garfield St
   459 ft
5. Garfield St turns left and becomes Sherman St
   171 ft
6. Turn right onto Prather Ave
   49 ft
7. Turn right
   Destination will be on the right
   240 ft

207 Foote Ave
Jamestown, NY 14701

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.



APPENDIX D

QUALITY ASSURANCE PROJECT PLAN

441 CHANDLER STREET
ROCHESTER, NEW YORK

NYSDEC SITE NUMBER: (*TO BE DETERMINED*)

Prepared for: Weber-Knapp Company
441 Chandler Street
Jamestown, New York

Prepared by: Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York

Project No.: 5529R-18

Date: April 2019

Table of Contents

1.0 INTRODUCTION

This project-specific Quality Assurance Project Plan (QAPP) was prepared in accordance with Section 2.4 of the New York State Department of Environmental Conservation (NYSDEC) Technical Guidance, For Site Investigation and Remediation DER-10 dated May 2010. This QAPP provides quality assurance/quality control (QA/QC) protocols and guidance that are to be followed when implementing the Remedial Investigation/Remedial alternatives Analysis Work Plan (RI/RAA Work Plan) for 441 Chandler Street, Jamestown, New York (Site) to ensure that data of a known and acceptable precision and accuracy are generated. The QAPP also provides a summary of the project, identifies personnel responsibilities, and provides procedures to be used during sampling of environmental media, other field activities, and the analytical laboratory testing of samples. The components of the QAPP are provided herein.

1.1 PROJECT SCOPE AND PROJECT GOALS

The QAPP applies to the aspects of the project associated with the collection of field data, the collection and analytical laboratory testing of field samples and QA/QC samples, and the evaluation of the quality of the data that is generated. Specifically, the investigation will include a utility assessment, surface soil sampling, subsurface soil sampling (soil borings and confirmation sampling subsequent to soil removal activities conducted as part of an interim remedial measure), and groundwater sampling. A summary of the anticipated number of samples to be submitted for testing by an analytical laboraotry is provided in Table 1 of the RI/RAA Work plan. Detailed discussions of the project scope and project goals are provided in the RI/RAA Work Plan. In general, the project goal is to obtain sufficient information to characterize the nature and extent of contamination at the Site sufficiently to develop remedial alternatives for the Site.

2.0 PROJECT/TASK ORGANIZATION

Project organization and tentative personnel to implement the work are outlined in this section of the QAPP.

2.1 DAY ORGANIZATION

Information regarding key personnel for Day Environmental, Inc. (DAY) is provided below, and resumes of key personnel are included in Attachment 1.

DAY Principal in Charge

The Principal in Charge is responsible for such things as the review of project documents and ensuring that the project is completed in accordance with relative work plans. Mr. Raymond L. Kampff will serve as DAY's Principle-in-Charge on this project.

DAY Project Manager

The DAY Project Manager has the overall responsibility for implementing the project and ensuring that the project meets the objectives and quality standards as presented in this QAPP. Mr. Charles A. Hampton will serve as DAY's Project Manager on this project, and will serve as DAY's primary point of contact and control for the project.

DAY Quality Assurance Officer

The Quality Assurance Officer is responsible for QA/QC on this project. The Quality Assurance Officer's responsibilities on this project are not as a project manager or task manager involved with project productivity or profitability as job performance criteria. Jeffery A. Danzinger will serve as DAY's Quality Assurance Officer on this project. The Quality Assurance Officer may conduct audits of the operations at the Site to ensure that work is being performed in accordance with the QAPP.

DAY Technical Staff

DAY's technical staff for this project consists of experienced professionals (e.g., professional engineers, engineers-in-training, scientists, technicians, etc.) that possess the qualifications necessary to effectively and efficiently complete the project tasks. The technical staff will be used to gather and analyze data, prepare various project documentation, etc.

2.2 ANALYTICAL LABORATORIES

A New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory will be utilized to provideanalytical laboratory services assocaited with this project. The specific analytical laboratory has not yet been selected, but the laboratory utilized will meet the NYSDOH ELAP criteria. A copy of the Lab's Quality Assurance Plan (QAP) can be provied upon request.

3.0 QUALITY ASSURANCE/QUALITY CONTROL

As part of this QAPP, QA/QC protocol and procedures have been developed and are described below. The objective of the QA/QC protocol and procedures is to ensure that the information, data, and decisions associated with this project are technically sound and properly documented. The QA/QC protocol and procedures also pertain to the collection, evaluation, and review of activities and data that are part of this project. These QA/QC protocol and procedures will be modified in supplemental work plans when deemed appropriate.

3.1 OPERATION AND CALIBRATION OF ON-SITE MONITORING EQUIPMENT

On-site monitoring equipment will play a significant role in meeting the RI objectives and to determine the appropriate personal protective equipment (PPE) as noted in the Health and Safety Plan (HASP). The on-site, monitoring equipment includes volatile organic compound (VOC) monitors, particulate monitors, oil/water interface probes, an electronic static water level indicator; water quality monitors, and a global position system (GPS) reciever. Operation and calibration of on-site monitoring equipment that are anticipated for use during the RI are discussed below.

3.1.1 VOC Monitoring Equipment

Real-time monitoring for VOCs will be conducted to evaluate the nature and extent of petroleum- or solvent-type discharges at the Site and to determine the appropriate PPE as noted in the HASP. The primary field instrument for monitoring VOCs during the RI will be a photoionization detector (PID). It is anticipated that a Minirae 3000 PID (or equivalent) equipped with a 10.6 eV lamp and/or a RAE ppbRAE 3000 PID will be used during this project. An accredited firm/testing laboratory will calibrate the equipment on a yearly basis. During fieldwork, the PID will be calibrated on a daily basis in accordance with the manufacturer's specifications. Isobutylene gas will be used to calibrate the PID prior to use and as necessary during fieldwork. Measurements will be collected before operations begin in an area to determine the amount of VOCs naturally occurring in the air (i.e., background concentrations).

3.1.2 Particulate Monitoring Equipment

Particulate monitoring will be conducted during intrusive activities as noted in the Community Air Monitoring Plan (CAMP) portion of the HASP. It is anticipated that the particulate air monitoring will be conducted using a real-time aerosol monitor (RATM) particulate meter. An accredited firm/testing laboratory will calibrate the equipment on an as needed basis. During fieldwork, the particulate meter will be regularly calibrated in accordance with the manufacturer's specifications. Measurements will be collected along the upwind perimeter of the intrusive investigation activities to determine the amount of particulates naturally occurring in the air (i.e., background concentrations) as per the requirements of the CAMP.

3.1.3 Global Positioning System Equipment

A GPS unit will be used to obtain the precise locations of sampling points and significant site features. It is anticipated that a Trimble GeoXH will be used during this project. The GPS location accuracy of <1 horizontal foot is the data quality objective for this project.

The GPS unit will be calibrated as needed in accordance with the manufacturer's specifications. The GPS location data will conform to Jamestown's GIS coordinate system (NAD 1983 State Plane New York West) to match adjacent features that may affect contaminant migration such as underground utilities.

3.1.4 Miscellaneous Field Monitoring Equipment

Several other pieces of miscellaneous field monitoring equipment will be used as part of the project. It is anticipated that the other field monitoring equipment utilized during portions of the project include:

- A RAE ppbRAE 3000 PID ppb Level VOC Monitor equipped with a 10.6 eV lamp;
- An electronic static water level indicator;
- An oil/water interface meter; and
- A Horiba U-52 water quality meter (or equivelent) that measures pH, specific conductivity, temperature, dissolved oxygen, oxygen-reduction potential, and turbidity.

These meters will be calibrated, operated, and maintained in accordance with he manufacturer's instructions.

3.3 GENERAL SOIL SCREENING AND LOGGING

A DAY representative will: document visual observations; screen the surface, split spoon and macro-core samples with a PID; collect selected portions of the samples for possible laboratory analysis; collect other portions of the samples (and process and screen the headspace of these selected samples with a PID), photograph soil collection activities, and prepare logs that provide pertinent field information.

Pertinent information that will be recorded on surface soil sample logs will include:

- Date, sample identification, and project identification;
- Name of individual developing the log;
- Depths recorded in feet and fractions thereof (tenths of feet) referenced to ground surface;
- Description of soil type using the Unified Soil Classification System (or equivalent); and
- PID screening results of ambient headspace air above selected soil samples.

Pertinent information will be recorded on test boring/well logs, and will include:

- Date, boring/well identification, and project identification;
- Name of individual developing the log;
- Name of drilling contractor;
- Drill make and model, and auger size;
- Identification of alternative drilling methods used and justification thereof;
- Depths recorded in feet and fractions thereof (tenths of feet) referenced to ground surface;
- Standard penetration test (ASTM D-1586) blow counts (if applicable);
- The length of the sample interval and the percentage of the sample recovered;

- Description of soil type using the Unified Soil Classification System (or equivalent);
- The depth of the first encountered water table (if encountered), along with the method of determination, referenced to ground surface;
- Drilling and borehole characteristics;
- Sequential stratigraphic boundaries and soil types consistent with logging performed on other project elements;
- Well specifications (construction materials; screened interval;annulus backfill; etc.); and
- PID screening results of ambient headspace air above selected soil samples.

3.4 SOIL SAMPLE HEADSPACE SCREENING

The recovered soil samples will be visually examined by a DAY representative for evidence of suspect contamination (e.g., staining, unusual odors) and screened with a PID. Portions of the recovered soil samples may be placed in containers for possible analytical laboratory testing. Different portions of the soil samples will be placed in sealable Ziploc®-type plastic baggies, and will be field screened the same day they are collected. Each sample will be agitated and homogenized for at least 30 seconds and allowed to equilibrate for at least three minutes. The ambient headspace air inside the baggie above each sample will be screened for total VOC vapors with the PID equipped with a 10.6 eV lamp. The sampling port for the PID will be placed in the ambient air headspace inside the bag by opening a corner of the "locked" portion of the bag. The PID will monitor air inside the baggie for a period of at least 15 seconds and the peak readings measured will be recorded on a log sheet or log book.

3.5 NAPL SCREENING SHAKE TEST

As required, field evidence of suspect non-aqueous phase liquid (NAPL) will be confirmed in the field utilizing a hydrophobic dye shake test. Field evidence of suspect NAPL includes, but is not limited to, elevated PID readings (i.e., >1,000 parts per million (ppm)), saturated soil with petroleum or solvent odors or significant staining, and apparent free phase or residual NAPL. The NAPL screening shake test is applicable for both light non-aqueous phase liquid (LNAPL) and densse non-aqueous phase liquid (DNAPL). If field evidence suggests the presence of LNAPL or DNAPL, the DAY may perform a shake test on an aliquot of the corresponding soil sample using hydrophobic dye. The sample aliquot will be mixed with approximately two ounces potable water, and a pinch of Sudan IV or equivalent hydrophobic dye will be placed in a sealable plastic baggie, agitated for approximately 10 seconds, and then noted for pigment staining. If organic NAPL is present, the Sudan IV Pigment should result in pigment staining. The NAPL screening shake test results will be documented and if possible photographed for documentation purposes. The hydrophobic dye will be handled with care using a new pair of disposable gloves. Following the shake test, the plastic baggie containing the soil-dye moisture and associated PPE should be managed as investigation derived waste (IDW). Soils containing hydrophobic dye and PPE will not be used for confirmatory analytical analyses or headspace readings.

3.6 WELL DEVELOPMENT

Monitoring wells will be developed by utilizing either a new dedicated disposable bailer with dedicated cord, and/or a pump and dedicated disposable tubing depending on the field conditions. No fluids will be added to the wells during development without prior approval of the NYSDEC, and well development equipment will be decontaminated prior to development of each well.

The well development procedure is listed below:

- Obtain pre-development static water level and oil/water interface reading for presence of LNAPL or DNAPL using a Heron Model HO1.L oil/water interface probe or similar instrument;
- Calculate water/sediment volume in the well;
- Obtain initial field water quality measurements (e.g., pH, specific conductivity, turbidity, temperature, and PID readings). The pH, specific conductivity, turbidity and temperature readings will be obtained using Horiba U-52 water quality meter (or similar equipment);
- Select development method and set up equipment depending on method used;
- Alternate water agitation methods (e.g., moving a bailer or pump tubing up and down inside the screened interval) and water removal methods (e.g., pumping or bailing) in order to suspend and remove solids from the well;
- Obtain field water quality measurements for every two to five gallons of water removed. Record water quantities and rates removed;
- Stop development when the following water quality criteria are met or at least 3 well volumes have been removed;
    - Water is clear and free of sediment and turbidity is less than 50 nephelometric turbidity units (NTUs);
    - pH is ±0.1 standard unit between readings;
    - Specific conductivity is ±3% between readings, and;
    - Temperature is ±10% between readings.
- Obtain post-development water level readings; and
- Document development procedures, measurements, quantities, etc.

Pertinent information for each well will be recorded on well development logs.

3.7 INVESTIGATION DERIVED WASTE CHARACTERIZATION SAMPLING

IDW will be managed in accordance with the guidelines outlined in Section 4.10 of the RI/RAA Work Plan. Supplemental sampling of the IDW is anticipated in order to obtain approvals from appropriate disposal and/or recycling at an authorized solid waste management facility or publicly owned wastewater treatment works (liquids). The following protocols likely apply to IDW sampling:

- The objective of IDW sampling is to characterize a substantial mass of waste requiring disposal. Consequently, the sample should be collected in a manner that is representative of the entire waste mass and not limited to a specific zone of concern or observed contamination.
- Grab samples may be composited to form one sample for analytical analyses.

4.0 EQUIPMENT DECONTAMINATION PROCEDURES

In order to reduce the potential for cross-contamination of samples collected during this project, the following procedures will be implemented to ensure that the data collected (primarily the laboratory data) is acceptable.

It is anticipated that most of the materials used to assist in obtaining samples will be disposable one-time use materials (e.g., sampling containers, acetate macrocore liners, bailers, rope, pump tubing, latex gloves, etc.). However, when equipment must be re-used (e.g., drill rigs, static water level indicator, split spoon samplers, etc.), it will be decontaminated by at least one of the following methods:

- Steam clean the equipment within a dedicated decontamination area; or
- Rough wash in tap water; wash in mixture of tap water and Alconox-type soap; double rinse with deionized or distilled water; and air dry and/or dry with clean paper towel.

The effectiveness of the equipment decontamination of non-dedicated sampling equipment such as split-spoon samplers will be evaluated via analytical laboratory testing of field blanks (e.g., rinsate samples). Decontamination liquids, disposable equipment and PPE will be containerized and left on-site until a proper disposal method is determined. The location of a dedicated decontamination area at, or in the vicinity of the Site will be determined, with NYSDEC input, prior to the commencement of the RI field activities.

5.0 SAMPLE HANDLING AND CUSTODY REQUIREMENTS

During sampling activities, personnel will wear disposable latex or nitrile gloves. Between collection of samples, personnel performing the sampling will discard used latex gloves and put on new gloves to preclude cross-contamination between samples. As few personnel as possible will handle samples or be in charge of their custody prior to shipment to the analytical laboratory.

New laboratory-grade sample containers will be used for each sample collected. Sufficient volume will be collected to ensure that the laboratory has adequate sample volume to perform the specified analyses. Soil samples will be collected in accrodance with United States Environmental Protection Agency (USEPA) Method 5035 when VOC analysis is going to be performed. Samples to be tested for emerging contaminantts will be collected and tested in accordance with NYSDEC guidance documents available at the time of the study.

Samples will be preserved as specified by the analytical laboratory for the type of parameters and matrices being tested. The required amount of preservatives will be added by the analytical laboratory to the sample containers prior to delivery to the Site.

Chain-Of-Custody

Samples that are collected for subsequent testing as part of this project will be handled using chain-of-custody control. Chain-of-custody documentation will accompany samples from their inception to their analysis, and copies of chain-of-custody documentation will be included with the laboratory's report. The chain-of-custody will include the date and time the sample was collected, the sample identity and sampling location, the requested analysis, and any request for accelerated turnaround time.

Sample Labels

Sample labels for field samples and QC samples with adhesive backing will be placed on sample containers in order to identify the sample. Sample information will be clearly written on the sample labels using waterproof ink. Sufficient sample information will be provided on the label to allow for cross-reference with the field sampling records or sample logbook.

The following information will be provided on each sample label:

Site identification/address;
Date and time of collection;
Sample identification;
Intended analyses; and
Preservation required.

Custody Seals

Custody seals are preprinted adhesive-backed seals that are designed to break if disturbed. Seals will be signed and dated before being placed on the shipping cooler. Seals will be placed on one or more location on each shipping cooler as necessary to ensure security. Shipping tape will be placed over the seals on the coolers to ensure that the seals are not accidentally broken during shipment. Sample receipt personnel at the laboratory will check and document whether the seals on the shipping coolers are intact when received.

Sample Identification

The following format will be used on the labels affixed to sample containers to identify samples:

Each sample will be designated using the location ID depicted on the Proposed Test Location Figure provded as Figure 8 of the RI/RAA Work Plan The sample test location IDs and QA/QC sampels will utilize the following test location designations:

VP	Soil vapor sample
SSV	Sub-slab vapor sample
IA	Indoor air sample
SS	Surface soil sample
SED	Sediment sample
TB-xxx (x') or TB-xxx (x-x')	Boring soil sample with depth (or depth interval) in parentheses below ground surface in tenths of a foot (x – x')
IRM-xx(x-x')	IMR delineation study soil sample with depth (or depth interval) in parentheses (as above)
MW-xx	Overburden, glacial till zone, LNAPL evauation or bedrock groundwater sample with monitoirng well letter
DUPxx/xx/xx-	Duplicate sample with day/month/year
TBxx/xx/xx-	Trip blank sample with day/month/year
FBxx/xx/xx-	Field blank sample (rinsate) with day/month/year

As an example, assuming the first project sample is a soil sample collected from a test pit TB-101 at a depth of 10 feet, the sample will be designated asTB-101(10').

Transportation of Samples

Samples will be handled, packaged and shipped in accordance with applicable regulations, and in a manner that does not diminish their quality or integrity. Samples will be delivered to the laboratory in a timely manner so that they may be processed/tested by the laboratory within the applicable method holding times.

6.0 ANALYTICAL QUALTIY ASSURANCE/QUALITY CONTROL

Analytical laboratory test results will be reported in NYSDEC Analytical Services Protocol (ASP) Category B deliverable reports. Analytical laboratory test results for soil samples will be reported on a dry-weight basis. The analytical laboratory will make every effort to analyze the samples using the lowest practical quantitation limits (PQLs) possible for soil and groundwater samples. In addition, analytical laboratory results will be provided to the NYSDEC using the NYSDEC's Equis Format.

The analytical laboratory will provide internal QA/QC checks that are required by NYSDEC ASP and/or USEPA contract laboratory protocol (CLP) protocol, such as analyses performed, spike blanks, internal standards, surrogate samples, calibration standards, and reference standards. Laboratory reports will be reviewed as outlined in the laboratories QAP. Laboratory results will be compared to data quality indicators in accordance with the laboratory's QAP and the NYSDEC ASP.

Table 1 of the RI/RAA Work Plan provides a summary of the samples scheduled for collection and the anticipated sampling parameters. The analytical methods to be used for each type of sample and sample matrix are identified on Table 1 in the RI/RAA Work Plan. In order to provide control over the collection, analysis, review, and interpretation of analytical laboratory data, the following QA/QC samples will be included as part of this project.

- During the groundwater monitoring for VOCs, one trip blank will be included per set of 20 liquid samples with a minimum of one trip blank per sample shipment. The trip blanks will be analyzed for target compound list (TCL) VOCs.
- During the groundwater monitoring for 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS) one matrix spike/matrix spike duplicate (MS/MSD) for each sample matrix. In addition, one field blank (i.e., rinsate sample) and one duplicate sample will be collected per set of 20 liquid samples, and these samples will be tested for 1,4-dioxane and PFAS. Note: It is anticipated that the samples collected for1,4-dioxane and PFAS testing, and associated MS/MSD and field blank samples, will be collected during a separate event from other grondwater samples collected at the Site, in order to reduce the likehood of sample cross contamination)
- One MS/MSD for each sample matrix, for each sampling event of 20 samples, or per shipment if less than 20 samples, within a seven-day period. Specific parameters that MS/MSD samples will be tested for is dependent upon the test parameters of the field samples that are being analyzed.
- One field blank will be collected from reusable sampling equipment for each sampling event of 20 samples, or per shipment if less than 20 samples. The field blank(s) will be tested for the suite parameters of the samples obtained using the subject re-useable sampling equipment (i.e. split spoon samplers or oil/water interface probe).

<u>Data Usability Summary Report</u>

Currently it is anticipated that Jodi R. Zimmerman (Vali-Data of Western NY) will complete a data usability summary report (DUSR) on the Category B deliverables analytical laboratory data that is generated as part of the scope of work in the RI/RAA work plan. The DUSR will be conducted in accordance with the provisions set forth in Appendix 2B of DER-10 Technical Guidance for Site Investigation and Remediation dated May 2010. The findings of the DUSR will be incorporated

in the final RI/RAA report. A copy of Ms. Zimmerman's curriculum vitae is included in Attachment 2.

Reporting

Analytical and QC data will be included in the final RI/RAA report. The final report will summarize the environmental work and provide evaluation of the data that is generated, including the validity of the results in the context of QA/QC procedures.

7.0 RECORD KEEPING AND DATA MANAGEMENT

DAY will document project activities in a bound field book on a daily basis. Information that will be recorded in the field book (or on location-specific field logs) will include:

- Dates and time work is performed;
- Details on work being performed;
- Details on field equipment being used;
- Field evidence of contamination such as staining, odors, degree of saturation, etc.
- Field meter measurements collected during monitoring activities;
- Sampling locations and depths measured in tenths of feet;
- Measurements of sample locations, and test locations, excavations, etc.;
- Personnel and equipment on-site;
- Weather conditions; and
- Other pertinent information as warranted.

In addition, the field notes will be converted into logs for each soil test boring and monitoring well completed as part of the RI.

Differential GPS, swing ties from existing surveyed site structures, and/or a licensed surveyor will be used to collect spatial data. The spatial data will be plotted using integrated GIS and/or computer-aided design (CAD) mapping. Electronic and hard copy files will be maintained by DAY.

As noted above, DAY will utilize its Trimble Geo-XH sub-foot accuracy GPS with ESRI ArcPad installed software with GIS shape files that have been developed for the Site.

8.0 ACRONYMS

ASP	Analytical Services Protocol
CAMP	Community Air Monitoring Plan
CLP	Contract Laboratory Protocol
DAY	Day Environmental, Inc.
DNAPL	Dense Non-Aqueous Phase Liquid
DUSR	Data Usability Summary Report
ELAP	Environmental Laboratory Approval Program
GPS	Global Positioning System
HASP	Health and Safety Plan
IDW	Investigation-Derived Waste
LNAPL	Light Non-Aqueous Phase Liquid
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NTU	Nephelometric Turbidity Units
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PID	Photoionization Detector
PPE	Personal Protective Equipment
PQL	Practical Quantitation Limit
QAP	Quality Assurance Plan
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
RI/RAA	Remedial Investigation/Remedial Alternatives Analysis
TCL	Target Compound List
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

ATTACHMENT 1

Resumes of Key Personnel

RAYMOND L. KAMPFF

EXPERIENCE

Day Environmental, Inc.: May 1994 to present
Years with Other Firms: 18 years

AREAS OF SPECIALIZATION

- Environmental Site Assessment
- Environmental Restoration
- Geology

EDUCATION

University of Rochester, B. A. Geology 1974
Monroe Community College, Civil Engineering Technology 1976
Various continuing education courses/seminars in environmental regulations, remediation techniques and other technical issues

REGISTRATION/AFFILIATIONS

- 40-Hour OSHA Hazardous Waste Site Worker Training
- 8-Hour OSHA Hazardous Waste Site Supervisor Training
- 8 Hour OSHA Hazardous Waste Site Worker Refresher Training

RESPONSIBILITIES AND PROJECT EXPERIENCE

Mr. Kampff has over 39 years of professional experience and is currently responsible for the overall technical and administrative direction of DAY's Site Evaluation/Environmental Restoration Group. Mr. Kampff's experience includes environmental studies and remediation at inactive hazardous waste sites, industrial facilities, petroleum spill sites, Brownfield sites and municipal properties. Some of his representative projects are described below.

Environmental Site Assessment

Environmental Site Assessment for a Manufacturing Facility: Olean, New York. Responsible for a Phase I Environmental Site Assessment (ESA) and a Limited Phase II ESA for this 14-acre site currently developed with a 280,000 square foot industrial facility. The site was originally developed in the 1890s, and historically it has been used for various purposes including the manufacture of chemicals, metal furniture and industrial coatings. These studies were done to characterize the site in sufficient detail to prepare an application to enter the New York State Brownfield Cleanup Program (BCP).

Site Evaluation and Assessment of PCB Impact: Innis-Arden Golf Course. Reviewed documents and evaluated analytical laboratory data presented as part of a claim that discharges from a nearby railroad line operated by Metro-North Railroad (MNR) caused PCB-impact identified within ponds and streams on the golf course. The evaluation completed determined that nearby industrial facilities, and not MNR, were the responsible for the PCB contamination on the golf course.

Environmental Evaluation, Precast Concrete Facility, Manchester, New York. Responsible for the environmental evaluation of this 105-acre former railroad yard that was re-developed with an approximate 70,500 square foot structure in the late 1980s for use as a pre-cast concrete manufacturing facility. The site assessment studies conducted included testing of soil, groundwater and soil vapors to evaluate areas of potential environmental concern pursuant to the sale of the property. These studies included the delineation of an area of

the site impacted with petroleum that resulted in the New York State Department of Environmental Conservation (NYSDEC) opening a spill file, and another area on the site where groundwater impacted with chlorinated solvents was identified.

Petroleum Spills

Petroleum Spill Remediation and Closure: Metro-North Railroad's Brewster Yard, North White Plains Yard and Harmon Yard in New York. Assisted MNR with the assessment and remediation of various petroleum spills at these railroad yards where petroleum impact from historic operations resulted in the accumulation of several feet of free product in some locations. The work included the design and construction of a combination of active and passive removal systems, design and operation of long-term monitoring networks to document the effectiveness of remedial efforts and, the preparation of status reports for submittal to the NYSDEC to document remedial efforts pursuant to spill closure.

Seneca-Cayuga ARC Spill Remediation: Waterloo, New York. Responsible for site characterization studies to assess the nature and extent of historic petroleum releases resulting from leaking tanks and discharges into septic systems. Subsequently, designed and implemented a remedial action plan to address petroleum impacts and to mitigate vapors in an adjacent building under construction. The remedial activities included the removal of underground storage tanks and petroleum-impacted soil/groundwater, the installation of a sub-slab depressurization system, and the preparation of a Site Management Plan (SMP) to address future impacts (if encountered).

Remedial Action Plan Development and Implementation: Mott Haven Yard, Bronx, New York. Completed site characterization studies to define the nature and extent of petroleum spills resulting from a combination of leaking tanks and discharges from railroad equipment. Based on the findings of the characterization studies, a removal of soil impacted with free product was conducted in accessible areas and systems were designed and implemented to preclude future discharges (e.g., installation of state-of the art fueling system, development of SPCC plans, construction of secondary containment systems). Subsequently, a Remedial Action Plan (RAP) describing methods to be implemented to collect residual free product from the groundwater was prepared for submittal to the NYSDEC.

York Oil Superfund Site RI/FS: Moira, New York. Managed several studies to evaluate on-site contamination and off-site pathways at this former waste oil recycling facility where large quantities of PCB and solvent-laden oils spilled onto the ground and migrated into adjacent wetlands.

Brownfield and RI/FS Projects

Interim Remedial Measure (IRM) Construction, Confidential Industrial Client: Akron, New York. Responsible for construction oversight during the implementation of IRM activities at an approximate 3-acre former waste disposal area used to dispose of hazardous and industrial wastes. Work included construction oversight during waste consolidation and capping activities, coordination with the NYSDEC, implementation of design modifications and preparation of various closure reports. Also, responsible for long term monitoring and the preparation of Periodic Review Reports.

Dry Cleaners: Jamestown, New York: Responsible for studies completed to evaluate the extent of chlorinated solvents in the soil and groundwater at this dry cleaning facility that has operated for the past 50 years. Also developed and implemented remediation system to actively remove more than 200 gallons of Dense Non-Aqueous Liquid (DNAPL), the design and construction of a permeable reactive barrier to preclude off-site migration, and the implementation of in-situ bioremediation to address residual impacts.

Harmon Railroad Yard Former Wastewater Lagoon: Croton-on-Hudson, New York. Responsible for the preparation of the Site Management Plan (SMP), long-term monitoring, preparation of status and Periodic Review Report reports, and implementation of corrective actions for Operation Units OU-I and OU II at this NYSDEC Inactive Hazardous Waste Site.

Manufacturing Facility: Rochester, New York. Responsible for the Remedial Investigation conducted at this facility where groundwater is impacted with elevated concentration of chlorinated solvents and heavy metals. Work includes studies designed to assess the nature and extent of impact with the soil, groundwater and soil vapor (including sub-slab studies within on-site structures and assessment of potential off-site impacts). Studies also included the design and implementation of pilot studies to evaluate bioaugmentation and phytoremediation as potential long-term remedial options.

Environmental Restoration Projects

Remediation of Petroleum Contaminated Soils, DePaul Community Facilities: Rochester, New York. Responsible for the design and construction of a combined active and passive soil vapor extraction system at this facility constructed on the site of a former gasoline station.

Track Platform Assessment and Encapsulation, Grand Central Terminal: New York, New York. Project Manager for a testing program designed to define the extent of PCB contamination and develop a comprehensive remedial program consisting of the initial cleaning of the impacted track area following by a double epoxy coating was required for this site. Due to the location of the site, care was taken to limit potential exposure to the public during remedial activities

Former Dry Cleaners: Canandaigua, New York. Responsible for site characterization studies to define subsurface conditions and the nature and extent of chlorinated solvent impact (tetrachloroethene and breakdown products), implementation of a soil removal interim remedial measure (IRM), installation of a sub-slab vapor mitigation system and implementation of biostimulation to address residual contamination.

Former Gasoline Station: Hornell, New York. Responsible for the completion of site investigations and the development and implementation of remedial options including source removal with the subsequent installation of an air sparging system augmented the injection of microbes designed to expedite the remediation process.

DAY ENVIRONMENTAL, INC.

JEFFREY A. DANZINGER, P.G.

EXPERIENCE

Day Environmental, Inc.: October 1991 to present
Years with Other Firms: 5 years

AREAS OF SPECIALIZATION

- Environmental Site Assessment
- Environmental Restoration/Remediation
- Environmental Computer Modeling
- Risk Assessment/Geology/Hydrogeology

EDUCATION

University of Colorado at Boulder; B.A. Geology; 1986
Various continuing education courses/seminars in environmental studies and remediation

REGISTRATION/AFFILIATIONS

OSHA Hazardous Waste Site Worker and Supervisor Training, and Confined Space Training

RESPONSIBILITIES AND PROJECT EXPERIENCE

Mr. Danzinger has over 30 years of professional experience working on environmental projects as a consultant. Mr. Danzinger is responsible for development and completion of Phase II studies, hydrogeologic studies, environmental restoration, remediation and Brownfield projects and environmental compliance projects for independent clients and government agencies. He also serves as the company Assistant Health and Safety Officer. Mr. Danzinger has performed over 240 Phase I Environmental Site Assessments, over 200 Phase II Environmental Site Assessments and over 25 environmental restoration projects. Examples are provided below:

Niagara County Brownfield Projects: Mr. Danzinger has managed Phase I ESA and Phase II ESA projects under the Niagara County Department of Economic Development Brownfield program that is funded by USEPA brownfield grants. These included: a Phase I ESA with asbestos survey at the Palace Theater in Lockport, New York; a Phase II ESA on an approximate 20.9 acre portion of Tonawanda Island, North Tonawanda, NY that was formerly occupied by a wood and lumber industrial operation; and a Phase I ESA followed by a Phase II ESA at Site in North Tonawanda that was a former gas station that also included former/current automobile-related repair/service operations. Types of Phase II ESA work completed included: a drum and container inventory, advancement of test borings; excavation of test pits; collection and analysis of soil, air, sub-slab, and groundwater samples; asbestos and/or lead-based paint surveys; a radiological survey, evaluation of a former transformer building for polychlorinated biphenyls; a geophysical survey, and data validation. Mr. Danzinger prepared Quality Assurance Project Plans (QAPPs) and reports for the Phase II ESAs, as well as opinions of probable costs associated with addressing environmental conditions at the Sites.

Andrews Street Site, Rochester, New York: DAY was retained by the City of Rochester to perform Demolition-Phase environmental services, Remedial Investigation/Remedial Alternatives Analysis (RI/RAA) services, and Interim Remedial Measure (IRM) services at the Andrews Street Site. Mr. Danzinger managed extensive and specialized investigative studies, including: sampling and monitoring of soil, groundwater and building materials; and preparation of various work plans, safety plans, quality assurance project plans, and associated project reports. Studies completed included: a utility assessment including videotaping; a geophysical survey; test pits; borings; membrane interface probe (MIP) PID and halogen specific detector (XSD) and hydraulic profiling tool (HPT) data collection; installation and monitoring of overburden and bedrock groundwater monitoring wells. As part of DAY's

services, Mr. Danzinger also managed subcontractor procurement procedures, and interfaced with representatives of the Client and regulatory agencies. Mr. Danzinger played a critical role in the development of specialized innovative GIS interpolation modeling of soil and MIP XSD data that were successful in defining the extent of PCE IRMs, including source area soil removal and subsequent in-situ chemical oxidation using potassium permanganate. The project resulted in the City of Rochester receiving a Certificate of Completion from the New York State Department of Environmental Conservation (NYSDEC).

Slag and Fill Management Project, Greece and Rochester, New York: Project Manager to address fill material containing regulated solid waste (slag) that was generated during a City of Rochester redevelopment project and was inadvertently placed on a vacant residential subdivision parcel in the Town of Greece. Mr. Danzinger's responsibilities included: preparing for and attending meetings with municipalities, regulators, and the general public; development of work plans; coordination and management of field activities; and development of closure reports.

Former Air Force Plant No. 51, Greece, New York: This Site was used for the manufacture of ocean-going ships and cranes during and immediately following World War II, and for the manufacture of B-52 aircraft parts and Talos ground handling equipment during the 1950's. Mr. Danzinger was Project Manager for the investigation of this Site under the NYSDEC Voluntary Cleanup Program (VCP). Fifteen areas of concern (AOCs) were incorporated into seven operable units (OUs). Tasks Mr. Danzinger has managed include: development of environmental work plans and site-specific health and safety plans; inventory, characterization and disposal of abandoned wastes; sampling and dismantling of abandoned wet-type electrical equipment; investigation of, and development of a remedial work plan for a former wastewater treatment lagoon/pond area; investigation of an existing stormwater system and former septic system areas; investigation and remediation of a former underground storage tank area; and monitoring and recovery of dense non-aqueous phase liquid (DNAPL) as an interim remedial measure.

Former Photech Imaging Systems, 1000 Driving Park Avenue, Rochester, New York: Mr. Danzinger was responsible for managing the completion of a SI/RA report (NYSDEC Environmental Restoration Program Site ID B-00016-8) at this Brownfield Site that consisted of 12 vacant buildings of varying degrees of disrepair that were situated on an approximate 12.5-acre parcel. The buildings formerly housed various manufacturing, laboratory, office and warehouse operations. Various underground and aboveground storage tank systems and a wastewater silver recovery system were operated at the Site. Other features at the Site included a burn pit area, and a retention pond basin. The SI/RA identified the nature and extent of contamination and also identified options and associated estimated costs for cleanup.

Former Ford Garage, 2624 Main Street, Gorham, New York: On behalf of the Town of Gorham, New York, Mr. Danzinger managed environmental services at this Brownfield Site under the NYSDEC Environmental Restoration Program (Site ID#B-00153-8). These services included a Phase I ESA report, a Site Investigation/Remedial Alternatives (SI/RA) report, development of a Remedial Work Plan (RWP), Health and Safety Plan (HASP), and Citizen Participation Plan (CPP). The Site was formerly operated as an automobile sales and service facility, and also as a gasoline station. Remediation consisted of a source area soil removal, in-situ bioremediation, institutional controls and engineering controls. Mr. Danzinger managed the preparation of a Final Engineering Report (FER), a Site Management Plan (SMP), an Alta survey, and an Environmental Easement of the project, which resulted in the Town of Gorham receiving a Certificate of Completion from the NYSDEC.

JEFFREY A. DANZINGER, P.G.
(continued)

Former Vogt Manufacturing Facility, 100 Fernwood Ave., Rochester, New York: Under the NYSDEC Brownfield Cleanup Program (BCP Site #C828119), Mr. Danzinger managed remedial investigation and implementation of interim remedial measures at this Brownfield Site. This industrial-zoned Site consists of eleven contiguous parcels totaling approximately 8.14 acres that was originally occupied by Vogt Manufacturing Corporation, which manufactured auto trimmings (e.g., textile trimmings spinning and weaving). The main building was later converted for multi-tenant light industrial/commercial use, including plastic products manufacturer, tool and die makers, machine shops, painters, printers, graphics companies, and sheet metal contractors. Mr. Danzinger was responsible for the development of a Remedial Investigation/Remedial Alternatives Analysis (RI/RAA) report, a Remedial Work Plan (RWP), a Final Engineering Report, and a Site Management Plan (SMP). Mr. Danzinger also assisted in the preparation of an Alta Survey and Environmental Easement for the Sites. As a result of the work completed, the Client received a Certificate of Completion from the NYSDEC.

High-Rise Apartment Complex, 185 Mt. Hope Ave., Rochester, New York: Under the NYSDEC Brownfield Cleanup Program (BCP Site #C828124), Mr. Danzinger managed remedial investigation and implementation of remedial measures at this Brownfield Site. This Site consists of an apartment building with an associated paved parking lot located on approximately 1.106 acres of land. The apartment building houses 202 residential units, totals approximately 143,000 square feet, and consists of a multi-level eight to twelve-story brick and concrete-block, slab-on-grade building constructed in 1975. Prior to the residential development in 1975, former uses at the Site included: rail yards, former Erie Canal feeder, and possibly a portion of a gasoline station. The remedy included: a source area soil removal; in-situ remediation, and preparation of a Final Engineering Report (FER), Site Management Plan, and Environmental Easement. As a result of the work completed, DAY's client received a Certificate of Completion from the NYSDEC, the apartment building was renovated, and exterior Site improvements were constructed.

Low-Rise Apartment Complex, 225-405 Mt. Hope Ave., Rochester, New York: Under the NYSDEC Brownfield Cleanup Program (BCP Site #C828125), Mr. Danzinger managed the remedial investigation and remediation at this Brownfield Site. This Site consists of approximately 6.016 acres of land that was improved with five four-story apartment buildings. The brick and concrete-block, slab-on-grade apartment buildings were constructed in 1975, and these buildings housed 200 units totaling approximately 205,000 square feet. Prior to residential development in 1975, past uses/activities at the Site included commercial, warehouse, feeder canal, rail yards, a work shop, auto repair, car sales, a wagon shop, a junk-yard and iron cutting facility, a brick storage yard, a tannery, and a coal yard. The remedy included abatement of PCB transformers, source area soil removals, in-situ remediation, preparation of a site management plan and environmental easement, and removal of impacted topsoil across the site. As a result of the work completed, the five old apartment buildings were demolished, the Client received a Certificate of Completion from the NYSDEC, and nine new multi-story residential buildings and associated exterior improvements were constructed.

Former Manufactured Gas Plant (MGP), Canandaigua, New York: Mr. Danzinger was involved with the development and implementation of a work plan and health and safety plan to evaluate this Site. Mr. Danzinger managed the associated site studies consisting of test borings/monitoring well installation, soil gas studies, sampling and testing of impacted media (e.g. soil/fill, groundwater, surface waters/sediments) to characterize site conditions and delineate contaminant plumes. Based upon the assessment of site conditions, Mr. Danzinger assisted in the development of a report that summarized the findings of the environmental studies, identified various remedial options consisting of a combination of waste removal/isolation and in-situ treatment, and presented conceptual remedial design schemes with estimated implementation costs.

JEFFREY A. DANZINGER, P.G.
(continued)

80-100 Charlotte Street, Rochester, New York: DAY initially completed Phase I ESA, Phase II ESA and cost estimating services for this Site using City of Rochester funding mechanisms. Through a competitive request for proposal process, the City of Rochester subsequently awarded DAY the Brownfield Cleanup Project for this Site that was funded with a USEPA Brownfield Initiative Grant. DAY's services under the USEPA Brownfields Initiative Grant included: the development of an Analysis of Brownfields Cleanup Alternatives (ABCA) report; review of a Citizens Participation Plan (CPP) that was developed by the City of Rochester; the development of a corrective action plan (CAP) and a health and safety plan HASP); coordination, management, documentation and implementation of a source area soil removal enhanced by the placement of bioremediation stimulant product in a portion of the excavation; utilization of global positioning system (GPS) and geographical information system (GIS) on the project, installation and monitoring of groundwater wells on a long-term basis; and associated reporting of the work completed at the Site. No further action is required by the NYSDEC for this Site. Mr. Danzinger also managed EMP requirements at this Site during redevelopment that involved construction of a five new multi-story townhouse buildings.

Former Hallman's Auto Dealership, Rochester, New York: Site was formerly used as an automobile dealership and service center for over 50 years. Redevelopment of this Brownfield site included demolition of the service garage, construction of new residential apartments and townhouses, and conversion of a portion of the existing building (including former automobile showroom) into retail/restaurant commercial space. Mr. Danzinger completed an ASTM RBCA risk assessment using site-specific data generated during a Phase II environmental study and the proposed residential and commercial uses of portions of the site. As a result of performing the risk assessment, risk-based corrective measures that were completed in conjunction with redevelopment at this Site included: removal of over 20 underground storage tanks, removal and off-site disposal of petroleum-contaminated soils and fill material containing ash with elevated levels of heavy metals; design and installation of a free product recovery system; design and installation of passive venting systems with a vapor barrier; and design and installation of a soil vapor extraction system. Mr. Danzinger was responsible for developing and implementing an environmental project work plan, a health and safety plan, and an environmental management plan for this redevelopment project. In addition, DAY provided on-site environmental air monitoring services and site documentation services during construction activities that had the potential to disturb contaminated media. After the project was completed, Mr. Danzinger was involved with the development of a closure report for this Site.

Former Railroad Car Shops Site, East Rochester, New York: Mr. Danzinger was responsible for managing subsurface studies and an ASTM RBCA risk assessment on a portion of this former railroad car shop site. The Site was confirmed to be impacted with fill containing elevated heavy metals and weathered petroleum product. Mr. Danzinger was involved with the development and implementation of a health and safety plan and environmental management plan that included the design and monitoring of a passive vapor barrier vent system that was installed beneath a new industrial building that was constructed on this Site. In addition, DAY provided on-site environmental air monitoring services and site documentation services during construction activities that had the potential to disturb contaminated media. This project was successful in identifying pre-existing environmental conditions prior to transfer of ownership while obtaining regulatory agency approvals for the new owner to redevelop the vacant parcel with a new industrial facility.

Former Petroleum Bulk Storage Facility, Mt. Morris, New York: Mr. Danzinger managed an environmental site investigation at this former petroleum bulk storage facility under the New York State Environmental Restoration Bond Act Program. Mr. Danzinger was involved in the preparation and implementation of detailed work plans, implementation of fieldwork, and preparation of a Site Investigation/Remedial Alternatives Report (SI/RAR).

JEFFREY A. DANZINGER, P.G.
(continued)

Residential Care Facility, Rochester, New York: DAY's Client developed this approximate 3-acre property into a residential care facility on property that formerly contained several vehicle repair shops/gasoline stations, the City of Rochester Streets Department maintenance facility and the City of Rochester automobile pound. In addition, a portion of the Erie Canal, later converted to a trolley system, traversed the property. Subsequently, the canal/trolley line was backfilled with various construction-type debris and other assorted material (including petroleum-contaminated material). Mr. Danzinger was involved with development of a health and safety plan and an environmental management plan (EMP), which included the removal of localized areas of petroleum-contaminated soil for treatment via an on-site 4,500 cubic yard biopile, the installation of an active venting system installed beneath the building footprint, and long-term monitoring. DAY also provided on-site environmental air monitoring services and site documentation services during construction activities that had the potential to disturb contaminated media.

Multiple-Parcel Brownfield Site, Rochester, New York: Responsible for the completion of a Phase I ESA for the City of Rochester at a five-parcel Brownfield site. The Site is located within the Western Gateway Zone of the New York State Economic Development Zone (EDZ) Program, and the City of Rochester was evaluating the restoration of these parcels for incorporation into an adjoining industrial park. Site improvements encompassed over 610,000 square feet of floor space in multiple level industrial buildings of varying structural condition. Former uses of the Site included: appliance manufacturing, tool and die shops, printing/lithographing operations, shoe manufacturing, circuit board manufacturing, box manufacturing; cabinet manufacturing; possible foundry operations, chromium plating operations, basket manufacturing, automobile services, welding operations, and warehousing/distribution operations. Mr. Danzinger was also responsible for the management of Phase II Studies on a portion of this Site.

14-60 Charlotte Street, Rochester, New York: This Brownfield Site consisted of seven parcels of underutilized commercial land totaling approximately 1.3 acres. Mr. Danzinger was responsible for managing a Phase I ESA, Phase II studies, and remediation services at the Site. Contamination addressed at this Site was attributable to an on-site UST, on-site former automobile repair operations, on-site fill materials, and off-site dry-cleaning and automobile repair operations. Project deliverables included: a Phase I ESA report, Phase II reports, a Corrective Action Plan (CAP); a Health and Safety Plan (HASP) that included a Community Air Monitoring Plan (CAMP); an Environmental Management Plan (EMP); an exposure assessment with site-specific PSSI calculations; a closure report, and conceptual sub-slab depressurization system (engineering control) designs for use during redevelopment of the Site. Mr. Danzinger also managed EMP requirements at this Site during redevelopment that involved construction of a new multi-story apartment building.

Assessment of Transformer Maintenance Shop at Utility Company, Rochester, New York: A utility company's facility contained a transformer maintenance shop that had been operated since the 1950s. Mr. Danzinger managed the development and implementation of a characterization sampling plan; evaluated the characterization data and identified areas requiring remediation; and developed a report documenting the investigation and proposed remedial actions. This project was conducted in accordance with 40 CFR §§ 761. The USEPA documents titled "Verification of PCB Spill Cleanup by Sampling and Analysis" dated August 1985, "Field Manual for Grid sampling of PCB Spill Sites to Verify Cleanup" dated May 1986, "Wipe Sampling and Double Wash/Rinse Cleanup" dated April 18, 1991, and. Region 1 "Draft" document titled "Standard Operating Procedure For Sampling Concrete in the Field" dated December 1, 1997 were utilized in the sampling protocol.

DAY ENVIRONMENTAL, INC.

CHARLES A. HAMPTON

EXPERIENCE

Day Environmental Inc.: June 2008 to present
Years with Other Firms: 3 years

AREAS OF SPECIALIZATION

- Environmental Site Assessment
- Environmental Restoration
- Geographical Information Systems (GIS)

EDUCATION

Trinity University; B.S. Geology; 2000
Various continuing education seminars in Environmental Site Assessments and GIS

REGISTRATIONS/AFFILIATIONS

24-Hour OSHA Hazardous Waste Site Worker Training
8-Hour OSHA Hazardous Waste Site Worker Refresher Training

RESPONSIBILITIES AND PROJECT EXPERIENCE

Mr. Hampton's current responsibilities include management of Phase II Environmental Site Assessments and ongoing environmental remediation projects. Mr. Hampton has over 10 years of professional experience working on environmental projects as a consultant. Mr. Hampton has also performed various geotechnical and hydrogeologic tasks while working on projects as a consultant with other firms.

Site Redevelopment, Rochester New York: Responsible for the management of tasks required by a site-specific Environmental Management Plan implemented during the redevelopment of an urban property into multi-family residences. Work included management of continuous air monitoring during excavation activities, removal and disposal of petroleum-contaminated fill material, and the preparation of reports documenting the various tasks implemented at the site.

Tank Removal, Rochester New York: Responsible for coordination, observation and documentation of the removal of multiple underground storage tanks at a former gas station site. Tasks included coordination of subcontractors, confirmatory sampling, and the preparation of tank removal documentation.

Fill Removal, Rochester, New York: Responsible for the oversight of removal of contaminated fill material at a former sewage treatment plant location. Work included intrusive investigations and sampling to quantify the extent of contamination, confirmatory sampling during soil removal, and the preparation of a report to document the removal.

Phase I Assessments, New York State: Conducted Phase I Environmental Site Assessments for the purpose of real estate transactions. These assessments were conducted on a variety of different types of facilities including agricultural, residential, commercial, and industrial properties.

Phase II Assessments, New York State: Conducted Phase II Environmental Site Assessments for the purpose of contaminant identification and categorization. These assessments were conducted on a variety of different types of facilities including agricultural, residential, and commercial properties.

Geotechnical and Hydrologic Investigations, New York State: Staff Geologist responsible for various investigations to determine geotechnical and hydrogeologic site properties for residential and commercial development.

ATTACHMENT 2

Resume of Jodi R. Zimmerman of
Vali-Data of Western NY

Jodi R. Zimmerman
1514 Davis Rd.
West Falls, NY 14170
(716) 655-6530

EDUCATION:

B.S. Chemistry, William Smith College, Geneva, NY
Graduated June 1990
Chemistry GPA 3.41, Overall GPA 2.94
Research Topic: 'Kinetics and Mechanism of Electrophilic Substitution Reactions Involving Fe, Co, Ni, Cu and Zn Ions in Meso-tetraphenylporphyrins.'

PhD Candidate in Chemistry, Pennsylvania State University,
University Park, PS
June 1990 – August 1991
Bioinorganic Chemistry
Research Topic: Energy Transfer of Europium Chelates Using Lanthanide Luminescence

PROFESSIONAL EXPERIENCE:

Owner/Data Validator – Vali-Data of WNY, LLC, West Falls, NY (February 2008 to present)

Formed a Limited Liability Corporation and became a Woman-Owned Business in September 2009.

Responsibilities include the assessment of project data, determination of its usability and documentation of the findings in accordance with project requirements. Have completed several projects for consulting firms and/or laboratories requiring the preparation of Data Usability Summary Reports (DUSRs) for NYSDEC projects. Analytical suites validated have included, but are not limited to, TCL Volatile Organics, TCL Semi-Volatile Organics, Pesticides/PCBs, TAL Metals, Wet Chemistry for soil and water samples, and TO-15 and TO-17 Volatile Organics analysis for soil gas/vapor intrusion samples.

Analytical Chemist – Elf Atochem North America, Inc., King of Prussia, PA (1992 to 1994).

Responsibilities included chemical analysis of process samples via NMR Spectroscopy and the formulation of analytical methodologies. Performed analyses, and provided QA/QC of process intermediates and products to manufacturing and research facilities.

GC Analyst/Laboratory Technician – Centre Analytical Laboratories, Start College, PA (1991 to 1992)

Analytical chemist performing analyses of environmental samples.

HONORS:

Honors in Chemistry

Bioinorganic chemistry research conducted from June 1988 – June 1990. Requirements included: one year of research, written and oral examinations and a written thesis.

APPENDIX E

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management, Bureau of Hazardous Waste and Radiation Management
625 Broadway, 9th Floor, Albany, New York 12233-7256
P: (518) 402-8651 | F: (518) 402-9024
www.dec.ny.gov

November 29, 2019

Mr. Charles A. Hampton
Day Environmental, Inc.
1563 Lyell Avenue
Rochester, New York 14606

RE: NYSDEC Site C907048
441 Chandler Street
Jamestown, New York 14701

Dear Mr. Hampton:

We have completed our review of the soil sampling data (Lab Sample ID: SC51827-01, SC51827-02, SC51827-03, L1944926-15, L1950289-04, L1950289-05, L1950289-10, L1950289-11 and L1950289-12) submitted with your November 19, 2019, request for a “contained-in” determination for the referenced project.

Concentrations detected for individual VOCs were all significantly less than their current NYSDEC "contained in" soil action levels and Land Disposal Restriction concentrations. Most of the individual VOCs were not detected above the detection limit. No hazardous constituents exhibited a hazardous waste characteristic by exceeding their TCLP regulatory level.

Concentrations (Lab Sample ID: SC51827-01, SC51827-02, SC51827-03, L1944926-15, L1950289-04, L1950289-05, L1950289-10, L1950289-11 and L1950289-12) for trichloroethene, cis-1,2-dichloroethene, and 1,2-dichloroethene, were below the soil “contained-in” action level, the Land Disposal Restriction concentration. Therefore, excavated soils, to a depth of approximately 13 feet below grade, do not have to be managed as hazardous waste when transported to a permitted solid waste landfill with liner and leachate collection system, for proper disposal as non-hazardous waste.

General Evaluation

During the soil excavation, if Day encounters stains, discoloration or soils that exhibit odors suggesting contamination, such material shall be separated from the excavated material and should be properly stockpiled and analyzed as per the approved Remedial Work Plan, and depending on the results, Day may request a “Contained-In” determination for this material.

Also prior to disposal, the concrete needs to be segregated and sampled for VOCs (8260 and TCLP) and depending on the results, Day may request a “Contained-In” determination for the concrete.

Should you have any questions regarding the content of this letter, please do not hesitate to contact me at (518) 402-9611 or email me at henry.wilkie@dec.ny.gov.

Sincerely,

Henry Wilkie
Assistant Environmental Engineer
RCRA Permitting Section

ec: D. Skaros, DER Region 9