Interim Remedial Measures Work Plan

Weber Knapp Company
441 Chandler Street
Jamestown, New York

NYSDEC Site # C907048

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I, Raymond L. Kampff, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Interim Remedial Measures Work Plan was prepared in 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.

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1.0 Introduction

The property addressed 441 Chandler Street, Jamestown, New York (the Site) has been accepted into the New York State (NYS) Brownfield Cleanup Program (BCP) to evaluate and remediate environmental impacts. This work plan presents a scope of work for the completion of an interim remedial measure (IRM) during the Remedial Investigation (RI) of the Site, which will be completed concurrently. This IRM Work Plan was developed in accordance with NYSDEC Department of Environmental Restoration (DER)-10 "Technical Guidance for Site Investigation and Remediation", and the applicable requirements of the NYS Brownfield Cleanup Program.

As defined within DER-10, an IRM is an action taken to mitigate environmental or human exposures before the completion of the remedial investigation and remedial alternative selection. IRMs may include the removal of wastes and contaminated materials, including environmental media. The use of a non-emergency IRM is encouraged when a source of contamination or exposure pathway can be effectively addressed prior to completion of the investigation and remedy selection process.

The goal of the IRM to be completed at the Site will be to remove areas of contamination and environmental conditions that are considered to have the greatest potential for human exposure and migration. Planned IRM activities for the Site generally include:

- Excavation and disposal of trichloroethene (TCE) impacted soil and groundwater below the floor slab of the building at the Site in the area where a vapor degreaser operated between about 1969 and 1993, when it was decommissioned.

1.1 Site Description

The Site is comprised of approximately 2.65 acres of land identified as Tax Parcel 387.08-3-20, and it is developed with an approximate 105,000 square foot slab-on-grade building originally constructed in 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. In the 1930s, a brass foundry was located in the area that is now the northwestern portion of the building at the Site. The original footprint of the building (i.e., located along the western boundary of the Site and along the Chadakoin River) was expanded to the north and east over the former Morse Avenue right-of-way and residential properties between the 1940s and 1960s. Copies of historic Sanborn Fire Insurance maps overlain on the current building plan are included in Appendix A. A project locus map for the Site is included as Figure 1.

The location of the former vapor degreaser that operated in the central portion of the building at the Site is shown on Figure 2. In addition, the various building additions, and the approximate date of each addition, are shown on Figure 2. A copy of a schematic diagram prepared by Baron, Blakeslee, Inc. (i.e., the manufacturer of the degreaser) dated

November 13, 1967 is included in Appendix B. As shown, the degreaser consisted of three treatment areas connected by a conveyor system that transported parts to be cleaned. The degreaser unit was entirely above ground, with the exception of a sump pit in the floor that housed a pump used to circulate solvent through the vapor degreaser. A patch in the concrete floor is evident in the location of this former sump pit. A 2,000-gallon above-ground steel tank was located immediately to the northwest of the vapor degreaser. This tank was used to store solvent removed from the degreaser during cleaning operations. When not used during cleaning, this tank was reportedly empty.

1.2 Description of the Proposed IRM

The IRM will consist of the removal of soil (and groundwater, as necessary for dewatering the soil excavation) from an apparent source area of TCE identified at the Site. As described in Section 3.0 of this document, additional delineation studies will be done to define the areal and vertical extent of the IRM removal area. However, it is currently anticipated that the components of the IRM will consist of the following:

- The saw cutting and removal of an estimated 200 square foot (ft^2) section of concrete floor in the area of the former vapor degreaser (refer to Figure 3).
- Excavation and removal of soil to depths up to 13 ft. below the surface of the concrete floor.
- Placement of the excavated soil in roll-off containers located in a parking area south of the building at the Site (refer to Figure 3).
- Since the IRM removal area is located in proximity to the foundation for a former building wall that now provides support for the roof of the building and adjacent to a burn-off oven used as part of the manufacturing operations, it is anticipated that temporary structural support will be required when excavating soil in proximity of these features. It is anticipated that a temporary support system will be constructed and advanced as the excavation proceeds (e.g., a trench box system or similar). It is also anticipated that the excavation of soil will be completed in cells, which will be backfilled upon reaching the desired depth. It is expected that excavation of a series of cells will also reduce/eliminate the need for dewatering.
- If necessary, dewatering will be completed using sump pumps placed in the bottom of the excavation. The water removed from the excavation will be placed in a frac tank(s) that will be positioned in the parking lot south of the building. The water collected will be disposed off-site at a regulated treatment facility, or pre-treated and disposed at the municipal waste water treatment plant.
- A "Contained-In" assessment will be completed to characterize the soil to be removed. Based on the findings of this evaluation, a portion of the soil will be disposed off-site as a hazardous waste and portion of the soil will be disposed off-site as a non-hazardous waste.
- Prior to backfilling, a representative number of samples will be collected from the sidewalls and base (if possible) and submitted for testing of Target Compound List (TCL) VOCs. The results of these 'confirmatory' samples will be used to

assess the effectiveness of the soil removal IRM and the need for additional remediation (e.g., in-situ chemical and/or biological treatment).

- During backfilling, one or more 4-inch diameter monitoring point(s) consisting of an approximate 5-foot long slotted screen, positioned in the bottom of the excavation (i.e., up to about 13 ft. below the top of the concrete floor) connected solid riser pipe will be installed. The excavation will be backfilled with imported backfill deemed to be free of contaminants and the concrete floor will subsequently be replaced.

2.0 Background

The following sections summarize the findings of work conducted prior to the delineation studies described in Section 3.1 in the area of the former vapor degreaser and the proposed IRM area.

2.1 Subsurface Investigation Summary and Findings

The following soil vapor and test boring/monitoring wells were advanced/installed in proximity of the former vapor degreaser. The approximate distance and location, relative to the concrete patch in the floor where the sump pit was formerly located, is listed below, and these exploration locations are depicted on Figure 2.

- Soil vapor point SSV-1: approximately 5 feet (ft.) north
- Soil vapor point SSV-2: approximately 30 ft. southeast
- Test boring/Monitoring Well MW-A: approximately 4 ft. west
- Test boring/Monitoring Well TB-01/MW-E: approximately 17 ft. north
- Test boring/Monitoring Well TB-02/MW-F: approximately 13 ft. southwest
- Test boring TB-04: approximately 31 ft. southwest
- Test boring TB-05: approximately 34 ft. north
- Test boring/Monitoring Well TB-06/MW-G: approximately 65 ft. southeast
- Test boring TB-22: approximately 22 ft. west

The concentration of TCE and its breakdown products [cis-1,2-dichloroethene (cis-1,2 DCE) and vinyl chloride (VC)] detected in the above are summarized below.

Sample Designation	Sample Type	Date Sampled	Concentration and Units		
			TCE	Cis-1,2 DCE	VC
SSV-1	soil vapor	9/5/2018	110,000 ug/m^3	3,600 ug/m^3	ND
SSV-2	soil vapor	9/5/2018	5,800 ug/m^3	ND	ND
[Note: No NYSDOH criteria is available for soil vapor samples]					
MW-A(4')	soil	11/8/2018	24.5 mg/kg	0.0074 mg/kg	ND (0.0048 mg/kg)
MW-A(8')	soil	11/8/2018	0.0382 mg/kg J	ND (0.0562 mg/kg)	ND (0.0562 mg/kg)
MW-A(11')	soil	11/8/2018	32.4 mg/kg	12 mg/kg	0.48 mg/kg
MW-A(13')	soil	11/8/2018	198 mg/kg	12.6 mg/kg	0.193 mg/kg J
TB-01(11')	soil	12/19/2018	4,400 mg/kg	34.0 mg/kg J	ND (46 mg/kg)
TB-01(12.5')	soil	12/19/2018	10 mg/kg	0.26 mg/kg J	ND (0.16 mg/kg)
TB-02(11.5')	soil	12/19/2018	81 mg/kg	17 mg/kg	1.5 mg/kg
TB-04(11.5')	soil	12/20/2018	29 mg/kg	22 mg/kg	1.7 mg/kg
TB-04(12.9')	soil	12/20/2018	1.5 mg/kg	3.6 mg/kg	0.42 mg/kg
TB-05(12.5')	soil	12/19/2018	100 mg/kg	2.9 mg/kg	0.021 mg/kg J

Sample Designation	Sample Type	Date Sampled	Concentration and Units TCE	Cis-1,2 DCE	VC
TB-22(13’)	soil	12/20/2018	1.4 mg/kg	2.9 mg/kg	0.025 mg/kg J
Restricted Industrial Use Soil Cleanup Objective (SCO)			**400 mg/kg**	**1,000 mg/kg**	**27 mg/kg**
Protection of Groundwater SCO			**0.47 mg/kg**	**0.25 mg/kg**	**0.02 mg/kg**
MW-A	LNAPL	11/8/2018	1,170,000 ug/l	17,800 ug/l	ND(1,590 ug/l)
MW-A	‘sediment’	11/8/2018	10,300,000 ug/l	163,000 ug/l	2,320 ug/l
MW-A	groundwater	11/8/2018	46,900 ug/l	1,310 ug/l	ND(201 ug/l)
MW-A	groundwater	12/27/2018	82,000 ug/l	20,000 ug/l	1,500 ug/l
MW-E	groundwater	12/27/2018	780,000 ug/l	32,000 ug/l	1,100 ug/l
MW-F	groundwater	12/27/2018	230,000 ug/l	140,000 ug/l	6,200 ug/l
MW-G	groundwater	12/27/2018	ND (0.2 ug/l)	2 ug/l	3 ug/l
Groundwater Standard			**5 ug/l**	**5 ug/l**	**5 ug/l**

Notes:

TCE = Trichloroethene
Cis-1,2 DCE = Cis-1,2 Dichloroethene
VC = Vinyl Chloride
ND = Not Detected above the detection limit shown in parenthesis
J = Estimated Concentration
SCOs – Refer to Section 2.2
Groundwater Standards – as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended in January 1999, April 2000, and June 2004.

2.2 Standards, Criteria, and Guidance

Standards, criteria, and guidance (SCG) values to be employed during the IRM include Restricted-Industrial Use soil cleanup objectives (SCO) and Protection of Groundwater SCO referenced in the NYSDEC document titled “*6 NYCRR Part 375, Environmental Remediation Programs*” dated December 14, 2006. The table below provides a list of the SCOs that are specific to the target contaminants addressed by this IRM.

Contaminant	NYSDEC SCO	SCO Concentration
TCE	Restricted-Industrial Use	400 mg/kg
	Protection of Groundwater	0.47 mg/kg
Cis-1,2 DCE	Restricted-Industrial Use	1,000 mg/kg
	Protection of Groundwater	0.25 mg/kg
VC	Restricted-Industrial Use	27 mg/kg
	Protection of Groundwater	0.02 mg/kg

3.0 Scope of Work

The primary goal of the IRM is to address areas of contamination and environmental conditions that are considered to have the greatest potential for human exposure and migration. The IRM will include removal of TCE-impacted soil during the excavation process from the identified source area, and to the extent necessary in order to complete the soil removal, the removal of groundwater from the excavation. The IRM activities will be observed and documented by Day Environmental Inc. (DAY).

3.1 Delineation Studies

3.1.1 Delineation Test Borings – 1st Round

Between September 25 and 26, 2019, an initial round of supplemental studies was completed to further delineate the areal and vertical extent of the soil removal area. To this end, eleven direct-push test borings (i.e., designated IRM-01 through IRM-11) were advanced in the approximate locations depicted on Figure 4. Prior to advancing each test boring, the concrete floor was cored at each location using a rotary core drill, and the core was retained for observation. Each test boring was advanced to equipment refusal [i.e., between about 10.2 ft. (i.e., IRM-01) and 18.5 ft. (i.e., IRM-06) below the top of the concrete floor]. Test borings IRM-05 and IRM-10 were converted into 1-inch diameter groundwater monitoring wells. Test borings not completed as monitoring wells were backfilled with drill cuttings and sealed with concrete to match pre-existing conditions.

Samples collected during the advancement of the test borings were observed for field evidence of potential contamination (e.g., staining, unusual odors, etc.) and screened with a photoionization detector (PID). Logs describing the subsurface conditions encountered during the advancement of the test borings were prepared (i.e., soil types, evidence of apparent groundwater, observations, screening results, etc.) and are presented in Appendix C.

On October 11, 2019, groundwater monitoring wells IRM-05 and IRM-10 were developed by removing at least approximately three well volumes of groundwater and allowing the wells to recover prior to collection of a groundwater sample from each monitoring well.

Select soil and groundwater samples were submitted to Alpha Analytical in Buffalo, New York (Alpha) for testing (refer to Section 3.1.4). Based on field evidence observed during the advancement of test borings IRM-01 through IRM-11,the test results from soil samples collected between September 25 and 26, 2019, and the groundwater samples collected on October 11, 2019 (discussed below), it was determined that the extent of the original soil removal area (i.e., 1,250 ft^2, as proposed in the April 2019 draft of this document) was excessive, and that additional delineation (i.e., in closer proximity to the patch in the concrete floor assumed to be the former sump pit for the former vapor degreaser) was necessary to identify the source zone limits.

3.1.2 Delineation Test Borings – 2nd Round

On October 24, 2019 eight additional direct-push test borings (i.e., designated IRM-12 through IRM-20) were advanced as described above, in the approximate locations depicted on Figure 4. Test borings IRM-12, IRM-14, IRM-15 and IRM-18 were advanced to approximately 8 ft. below the top of the concrete floor, and the remaining test borings were advanced to equipment refusal [i.e., between about 11.2 ft. (i.e., IRM-20) and 11.7 ft. (i.e., IRM-19) below the top of the concrete floor]. Soil samples collected during the advancement of the test borings were observed as described above, and select samples were retained and subsequently submitted to Alpha for testing of TCL VOCs. Logs describing the subsurface conditions encountered during the advancement of the test borings and also are presented in Appendix D.

An attempt was made to core through the patch in the concrete floor (i.e., assumed to be the former sump pit for the former vapor degreaser), using a core drill, in preparation for advancing a test boring at this location. However, the thickness of the concrete patch exceeded the depth to which the core drill was operable (i.e., about 30 inches below the top of the concrete floor). Thus, a test boring was not advanced through the patch. On November 1, 2019 a DAY representative returned to the Site and advanced a small diameter hole through the concrete patch, using a hammer drill, and subsequently screened the annulus using a PID. It was determined that the concrete was approximately 32 inches thick, but samples could not be retained below the bottom of the former sump. Rather, a 4-foot long piece of reinforcing bar was driven to a depth of 45 inches below the top of the floor. The maximum PID readings measured during the advancement through the concrete and underlying soil was 5.8 ppm. There was no evidence of staining on the drill bit or reinforcing bar or unusual odors detected in the open hole.

3.1.3 Subsurface Conditions

The concrete floor varied in thickness from about 5½ inches to about 6½ inches. Generally, the samples retained from the test borings contained a reworked soil fill material comprised of mixtures/layers of sand, silty sand, and gravel that extended to depths ranging between about 3.0 ft. below the surface of the concrete floor in test borings IRM-01, IRM-12, and IRM-13, to about 7.5 ft. below the surface of the concrete floor in test boring IRM-11. In some locations, ash, cinders, coal fragments, concrete and brick fragments, and an apparent rust-like, green precipitate were observed intermixed within the fill material. A sandy to clayey silt was encountered below the fill at each test location, and this deposit extended to depths ranging between about 7.5 ft. below the surface of the concrete floor in test boring IRM-18, to about 12 ft. below the surface of the concrete floor in test boring IRM-04. A gray, silty sand to sandy silt, little clay, little gravel (i.e., gray glacial till) was encountered below the silt layer in each test boring except IRM-07, extending to depths ranging between about, 9.5 ft. below the surface of the concrete floor in test boring IRM-01, to about 17 ft. below the surface of the concrete floor in test boring IRM-06. At three test boring locations (i.e., IRM-06, IRM-08 and IRM-10), the gray glacial till unit graded into a red-brown glacial till unit containing occasional fractured shale fragments. Equipment refusal, where encountered, was reached at a unit of apparent fractured shale, evidenced by occasional weathered shale fragments in the bottom of the samples recovered.

Apparent solvent free product was observed on soil samples retained from test boring IRM-16 - starting at about 10 ft. below the surface of the concrete floor, with a corresponding PID reading of greater than 15,000 ppm.

An apparent mixture of petroleum and solvent was detected in test boring IRM-17 - starting at about 10 ft. below the surface of the concrete floor, with a corresponding PID reading of 690.9 ppm

Petroleum free product (i.e., an apparent lubricant oil that did not exhibit a solvent-type odor) was observed on soil samples retained from the following test borings:

- IRM-05 - starting at about 12 ft. below the surface of the concrete floor (described as oil globules), with a corresponding PID reading of 163 ppm;
- IRM-06 - starting at about 7.5 ft. below the surface of the concrete floor, with a corresponding PID reading of 5 ppm;
- IRM-07 - starting at about 7.5 ft. below the surface of the concrete floor, with a corresponding PID reading of 2.4 ppm; and
- IRM-08 - starting at about 7.5 ft. below the surface of the concrete floor, with a corresponding PID reading of 52.4 ppm;

Solvent-type odors were noted on soil samples retained from the following test borings:

- IRM-03 - starting at about 10 ft. below the surface of the concrete floor, with corresponding PID reading ranging from 1,662 ppm to 8,325 ppm;
- IRM-13 - starting at about 10 ft. below the surface of the concrete floor, with corresponding PID reading ranging from 376.6 ppm to 7,021 ppm;
- IRM-16 - starting at about 8.5 ft. below the surface of the concrete floor, with corresponding PID reading ranging from 2,060 ppm to greater than 15,000 ppm; and
- IRM-19 - starting at about 10 ft. below the surface of the concrete floor, with corresponding PID reading ranging from 2,000 ppm to 7,873 ppm;

Petroleum-type odors were noted on soil samples retained from the following test borings:

- IRM-01 - starting at about 5.5 ft. below the surface of the concrete floor, with corresponding PID reading ranging from 0.1 ppm to 0.5 ppm;
- IRM-07 - starting at about 7.5 ft. below the surface of the concrete floor, with a corresponding PID reading ranging from 1.0 ppm to 2.4 ppm; and
- IRM-12 - starting at about 7.0 ft. below the surface of the concrete floor, with corresponding PID reading ranging from 1.1 ppm to 1.9 ppm;
- IRM-13 - starting at about 4 ft. below the surface of the concrete floor, with corresponding PID reading ranging from 0.7 ppm to 1.9 ppm; and
- IRM-14 - starting at about 4 ft. below the surface of the concrete floor, with corresponding PID reading ranging from 2.6 ppm to 19.5 ppm;

Elevated PID readings (i.e., greater than about 100 ppm) were generally recorded over soil samples collected from the base of the silt unit in select locations [i.e., starting at depths ranging from about 8.0 ft. below the surface of the concrete floor in IRM-16 to about 9.5 ft. below the surface of the concrete floor in IRM-03] and from the gray glacial till unit. However, elevated PID readings were not observed over samples of the gray glacial till collected from IRM-01, IRM-02, IRM-04, IRM-08, IRM-10, IRM-11 and IRM-20.

Elevated PID readings were recorded over shallow fill samples (i.e., 0.5 ft to 4.0 ft. below the surface of the concrete floor) at only one delineation test boring location (i.e., collected from IRM-20). The PID readings in the shallow fill at this location ranged from 340.6 ppm just below the concrete floor to 23.5 ppm at 4.0 ft. below the surface of the concrete floor. [Note: to date, test boring MW-A (and to a lesser extent, IRM-14, located adjacent to the west of MW-A) are the only other test location in the area of the former vapor degreaser at which impacts to shallow fill have been observed. Construction drawings from the 1960 building expansion show a pair of floor drains, located in the vicinity of test borings MW-A and IRM-20, with drain lines converging towards the north-northwest. It is possible that that impacts to the subsurface migrated along the shallow bedding material associated with these drain lines prior to migrating downward.]

3.1.4 Analytical Laboratory Test Results

A total of 26 soil samples and two groundwater samples were collected from the test borings and submitted to Alpha for testing of TCL VOCs. Seventeen of the soil samples were also tested for VOCs following extraction by the Toxicity Characteristic Leaching Procedure (TCLP). In addition, one soil sample that exhibited field evidence of potential contamination [i.e., IRM-09 (10-12')] was submitted for testing of the following parameters:

- Polychlorinated biphenyls (PCBs);
- TCL List Semi-Volatile Organic Compound (SVOCs);
- Target Analyte List (TAL) Metals;
- Cyanide; and
- Per and Polyfluoroalkyl Substances (PFAS).

Alpha is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory (ELAP ID #11148). Copies of the reports provided by Alpha are included in Appendix D.

As shown in the Alpha laboratory report L1944926 (refer to Appendix D) the concentrations of PCBs, SVOCs, TAL Metals, cyanide and PFAS were not detected at concentrations greater than the laboratory detection limits.

Table 1 provides a comparison of the results of the TCL VOCs soil testing completed by Alpha to the Restricted-Industrial Use SCOs and Protection of Groundwater SCOs (refer to Section 2.2) and a comparison of the TCLP VOCs testing to the Maximum

Concentration of Contaminants for the Toxicity Characteristic (MCCTC) as referenced in Table 1 of 40 CFR § 261.24.

[Note: The results of VOC testing for soil samples collected from the vicinity of the proposed IRM removal area during previous studies (i.e., designated MW-A, TB-01, TB-02, TB-05 and TB-22) are also presented on Table 1 and depicted on Figure 2. The work completed and the analytical laboratory reports prepared as part of these studies are summarized in the report titled, *Environmental Evaluation, 415 and 441 Chandler Street, Jamestown, New York, NYSDEC Spill File No. 1808886,* dated February 8, 2019, prepared by DAY. A copy of the report was included with the BCP application, and is available upon request.]

As shown on Table 1, the concentration(s) of one or more halocarbon (i.e., TCE, Cis-1,2 DCE, VC, and/or chloroform) detected in 17 of the 26 soil samples tested from the IRM delineation test borings exceed(s) their respective Protection of Groundwater SCO(s). Concentrations of TCE exceeding the Industrial Use SCO (i.e., 400 mg/kg or ppm) were detected in four soil samples collected from the IRM delineation test borings [i.e., IRM-03(12-12.5') @ 1,700 ppm; IRM-16(9.5') @ 12,000 ppm; IRM-17(11.5') @ 1,100 ppm and IRM-19(11.5') @ 1,000 ppm]. The concentrations of TCE detected in the remainder of the soil samples collected and tested from the IRM delineation test borings, and the concentrations of other VOCS detected in the soil samples collected and tested from the IRM delineation test borings, are below their respective Industrial Use SCOs.

As shown on Table 1, seventeen soil samples were tested for TCLP VOCs. Three soil samples that were tested for TCLP VOCs [i.e., IRM-03 (12-12.5'), IRM-06 (10-10.5'), and IRM-13 (11')] contained concentrations of TCE that exceed the Maximum Concentration of Contaminants for the Toxicity Characteristic (MCCTC) for TCE of 0.5 mg/kg. The remaining fourteen soil samples that were tested for TCLP VOCs did not contain concentrations of VOCs exceeding their respective MCCTC.

Table 2 provides a comparison of the results of the TCL VOCs groundwater testing completed by Alpha to the Class GA groundwater standard or guidance values as referenced in NYSDEC TOGS 1.1.1, dated June 1998 with April 2000 and June 2004 addendums. As shown on Table 2, the concentrations of TCE, Cis-1,2 DCE and VC (i.e., 29 ppb, 58 ppb and 13 ppb, respectively) detected in the groundwater sample collected from monitoring well IRM-05 exceed their respective groundwater standards. Further, the concentration of TCE detected in the groundwater sample collected from monitoring well IRM-10 (i.e., 5.8 ppb) slightly exceeds the TCE groundwater standard of 5 ppb. The concentrations of Cis-1,2 DCE and VC detected in groundwater sample from monitoring well IRM-10 and the other VOCs detected in the groundwater samples from monitoring wells IRM-05 and IRM-10 were below their respective groundwater standard or guidance values

3.1.5 Soil Removal Area

Based on the results of the IRM delineation studies, and on the information generated during the 2018 Environmental Evaluation, impacts to shallow soil/fill subsurface material appear to present in the vicinity of the former vapor degreaser in a localized area between test location MW-A and IRM-20 (i.e., possibly due to preferential flow along utility bedding) and extending deeper into the subsurface, to the surface and/or into the gray glacial till unit that is located between about 9.5 ft. and 13 ft. below the surface of the concrete floor. Impacted soils at the 11 ft. to 13 ft. were observed in test location IRM-03, TB-01/MW-E, and TB-05 (i.e., located to the to the north-northwest of the shallow impacts), but impacts to shallow soils (i.e., from below the concrete floor to depths around 8 ft.) at these locations were not observed. Further, impacted soils (i.e., which would require removal as part of this IRM) were not observed in test locations to the northwest (i.e., IRM-04, IRM-10 and IRM-11), west (IRM-05 and IRM-08) or northeast (IRM-01 and IRM-02) portions of the IRM delineation study area. Impacts to the glacial till unit were observed in test locations IRM-06, IRM-07 and TB-02/MW-F (i.e., located southwest, southeast and south of the location of the former vapor degreaser). However, impacts to shallow soils at these locations were not observed, and their proximity to a building foundation wall precludes soil removal in this area.

The proposed IRM soil removal area (i.e., approximately 200 ft, located to the west-northwest of the patch in the concrete floor assumed to be the former sump pit for the former vapor degreaser) is depicted on Figure 4. [Note: Depending on conditions encountered during the soil removal IRM, it is possible that the removal area could be extended further to the north (i.e., of IRM-03) to remove additional TCE-impacted soil.]

3.2 Contained-In Determination

Following the completion of the delineation studies described in Section 3.1 and receipt of the data provided by Alpha, 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 herein described as "Type B" material (refer to Section 3.4.1.1). 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 19, 2019 contained-in demonstration letter, and the response from the NYSDEC, are provided as Appendix E.

Samples of the concrete (i.e., floor slab) will be collected and tested prior to the IRM. The results of this testing will be provided to the NYSDEC for "contained in" determination approval. In addition, depending on the quantity of groundwater collected during the IRM, samples will be collected and tested for "contained in" determination approval.

3.3 Structural Evaluation

As necessary, a structural engineer will be retained to evaluate the site conditions and the proposed excavation to provide recommendations to provide structural support during the excavation process.

3.4 Site Preparation and Control

The subcontractor will be responsible for identification and clearance of utilities prior to commencement of the work.

Planned IRM work will require control measures to ensure the safety of Site workers and the public. The IRM removal area is within the building at the Site. Access to the building is limited to Weber Knapp Company employees and authorized visitors accompanied by Weber Knapp Company employees. The public will not be permitted to enter within designated remedial area, material staging area, transportation area or support area.

Figure 3 indicates the location of the IRM area, significant existing features in the IRM area, and the anticipated layout of the Site during IRM activities. Planned staging, transportation and support areas are located such that movement of contaminated waste materials will be limited to the extent necessary to allow excavation and safe and efficient access to each work area.

GPS and/or tape measurements will be used to locate IRM-related features. The anticipated extent of the IRM removal area will be marked using marking paint prior to initiation of IRM activities. As necessary, areas of the Site to be used for staging, decontamination and related activities will also be marked using aerosol marking paint.

<u>IRM Removal Area Controls</u>

Facility activities in the vicinity of the IRM removal area (i.e., powder-coat and dye-stamping processes) are performed during the 1st shift at the facility (i.e., between the hours of 6 AM and 2 PM). In order to minimize the exposure of Weber-Knapp personnel to vapors from excavated materials and excavation machinery, IRM activities will be conducted during the second shift (i.e., between the hours of 3 PM and 11 PM).

Prior to the start of excavation activities, the IRM removal area will be isolated, to the extent practicable, from the adjacent areas of the building by creating a physical barrier and institutional controls (e.g., delineating the exclusion zone perimeter using traffic cones, survey tape, and other barriers and posting notices to avoid entering the exclusion zone). The intent will be to prevent unauthorized Weber-Knapp Company employees or visitors from approaching the IRM removal area.

A negative air unit system (i.e., exhaust fan(s) connected to disposable ducting, with intake(s) adjacent to the excavation and exhausting at/adjacent to an exterior door/window or equivalent) will be operated during excavation and backfill activities. If necessary, (i.e., depending on the results of CAMP/breathing zone monitoring) other methods of limiting vapor and particulate discharges from the work area (e.g., slowing the excavation process, adding a mist to prevent dust, placing biodegradable foam to preclude vapor discharges, etc.) may be employed. Heating and cooling ducts within the IRM removal area will be deactivated during the excavation process.

In the event that excavation and backfill of a single cell cannot be completed during a single shift, the open excavation will be covered overnight and during the 1st shift (i.e., between the hours of 11 PM and 3 PM) to minimize exposure to Weber-Knapp Company employees or visitors. The cover will consist of a single layer of poly sheeting, secured at the edges with sandbags, or similar.

Because the egress area (refer to Figure 3) also serves at the facility's receiving area, it can not be isolated during material removal and staging activities. However, IRM work will be performed during the second shift, which will minimize facility traffic (i.e., facility receiving traffic, fork-truck traffic, etc.) through the egress area during IRM work activities.

<u>Material Staging</u>

Material staging areas will be established in the asphalt paved parking area located in the southeastern portion of the Site. These locations are described below and illustrated on Figure 3. [Note: The receiving door that services the Weber Knapp Company facility at the Site is located on the north side of the staging area (refer to Figure 3). Excavation equipment, excavated soil, backfill material, and supplies will access the soil removal area via this receiving door.] It is anticipated that, as necessary, clean excavation equipment, backfill material, supplies, and/or covered roll-off containers containing Type A or Type B waste (refer to Section 3.4.1.1) may be staged in the parking lot of the 415 Chandler Street property (i.e., located adjacent to the west of the Site). The roll-off containers may be staged at the 415 Chandler Street property while waste characterization and waste profile activities are completed.

Equipment Staging Areas

Equipment required for the soil removal IRM will be staged in the locations depicted on Figure 3. This will include one 10,000-gallon capacity frac tank that will be used to store/treat groundwater removed during the excavation process.

Excavated Material Staging Areas

The excavated material will be loaded directly into roll-off containers, lined with a layer of 10-mil polyethylene sheeting. Once filled, and/or between loading activities, the roll off containers will be covered with secured tarps until disposal occurs. It is noted that during excavation, staging and disposal activities, the contractor will be directed to provide the provisions necessary to implement dust and vapor suppression controls as described in the Health and Safety Plan (HASP) in Section 5.0 of this Work Plan.

Note: The concrete floor and sub-base material removed will be loaded directly into roll-off containers.

Drainage Control

Surface runoff within the parking lot in the southeastern portion of the Site is directed to catch basins/trench drains (refer to Figure 3). The catch basins/trench drains will be protected (e.g., placement of filter fabric above and/or absorbent pads around the perimeter the catch basins/trench drains).

<u>Decontamination Procedures</u>

As part of the subcontractor's mobilization activities, a decontamination (decon) area for trucks, equipment, and personnel will be constructed on the Site to prevent tracking of contaminated residuals from the Site. It is anticipated that the decon area will be located adjacent to the material staging area within the asphalt paved parking lot located in the southeastern portion of the Site, as illustrated on Figure 3.

To limit exposure and tracking of chlorinated VOC contaminated soil, excavated material will only be moved from the soil removal IRM area to the staging area via the route identified on Figure 3. Efforts will be made to minimize the accumulation of any impacted material outside the excavation and staging areas. If accidental spillage of impacted material occurs, it will be cleaned immediately to the satisfaction of the DAY representative.

During truck loading activities, polyethylene sheeting or tarps may be used to prevent unnecessary tracking of wastes through the Site and during transport.

Decontamination will be performed in accordance with NYSDEC-approved procedures. Sampling methods and equipment have been chosen to minimize decontamination requirements and prevent the possibility of cross-contamination.

Prior to exiting the Site, transport and excavation vehicles/equipment will be decontaminated via washing, as deemed necessary. This washing activity will take place on the decontamination pad (decon pad) described below. Heavy equipment may be dry decontaminated, if possible. It should be noted that, if possible, clean areas/corridors that either eliminate or minimize any decontamination washing will be utilized. Adherence to these procedures will help to ensure that extensive decontamination will not be necessary.

Decon Pad

A decon pad will be constructed to decontaminate equipment and vehicles exiting the Site, such as excavators, or support trucks that may have come into contact with contaminated soil. At a minimum, equipment and/or vehicles that contact potentially contaminated soil will be washed down (or dry decontaminated) prior to exiting the Site. The anticipated location of the decon pad is depicted on Figure 3.

<u>Groundwater Monitoring Well Decommissioning</u>

It is anticipated that existing monitoring well MW-A will be removed during the excavation process. As such, it is not anticipated that monitoring wells will require decommissioning prior to beginning intrusive Site work. However, if deemed necessary, monitoring wells will be decommissioned in accordance with protocols outlined in the NYSDEC document titled "CP-43: Groundwater Monitoring Well Decommissioning Policy" dated November 3, 2009.

3.4 IRM Implementation

The Site preparation and control measures described in Section 3.3 will be implemented prior to completing IRM excavations.

The IRM-related components are shown on Figure 3. This IRM is intended to assist in remediating impacts at the Site to meet Restricted Industrial Use and Protection of Groundwater SCO. The following sections define the specific remedial work anticipated as part of the soil removal IRM.

3.4.1 Source Area Removal

The source area of TCE-contaminated soil will be removed and subsequently disposed off-site. Based on available data, it is estimated that approximately 155 tons of TCE contaminated soil will be removed and replaced by clean soil fill (e.g., pea gravel and crusher run or in accordance with applicable DER-10 requirements). Due to the anticipated excavation methods (i.e., excavation in a series of cells followed by backfilling) it is anticipated that limited, or no, dewatering will be required to advance the excavation to the required depth. However, if dewatering is required, the measures identified in Section 3.9 will be implemented.

3.4.1.1 Soil Excavation and Staging

Prior to initiating the soil removal IRM, the excavation limits will be marked on the floor of the building. As necessary, moveable equipment in proximity of the work area will be relocated (e.g., storage racks, etc.).

Material excavated during the IRM will be segregated into three categories based on observations and PID field measurements, as follows:

- Type A: expected to include the concrete floor.

- Type B: low/moderate level contaminated soil that may contain evidence of potential impact (e.g., staining and slight chemical-like odors) and/or PID readings between 10 ppm and 500 ppm. Based on the results of the Contained-in-Demonstration (refer to Appendix E), this soil will be disposed off-site as a non-hazardous waste. Currently it is estimated that approximately 110 tons of Type B material will be encountered.

- Type C: grossly contaminated soil that will be disposed off-site as a hazardous waste. Type C material is defined as material containing evidence of free product and/or PID readings above 500 ppm. Currently it is estimated that approximately 45 tons of Type C material will be encountered.

During excavation activities, Type A, Type B and Type C materials will be loaded directly into separate roll-off containers that are staged on the asphalt pavement in the area depicted on Figure 3. The roll-off containers designated for Type B and Type C materials will be lined with polyethylene sheeting and securely covered to prevent run-off, prior to waste testing and transport off-site for disposal. It is anticipated that, once filled and secured, the roll-off containers designated for Type A and Type B materials will be moved to, and stored on, the asphalt-paved parking lot located on the parcel adjacent to the west (i.e., the 415 Chandler Street property) during the waste characterization and profile process. The roll-off containers designated for Type C materials will remain on the 441 Chandler Street site during the waste characterization and profile process.

It is anticipated that excavated material soil will be transferred from the soil removal area to the staging area using a front-end loader or material buggies. Efforts will be made to avoid cross-contamination between loads by excavating like materials continuously, to the extent possible, based on access and other considerations. Care will be taken to prevent spillage of soil onto uncontaminated areas of the Site during transport. In the event spillage/leakage occurs, it will be cleaned to the satisfaction of the DAY representative immediacy upon its identification.

Once a roll-off container has been filled, samples will be collected for analytical laboratory testing to characterize the material for off-site disposal requirements as warranted by the disposal facility.

As described in the HASP presented in Appendix F, vapor screening with a PID will be conducted continuously during excavation and handling of contaminated soil for protection of on-site workers (refer to Section 3.7).

3.4.1.2 Post-Excavation Sampling

Once soil removal has taken place, the bottom (if possible based on the depth of the excavation) and side walls of the excavated area will be sampled, and the samples collected will be submitted for testing of TCL VOCs via USEPA Method 8260. In addition, one in five confirmatory samples will also be tested for each of the following:

- Target Analyte List (TAL) Metals by various USEPA methods;
- Cyanide via USEPA via Method 9012B;
- TCL and CP-51 List Semi-Volatiles (SVOCs) via USEPA Method 8270;
- Polychlorinated biphenyls (PCBs) via USEPA Method 8082A; and
- Per- and Polyfluoroalkyl Substances (PFAS) via USEPA Method 537 Modified.

These samples will be collected in accordance with the guidance presented in DER-10. [Note: Since it is anticipated that the excavation will be completed in stages to reduce structural impacts and reduce/eliminate the need for excavation dewatering, post-excavation samples will be collected upon the completion of each stage. The actual number and location of the samples submitted for testing will be dependent upon the final extent of the soil removal area.] It is understood that additional soil samples may be obtained for analysis as part of the RI in order to more precisely define the limits and concentrations of contamination left in-place after completion of IRM. Actual sample locations will be selected at the discretion of DAY with concurrence from representatives of the NYSDEC. The Quality Assurance Project Plan (QAPP) presented in Appendix G provides detailed descriptions of the applicable sampling protocols and planned testing requirements. Analytical laboratory results will be evaluated with respect to 6NYCRR Part 375 SCO.

The location, depth and concentrations of residual contamination will be documented and incorporated into the database for the Site and in the IRM Construction Completion Report.

3.4.1.3 Backfill and Monitoring Point Installation

The excavation will be backfilled with low total organic content material imported from approved sources that meet requirements set forth in DER-10. Pea gravel will be used as backfill from the bottom of the excavation to a depth of about 5 ft. below the top of the current concrete floor. A continuous layer of woven geotextile shall be placed above the pea gravel, and crusher run stone (or similar) shall be used to backfill the excavation to a depth of 6 inches below the top of the current concrete floor. The backfill material will be compacted in place to the extent necessary to provide suitable structural support for the finished concrete floor. Prior to the installation of backfill, one or more 4-inch diameter monitoring points consisting Schedule 40 PVC, a 5-foot 10-slot screen flush coupled to Schedule 40 PVC solid riser pipe, extending from the base of the excavation (i.e., around

13 ft. below the surface of the concrete floor) to the surface of the restored concrete floor, will be installed. The monitoring points will be completed with a minimum 6-inch diameter flush-mounted steel protective cover. These monitoring points may be used for the future delivery of in-situ remedial products to treat residual contamination and/or groundwater extraction and treatment, if such actions are deemed necessary.

3.5 On-Site Management of Excavated Soil

Excavated soil will be handled in accordance with applicable protocols and health and safety considerations. Detailed descriptions of the methods planned for segregating and staging soil and other excavated materials are specified in Section 3.4.1.1, Soil Excavation and Staging.

3.6 Characterization, Transportation, Disposal

Waste characterization samples will be collected from the roll-off containers in accordance with the QAPP (Appendix G) to determine disposal options. It is anticipated that these samples will be analyzed for one or more of the following parameters:

- TCL VOCs (EPA Method 8260)
- Toxic Characteristic Leaching Procedure (TCLP) VOCs (EPA Methods 1311, 8260)
- TCLP Metals (EPA Methods 1311, 6010/7470)
- TCL SVOCs (EPA Method 8270)

The specific testing program required will depend on the requirements of the disposal facility.

Trucks will be logged, and drivers and their respective time on-site will be documented to ensure compliance with applicable health and safety requirements.

The excavation contractor will be responsible for loading, transporting, and disposing of waste materials (i.e., concrete and non-hazardous and hazardous contaminated soil) generated during the IRM work.

Appropriate shipping documents will be prepared for each waste shipment, for execution by the Weber-Knapp Company. Copies of disposal documentation will be maintained and will be available for on-site review. Documentation from the disposal facility verifying the weight of each shipment will be obtained by the excavation contractor as soon as possible.

3.7 Dust and Vapor Monitoring and Mitigation Procedures

Procedures for dust and vapor monitoring are presented in the HASP and the Community Air Monitoring Plan (CAMP) included as Appendix F.

Continuous perimeter and work zone air monitoring will be conducted during contaminated soil removal and handling activities using Thermo Scientific, Inc. Data RAMs and MiniRAE 3000s (or equivalents) as specified in the CAMP. It is anticipated that three CAMP monitoring stations will be set up outside of the work zone perimeter, and that vapor monitoring will be conducted within the work zone perimeter. In addition, one CAMP monitoring station will be set up at the southeast corner of the Site (i.e., at the edge of the staging area). One of the CAMP monitoring stations will be equipped with a telemetry system capable of real-time data transmittal and this unit will be operated both during the IRM activities and during the first shift (i.e., between the hours of 6 AM and 2 PM) for the duration of the excavation and restoration activities.

It is anticipated that the dust and vapor monitoring will commence prior to the start of the IRM activities. Specifically, the monitoring equipment will record background levels for a period of up to 4 hours during the second shift (i.e., between the hours of 3 PM and 11 PM) within one week prior to the start of excavation activities.

3.8 Decontamination Procedures

As part of the subcontractor's mobilization activities, a decontamination area for trucks, equipment, and personnel will be constructed on the Site to prevent tracking of contaminated residuals from the Site as described in Section 3.3.

To further preclude the tracking of impacted soil, drivers will follow designated truck routes to contain traffic within a limited area. If materials accumulate outside the excavation and staging areas, they will be addressed to the satisfaction of the DAY field representative.

Decontamination will be performed in accordance with NYSDEC-approved procedures. Sampling methods and equipment have been chosen to minimize decontamination requirements, prevent the possibility of cross-contamination, and ensure compliance with the QAPP (Appendix G).

3.9 Handling and Disposal of Contaminated Groundwater

If dewatering of the excavation is required, this water will be pumped directly into a frac tank(s) for treatment or off-site disposal. It is anticipated that a sample of the water in the frac tank will be tested for total purgeable organics using EPA Method 624. Depending upon the results, the water will be: (1) transported to and discharged at the wastewater treatment plan (WWTP) under a sewer use permit, (2) pre-treated and then discharged at the WWTP under a sewer use permit after obtaining acceptable effluent results, or (3) disposed off-site as a hazardous or non-hazardous waste, with or without pre-treatment.

Note: If non-aqueous phase liquid (NAPL) is encountered during the soil removal IRM, sorbent pads will be used to remove it from the excavation sumps and the frac tank(s). These pads will be containerized, sampled/tested, and disposed in accordance with applicable regulations.

3.10 Disposal of Other IRM-Derived Wastes

The following IRM-derived wastes are anticipated for this project in addition to the bulk (soil and groundwater) materials discussed elsewhere:

- Building slab and demolition debris;
- Chlorinated VOC-impacted debris; and
- Decontamination wastes.

Samples of the concrete slab will be collected and tested for VOCs and, a Contained-in-Demonstration will be completed to assess disposal requirements.
Decontamination water will be containerized and staged on the Site with water removed during excavation activities. Final disposal of decontamination water will be dependent on the results of water analyses and waste characterization samples, as described in Section 3.9 above.

Excavated chlorinated solvent impacted soil will be transported to an off-site disposal facility permitted to accept such wastes. Prior to transport, waste characterization samples will be collected for laboratory analysis in accordance with Section 3.6, and as required by the disposal facility. Waste profiling will be coordinated with the Weber-Knapp Company. Waste manifests or bills of lading will be used for off-site shipments, and such documentation will be included in the subsequent IRM Construction Completion Report.

3.11 Site Restoration

Once chlorinated VOC-impacted soil has been excavated and post-excavation sampling completed the excavation(s) will be backfilled with clean soil that was imported (i.e., pea gravel/stone) from an approved source(s) that meet the requirements set forth in DER-10. To the extent practicable, backfill will be placed in 1-foot lifts and compacted to attain 95% compaction. Areas impacted by the IRM will be returned to existing conditions by repairing the concrete slab to match current conditions.

Following removal of the roll-off containers and frac tanks, the staging area will be restored to pre-existing conditions by decommissioning the decontamination pad, removing protective barriers around/over the catch basins/trench drains, etc. Non-reusable materials will be disposed in accordance with applicable regulations. Subsequent to removal, the parking lot will be cleaned and high pressure washed as needed.

3.12 Installation and Development of Additional Monitoring Wells

If necessary, to supplement monitoring wells to be installed as part of the RI, additional overburden monitoring wells will be installed upon completion of the IRM and Site restoration activities. These monitoring wells will extend into the glacial till layer present at a depth of about 13 ft. below the surface of the concrete floor and they will consist of 2-inch diameter PVC screen and flush-coupled riser pipe.

The annulus around the collection sump and well screen will be filled with a washed and graded silica sand pack that will be placed to at least two feet above the top of the screen interval. A minimum two-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 to 4% granular bentonite mixture and water. The cement/bentonite grout will be tremied into the well annulus to approximately one foot below grade. Wells will be completed with lockable flush mounted protective curb boxes.

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. Monitoring well development can occur a minimum of 48 hours after installation. 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 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-22 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 and at least 10 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.

4.0 QA/QC Protocols

DAY will be responsible for the project management, coordination and scheduling, subcontracting, and quality assurance/quality control (QA/QC) of IRM activities. General QA/QC procedures, including sample preparation and holding times, are described in the QAPP (Appendix G).

Samples will be obtained, handled and characterized in accordance with NYSDEC Analytical Services Protocol (ASP) methods. Once obtained, samples will be immediately labeled and stored on ice in a cooler. An appropriately qualified New York State Department of Health (NYSDOH) Environmental Laboratory Approval Plan (ELAP) Contract Laboratory Protocol (CLP) certified subcontracted laboratory will be retained to complete the required testing. Analytical laboratory methods reflect the requirements of the NYSDEC ASP, Revised June 2000. Chain-of-custody requirements will be adhered to for designated analyses.

5.0 Health and Safety

A site-specific HASP has been prepared for this project and is included as Appendix F. The HASP will be reviewed by DAY employees before starting site work. Other entities can adopt the protocols set forth in the HASP, or can develop their own HASP which must be submitted to the NYSDEC and NYSDOH. Monitoring of the work area and screening of soil and groundwater will be conducted throughout the duration of IRM activities using the following (or equivalent) instrumentation:

- Aerosol particulate meter (Thermo Scientific Data RAM)
- EntryRAE Multi-Gas Monitor (or equivalent)
- Two MiniRAE 2000 or MiniRAE 3000 PIDs equipped with a 10.2 eV or 10.6 eV lamps.

Air monitoring at the Site will be continuous during ground intrusive activities and during the demolition of building slabs. Air monitoring will be periodic during non-intrusive activities. Daily recorded perimeter real-time air monitoring readings for VOCs, as required by the CAMP presented in Appendix F, will be submitted to the NYSDEC and NYSDOH via email (as practicable) each day that the monitoring is implemented.

DAY employees and the subcontractor present on the Site during the IRM will have completed the Occupational Health and Safety (OSHA) 40-hour Hazardous Waste Operations (HAZWOPER) training with current refresher courses. A copy of the HASP will be available on-site at all times during the IRM activities. Note: Employees of Weber Knapp Company will be restricted from the IRM area to the extent practicable

Professional personnel entering the Site will have current OSHA HAZWOPER Certifications. Non-professional personnel will maintain OSHA 10-hour Certifications, at a minimum.

6.0 Project Organization

The personnel for this project are anticipated as follows:

Ray Kampff	DAY Project Manager 585/454-0210 x108 rkampff@daymail.net
Claire Quadri or Charles Hampton, P.G.	DAY Field Team Leader 716/218-6564 585/820-9021 champton@daymail.net
Donald Pangborn	Weber Knapp Company Representative 716/484-9135x203 dpangborn@weberknapp.com
Erik Dahlgren	Weber Knapp Company Representative 716/484-9135x231 edahlgren@weberknapp.com

Subcontractors

To Be Determined	Environmental Remediation Contractor(s) Analytical Laboratory Data Validation

7.0 IRM Construction Completion Report

Upon receipt and review of necessary data, an IRM Construction Completion Report will be prepared including:

- A discussion of the IRM work completed;
- A Site Plan with test locations;
- Extent of soil removal;
- Manifests for off-site disposal of waste materials;
- Photographs;
- Tabulated post-excavation soil sampling results, including comparison to appropriate NYSDEC SCO in 6 NYCRR Part 375; and
- Analytical laboratory reports and chain-of-custody documentation.

Initially a draft copy of this report will be provided for review and comment and subsequently hard and electronic copies of the final report will be submitted.

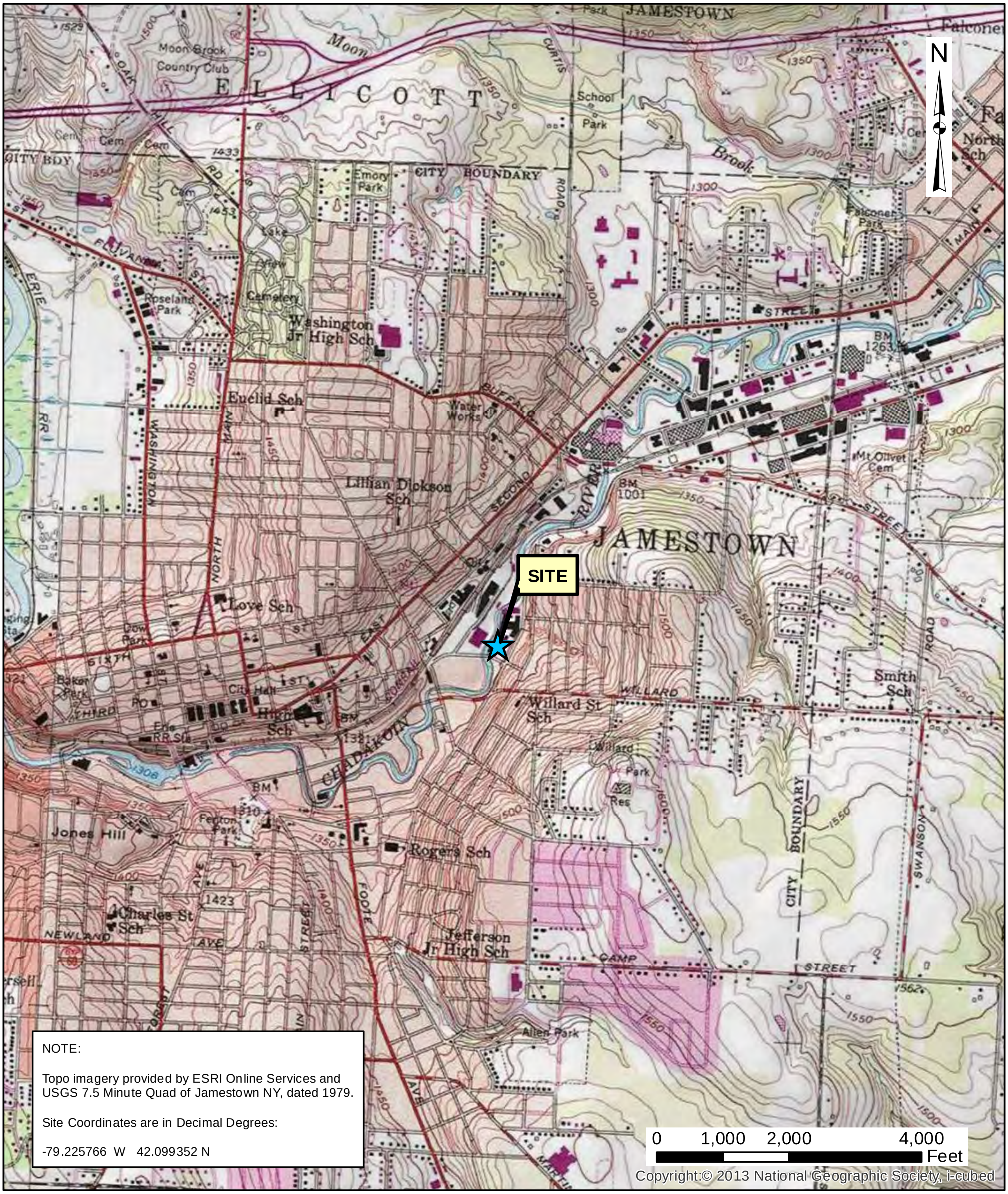
8.0 Schedule

A project schedule that includes the anticipated fieldwork and report submission is included as Appendix H.

9.0 Citizen Participation

Applicable components of the Citizen Participation Plan (CPP) developed for this project will be implemented as they relate to the IRM work.

FIGURES



NOTE:

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

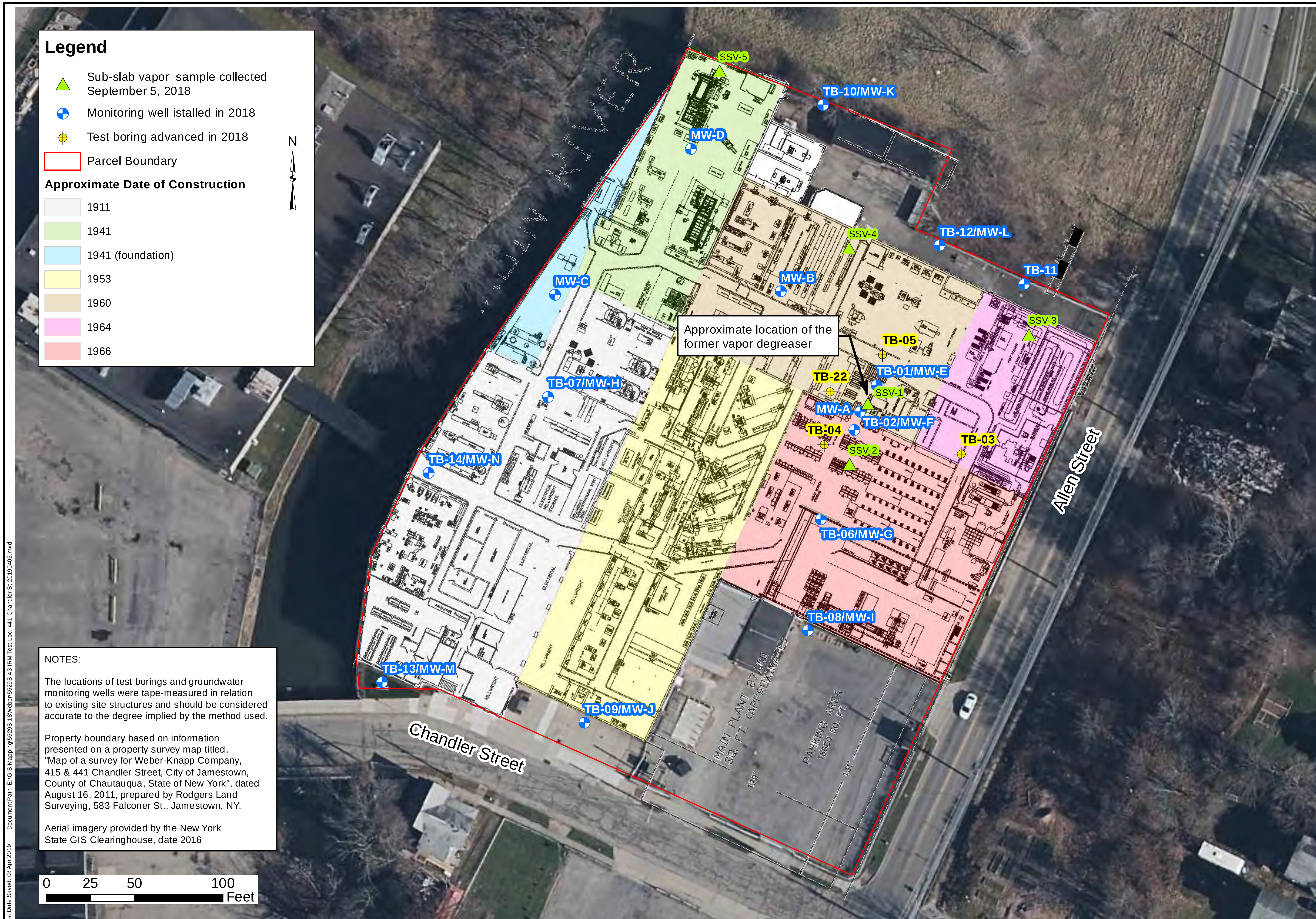
Site Coordinates are in Decimal Degrees:

-79.225766 W 42.099352 N

Document Path: E:\GIS Mapping\5529S-18Weber\5529S-42 IRM Locus_441 Chandler St 20190325.mxd

Last Date Saved: 05 Apr 2019

Date 04-05-2019	day DAY ENVIRONMENTAL, INC. Environmental Consultants Rochester, New York 14606 New York, New York 10170	Project Title 441 CHANDLER STREET JAMESTOWN, NEW YORK INTERIM REMEDIAL MEASURES WORK PLAN	Project No. 5529S-19 FIGURE 1
Drawn By CAH		Drawing Title Project Locus Map	
Scale AS NOTED			



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DATE 04-2019
DATE DRAWN 04-2019
DATE ISSUED 04-08-2019
DESIGNED BY CAH
DRAWN BY CAH
SCALE AS NOTED

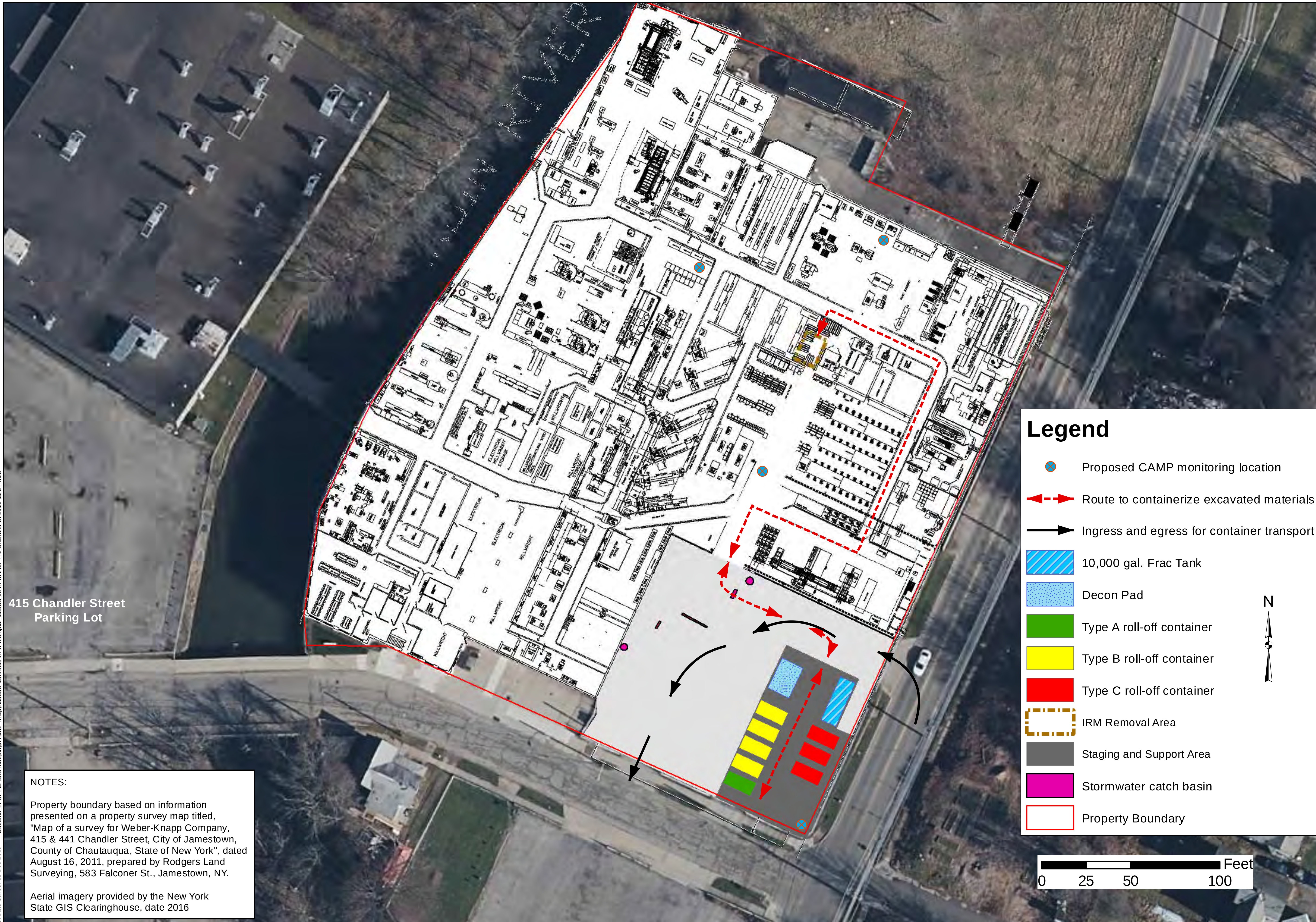
day
DAY ENVIRONMENTAL, INC.
Environmental Consultants
Rochester, New York 14606
New York, New York 10170

Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
INTERIM REMEDIAL MEASURES WORK PLAN

Drawing Title
Site Plan with Test Locations Completed to Date

Project No.
5529S-18

FIGURE 2



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

DESIGNED BY CAH	DATE 04-2019
DRAWN BY CAH	DATE DRAWN 04-2019
SCALE AS NOTED	DATE ISSUED 12-12-2019

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Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
INTERIM REMEDIAL MEASURES WORK PLAN

Drawing Title
Proposed IRM Areas

Project No.
5635S-19

FIGURE 3

Last Date Saved: 03 Dec 2019 Document Path: E:\GIS Mapping\Weber-Knapp\5635S-19\Weber\IRM Workplan\5635S-09 IRM Area 441 Chandler St 2019-11-27.mxd

Last Date Saved: 27 Nov 2019 Document Path: E:\GIS Mapping\Weber-Knapp\5635S-19Weber\IRM Workplan\5635S-10 Delineation Studies 441 Chandler St 20191127.mxd

DATE	11-2019
DATE DRAWN	11-2019
DATE ISSUED	11-27-2019
PROJECT MANAGER	CAH
DRAWN BY	CAH/CPS
SCALE	AS NOTED

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Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
INTERIM REMEDIAL MEASURES WORK PLAN

Drawing Title
Delineation Studies

Project No.
5635S-19

FIGURE 4

TABLES

TABLE 1
441 CHANDLER STREET
JAMESTOWN, NEW YORK
NYSDEC BCP SITE C907048

SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) - SOIL SAMPLES - IRM DELINEATION STUDIES

Compound	Protection of GW SCO[1]	Restricted Industrial Use SCO[2]	Sample Designation and Date															
			IRM-01 (8.5-9')	IRM-02 (9.5-10')	IRM-03 (8-8.5')	IRM-03 (12-12.5')	IRM-04 (12-12.5')	IRM-05 (12-12.5')	IRM-06 (8-8.5')	IRM-06 (10-10.5')	IRM-06 (14-15')	IRM-07 (8-8.5')	IRM-07 (9-9.5')	IRM-08 (8-8.5')	IRM-08 (10-10.5')	IRM-08 (14.2-14.5')	IRM-09 (10-12')	IRM-11 (11-11.5')
			9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/27/2019	9/27/2019
1,1-Dichloroethene*	0.33	1,000	ND (0.046)	ND (0.0016)	ND (0.005)	ND (11)	ND (0.00091)	ND (0.062)	ND (0.098)	ND (0.47)	ND (0.058)	ND (0.120)	ND (0.082)	ND (0.00095)	ND (0.054)	ND (0.00098)	ND (0.065)	ND (0.00092)
trans-1,2-Dichloroethene*	0.19	1,000	ND (0.069)	ND (0.0024)	ND (0.130)	ND (16)	ND (0.0014)	ND (0.093)	ND (0.15)	ND (0.71)	ND (0.087)	ND (0.190)	ND (0.12)	ND (0.0014)	ND (0.080)	ND (0.0015)	ND (0.098)	ND (0.0014)
cis-1,2-Dichloroethene*	0.25	1,000	ND (0.046)	0.014	ND (0.085)	**9.0 J**	0.00074 J	**1.7**	0.098	**5.70**	**0.650**	0.130	**2.60**	0.0015	**1.30**	**0.038**	**2.0**	0.00056 J
1,2-Dichlorobenzene*	1.1	1,000	ND (0.092)	ND (0.0032)	ND (0.170)	ND (22)	ND (0.0018)	ND (0.120)	ND (0.20)	ND (0.94)	ND (0.120)	ND (0.25)	ND (0.16)	0.00026 J	ND (0.110)	ND (0.002)	ND (0.130)	ND (0.0018)
1,2,4-Trichlorobenzene*	3.4	NS	ND (0.092)	ND (0.0032)	ND (0.170)	ND (22)	ND (0.0018)	ND (0.120)	ND (0.20)	ND (0.94)	ND (0.120)	ND (0.25)	ND (0.16)	0.00029 J	ND (0.110)	ND (0.002)	ND (0.130)	ND (0.0018)
1,4-Dichlorobenzene*	1.8	250	ND (0.092)	ND (0.0032)	ND (0.170)	ND (22)	ND (0.0018)	ND (0.120)	ND (0.20)	ND (0.94)	ND (0.120)	ND (0.25)	ND (0.16)	0.00033 J	ND (0.110)	ND (0.002)	ND (0.130)	ND (0.0018)
2-Butanone	0.3	NS	ND (0.46)	ND (0.016)	ND (0.85)	ND (110)	ND (0.0091)	ND (0.62)	ND (0.98)	ND (4.7)	ND (0.58)	ND (1.20)	ND (0.82)	0.0076 J	ND (0.54)	ND (0.0098)	ND (0.650)	ND (0.0092)
Acetone	0.05	1,000	ND (0.46)	0.041	**0.45 J**	ND (110)	ND (0.0091)	ND (0.62)	**0.58 J**	ND (4.7)	ND (0.58)	**0.71 J**	**0.520 J**	0.031	ND (0.54)	0.0074 J	ND (0.650)	ND (0.0092)
Benzene	0.06	89	ND (0.023)	ND (0.00079)	ND (0.043)	ND (5.4)	ND (0.00045)	ND (0.031)	ND (0.049)	ND (0.24)	ND (0.029)	ND (0.063)	ND (0.041)	0.0004 J	ND (0.027)	ND (0.00049)	ND (0.033)	ND (0.00046)
Bromomethane	NA	NA	ND (0.092)	ND (0.0032)	ND (0.17)	ND (22)	ND (0.0018)	ND (0.12)	ND (0.25)	ND (0.94)	ND (0.12)	ND (0.25)	ND (0.16)	ND (0.0019)	ND (0.11)	ND (0.002)	ND (0.13)	ND (0.0018)
Chlorobenzene*	1.1	1,000	ND (0.023)	ND (0.00079)	ND (0.043)	ND (5.4)	ND (0.00045)	ND (0.031)	ND (0.049)	ND (0.24)	ND (0.029)	ND (0.063)	ND (0.041)	0.00049	ND (0.027)	ND (0.0015)	ND (0.033)	ND (0.00046)
Chloroform*	0.37	700	0.012 J	0.0003 J	0.021 J	ND (16)	0.00019 J	ND (0.093)	0.025 J	**0.120 J**	0.014 J	0.029 J	0.019 J	0.00018 J	ND (0.080)	ND (0.0098)	ND (0.098)	0.00018 J
Cyclohexane	NA	NA	ND (0.46)	ND (0.016)	ND (0.85)	ND (110)	ND (0.0091)	ND (0.62)	ND (0.98)	ND (4.7)	ND (0.58)	ND (1.20)	ND (0.82)	0.0037 J	ND (0.54)	ND (0.0098)	ND (0.098)	ND (0.0092)
Ethylbenzene	1	780	ND (0.046)	ND (0.0016)	ND (0.085)	**1.5 J**	ND (0.00091)	ND (0.062)	ND (0.098)	ND (0.47)	ND (0.058)	0.024 J	ND (0.082)	0.00078 J	ND (0.054)	ND (0.00098)	ND (0.065)	ND (0.00092)
Isopropylbenzene	2.3	NA	ND (0.046)	ND (0.0016)	ND (0.085)	ND (11)	ND (0.0091)	ND (0.062)	ND (0.098)	ND (0.47)	ND (0.058)	ND (0.120)	ND (0.082)	0.004	ND (0.054)	ND (0.00098)	ND (0.065)	ND (0.00092)
Methyl Acetate	NA	NA	ND (0.180)	ND (0.0063)	0.37	ND (43)	ND (0.0036)	ND (0.25)	0.76	ND (1.9)	ND (0.23)	ND (0.50)	ND (0.33)	0.0011 J	ND (0.210)	ND (0.0039)	ND (0.260)	ND (0.0037)
Methyl cyclohexane	NA	NA	ND (0.180)	ND (0.0063)	ND (0.34)	ND (43)	ND (0.0036)	ND (0.25)	ND (0.39)	ND (1.9)	ND (0.23)	0.25 J	0.062 J	0.0071	ND (0.210)	ND (0.0039)	0.096 J	ND (0.0037)
Tetrachloroethene*	1.3	300	ND (0.023)	ND (0.00079)	ND (0.043)	ND (5.4)	ND (0.00045)	ND (0.031)	ND (0.049)	ND (0.24)	ND (0.029)	ND (0.063)	0.020 J	ND (0.00047)	ND (0.027)	ND (0.00049)	ND (0.033)	ND (0.00046)
Toluene	0.7	1,000	ND (0.046)	ND (0.0016)	ND (0.085)	ND (11)	ND (0.00091)	ND (0.062)	ND (0.098)	ND (0.47)	ND (0.058)	0.081 J	ND (0.082)	0.0015	ND (0.054)	ND (0.00098)	ND (0.065)	ND (0.00092)
Trichloroethene (TCE)*	0.47	400	0.14	0.0032	**3.1**	**1,700**	0.004	**1.0**	0.10	**81.0**	0.170	**16.00**	**8.60**	0.0068	0.17	0.032	**14.00**	0.00094
Vinyl chloride*	0.02	27	ND (0.010)	0.0019	ND (0.085)	ND (11)	ND (0.00091)	**0.036 J**	**0.037 J**	ND (0.47)	**0.050 J**	ND (0.120)	**0.041 J**	0.0016	**0.21**	**0.036**	ND (0.065)	0.00037 J
Xylenes (mixed)	0.26	1,000	ND (0.092)	ND (0.0032)	ND (0.170)	ND (22)	ND (0.0018)	ND (0.120)	ND (0.20)	ND (0.94)	ND (0.120)	0.155 J	ND (0.16)	0.0045	ND (0.110)	ND (0.002)	ND (0.130)	ND (0.0018)
(TCLP) Trichloroethene		0.5	ND (0.005)	ND (0.005)	0.086	**5.60**	ND (0.005)	0.038	0.0024 J	**1.00**	0.005	0.024	0.11	0.004 J	0.50	0.0028 J	0.120	ND (0.005)
(TCLP) Vinyl chloride	MCCTC[3]	0.2	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	0.005 J	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	0.0012 J	ND (0.010)	ND (0.010)	ND (0.010)
(TCLP) Tetrachloroethene		0.7	ND (0.005)	ND (0.005)	ND (0.005)	0.0024 J	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)

Compound	Protection of GW SCO[1]	Restricted Industrial Use SCO[2]	Sample Designation and Date											
			IRM-12 (7.5')	IRM-13 (11')	IRM-13 (11.2')	IRM-14 (2')	IRM-16 (7.5')	IRM-16 (9.5')	IRM-17 (11.5')	IRM-19 (7.5')	IRM-19 (11.5')	IRM-20 (0.7')	IRM-20 (6.5')	IRM-20 (11')
			10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019
1,1-Dichloroethene*	0.33	1,000	ND (0.00023)	NT	ND (0.38)	ND (0.015)	ND (0.00027)	ND (16)	ND (1.9)	ND (0.00024)	ND (1.3)	ND (0.026)	ND (0.018)	0.037 J
trans-1,2-Dichloroethene*	0.19	1,000	ND (0.00013)	NT	ND (0.22)	ND (0.0088)	ND (0.00015)	ND (9.0)	ND (1.1)	ND (0.00014)	ND (0.77)	ND (0.015)	ND (0.01)	0.029 J
cis-1,2-Dichloroethene*	0.25	1,000	0.001	NT	**4.90**	0.23	0.0014	**44.0 J**	**28.0**	0.00036 J	ND (0.98)	0.140	0.019 J	**15.0**
1,2-Dichlorobenzene*	1.1	1,000	ND (0.00014)	NT	ND (0.23)	ND (0.0093)	ND (0.00016)	ND (9.5)	ND (1.2)	ND (0.00014)	ND (0.81)	ND (0.015)	ND (0.011)	ND (0.012)
1,2,4-Trichlorobenzene*	3.4	NS	ND (0.00026)	NT	ND (0.43)	ND (0.018)	ND (0.00031)	ND (18)	ND (2.2)	ND (0.00027)	ND (1.5)	ND (0.029)	ND (0.02)	ND (0.023)
1,4-Dichlorobenzene*	1.8	250	0.00019 J	NT	ND (0.27)	ND (0.011)	ND (0.00019)	ND (11)	ND (1.4)	ND (0.00017)	ND (0.96)	ND (0.018)	ND (0.013)	ND (0.015)
2-Butanone	0.3	NS	ND (0.0021)	NT	ND (3.5)	ND (0.14)	0.024	ND (150)	ND (18)	0.0072 J	ND (12)	ND (0.24)	ND (0.16)	ND (0.19)
Acetone	0.05	1,000	0.021	NT	ND (7.6)	ND (0.31)	ND (0.0054)	ND (320)	ND (39)	0.046	ND (27)	ND (0.52)	ND (0.36)	ND (0.41)
Benzene	0.06	89	ND (0.00016)	NT	ND (0.26)	ND (0.011)	ND (0.00019)	ND (11)	ND (1.3)	ND (0.00016)	ND (0.93)	ND (0.018)	ND (0.012)	ND (0.014)
Bromomethane	NA	NA	ND (0.00056)	NT	ND (0.92)	0.088 J	ND (0.00066)	ND (38)	ND (4.7)	ND (0.00058)	ND (3.2)	0.082 J	0.096 J	ND (0.05)
Chlorobenzene*	1.1	1,000	ND (0.00012)	NT	ND (0.20)	ND (0.0082)	ND (0.00014)	ND (8.4)	ND (1.0)	ND (0.00012)	ND (0.71)	ND (0.014)	ND (0.0094)	ND (0.011)
Chloroform*	0.37	700	ND (0.00014)	NT	0.22	0.011 J	0.00026 J	**11.0 J**	**1.2 J**	0.00021 J	ND (0.78)	0.016 J	0.011 J	0.014 J
Cyclohexane	NA	NA	ND (0.00052)	NT	ND (0.86)	ND (0.035)	ND (0.00061)	ND (36)	ND (4.4)	ND (0.00054)	ND (3.0)	ND (0.058)	ND (0.045)	ND (0.046)
Ethylbenzene	1	780	0.00043 J	NT	ND (0.22)	ND (0.091)	ND (0.00016)	ND (9.3)	ND (1.1)	ND (0.00014)	ND (0.79)	ND (0.015)	ND (0.01)	ND (0.012)
Isopropylbenzene	2.3	NA	0.00055 J	NT	ND (0.17)	ND (0.007)	ND (0.00012)	ND (7.2)	ND (0.88)	ND (0.00011)	ND (0.61)	ND (0.012)	ND (0.0081)	ND (0.0093)
Methyl Acetate	NA	NA	0.004	NT	ND (1.5)	ND (0.061)	0.0076	ND (63)	ND (7.7)	0.0078	ND (5.3)	ND (0.10)	ND (0.07)	ND (0.081)
Methyl cyclohexane	NA	NA	ND (0.00058)	NT	2.70 J	ND (0.039)	ND (0.00068)	ND (40)	ND (4.9)	ND (0.0006)	ND (3.4)	0.16 J	ND (0.04)	0.15 J
Tetrachloroethene*	1.3	300	ND (0.00019)	NT	ND (0.31)	ND (0.013)	ND (0.00022)	ND (13)	ND (1.6)	ND (0.00019)	ND (1.1)	ND (0.021)	ND (0.014)	ND (0.017)
Toluene	0.7	1,000	0.00083 J	NT	ND (0.86)	ND (0.035)	0.00069 J	ND (36)	ND (4.4)	0.0011	ND (3.0)	ND (0.058)	ND (0.04)	ND (0.046)
Trichloroethene (TCE)*	0.47	400	0.007	NT	**330**	**11.0**	0.07	**12,000**	**1,100**	0.016	**1,000**	**15.0**	**4.0**	**18.0**
Vinyl chloride*	0.02	27	0.00047 J	NT	ND (0.53)	ND (0.022)	0.001 J	ND (22)	ND (2.7)	0.00036 J	ND (1.9)	ND (0.036)	ND (0.025)	**0.47**
Xylenes (mixed)	0.26	1,000	0.00175 J	NT	ND (0.89)	ND (0.036)	ND (0.00063)	ND (37)	ND (4.5)	ND (0.00056)	ND (3.4)	ND (0.06)	ND (0.042)	ND (0.048)
(TCLP) Trichloroethene		0.5	NT	**98 (D)**	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
(TCLP) Vinyl chloride	MCCTC[3]	0.2	NT	0.0098	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
(TCLP) Tetrachloroethene		0.7	NT	0.015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Compound	Protection of GW SCO[1]	Restricted Industrial Use SCO[2]	Sample Designation and Date								
			MW-A (4')	MW-A (8')	MW-A (11')	MW-A (13')	TB-01 (11')	TB-01 (12.5')	TB-02 (11.5')	TB-05 (12.5')	TB-22 (13')
			11/8/2018	11/8/2018	11/8/2018	11/8/2018	12/19/2018	12/19/2018	12/19/2018	12/19/2018	12/20/2018
1,1-Dichloroethene*	0.33	1,000	ND (0.0048)	ND (0.0562)	0.121 J	ND (0.205)	ND (46)	ND (0.160)	0.11 J	ND (0.20)	0.0019 J
trans-1,2-Dichloroethene*	0.19	1,000	ND (0.0048)	ND (0.0562)	ND (0.185)	ND (0.205)	ND (46)	ND (0.160)	0.049 J	0.022 J	0.0013 J
cis-1,2-Dichloroethene*	0.25	1,000	0.0074	ND (0.0562)	**12**	**12.6**	**34.0 J**	**0.26 J**	**17**	**2.9**	**2.9**
Tetrachloroethene*	1.3	300	ND (0.0048)	ND (0.0562)	ND (0.185)	ND (0.205)	ND (46)	ND (0.160)	ND (0.240)	0.067 J	ND (0.0024)
Trichloroethene (TCE)*	0.47	400	**24.5**	0.0382 J	**32.4**	**198**	**4,400**	**10**	**81**	**100**	**1.4**
Vinyl chloride*	0.02	27	ND (0.0048)	ND (0.0562)	**0.48**	**0.193 J**	ND (46)	ND (0.160)	**1.5**	**0.021 J**	**0.025 J**
n-Butylbenzene	12	1,000	NT	NT	NT	NT	NT	NT	NT	NT	NT
sec-Butylbenzene	11	1,000	NT	NT	NT	NT	NT	NT	NT	NT	NT

NOTES

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

(1) = Soil Cleanup Objective (SCO) for Protection of Groundwater 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.

(3) = Maximum Concentration of Contaminants for the Toxicity Characteristic as reference in Table 1 of 40 CFR § 261.24.

NT = Not Tested

NA = Not Available

ND = Not Detected at a concentration greater than the detection 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.

D = concentration following dilution

Highlighted value exceeds the Protection of Groundwater SCO

Highlighted value exceeds the Restricted Industrial Use SCO

Highlighted value exceeds the MCCTC

TABLE 2
441 CHANDLER STREET
JAMESTOWN, NEW YORK
NYSDEC BCP SITE C907048

SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) - GROUNDWATER SAMPLES - IRM DELINEATION STUDIES

Detected Constituent	CAS Number	Groundwater Standard or Guidance Value (1)	Sample Location and Date					
			IRM-05 10/11/19 Water			IRM-10 12/26/2018 Water		
Acetone	67-64-1	50	**7.3**			**6**		
1,1-Dichloroethene	75-35-4	5	**0.3**	**J**		0.5	U	
cis-1,2-Dichloroethene	156-59-2	5	**58**		**X**	**1.2**	**J**	
Trichloroethene (TCE)	79-01-6	5	**29**		**X**	**5.8**		**X**
Vinyl chloride	75-01-4	2	**13**		**X**	**0.46**	**J**	
Methyl acetate	79-20-9	NA	**2.9**			**1.6**	**J**	
Total Chlorinated VOCs		NA	100.3			7.5		
Total VOCs		NA	110.5			15.6		

Notes:

Groundwater standards and reported concentrations in ug/L or ppb

VOC = Volatile Organic Compound

J = Estimated Value

U = Not detected above the concentration indicated

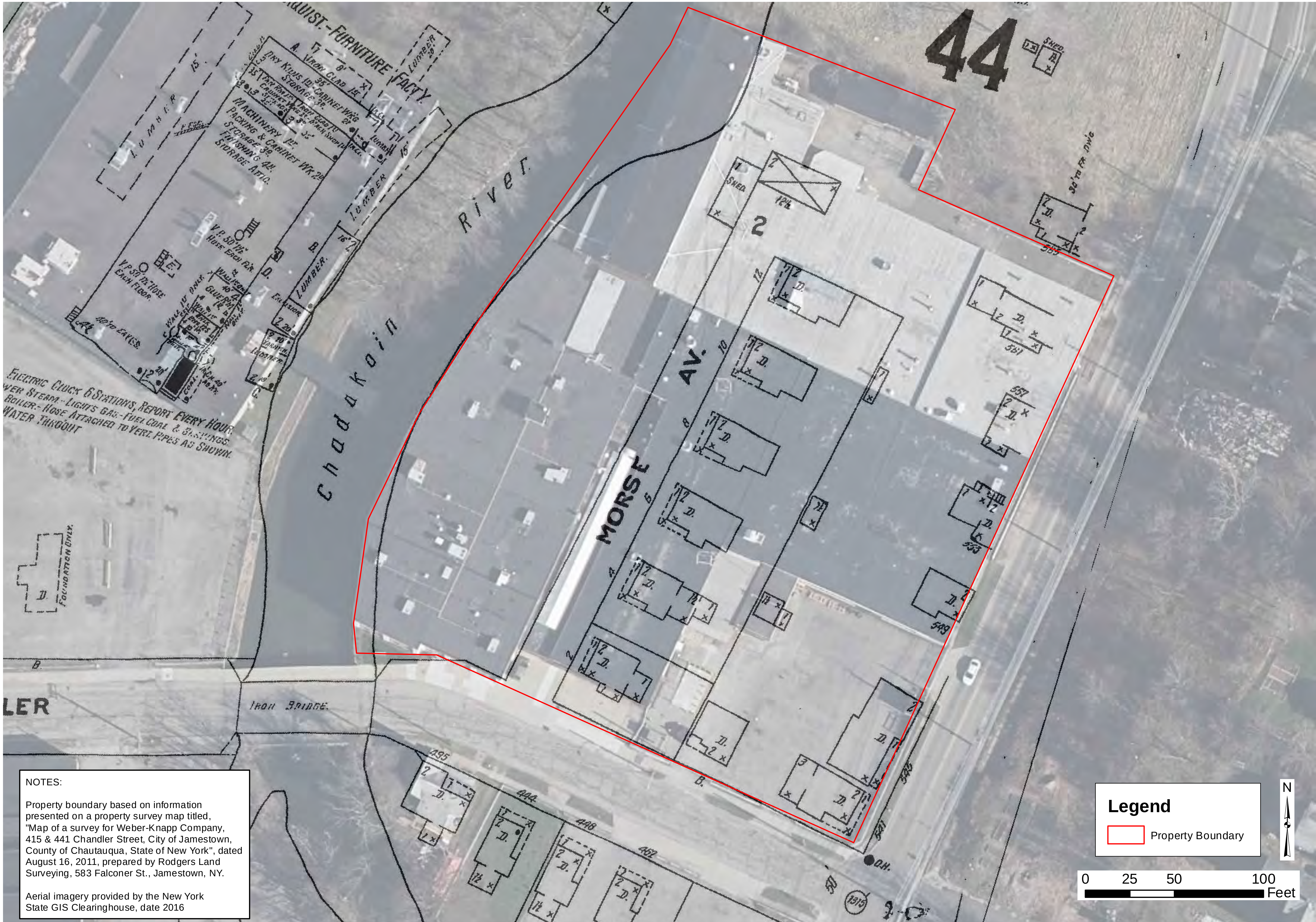
NA = Not available

(1) Groundwater standard or guidance value are as referenced in NYSDEC TOGS 1.1.1 dated June 1998 with April 2000 and June 2004 addendums.

X = Concentration exceeds groundwater standard or guidance value

APPENDIX A

Historic Sanborn Fire Insurance Maps



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

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

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

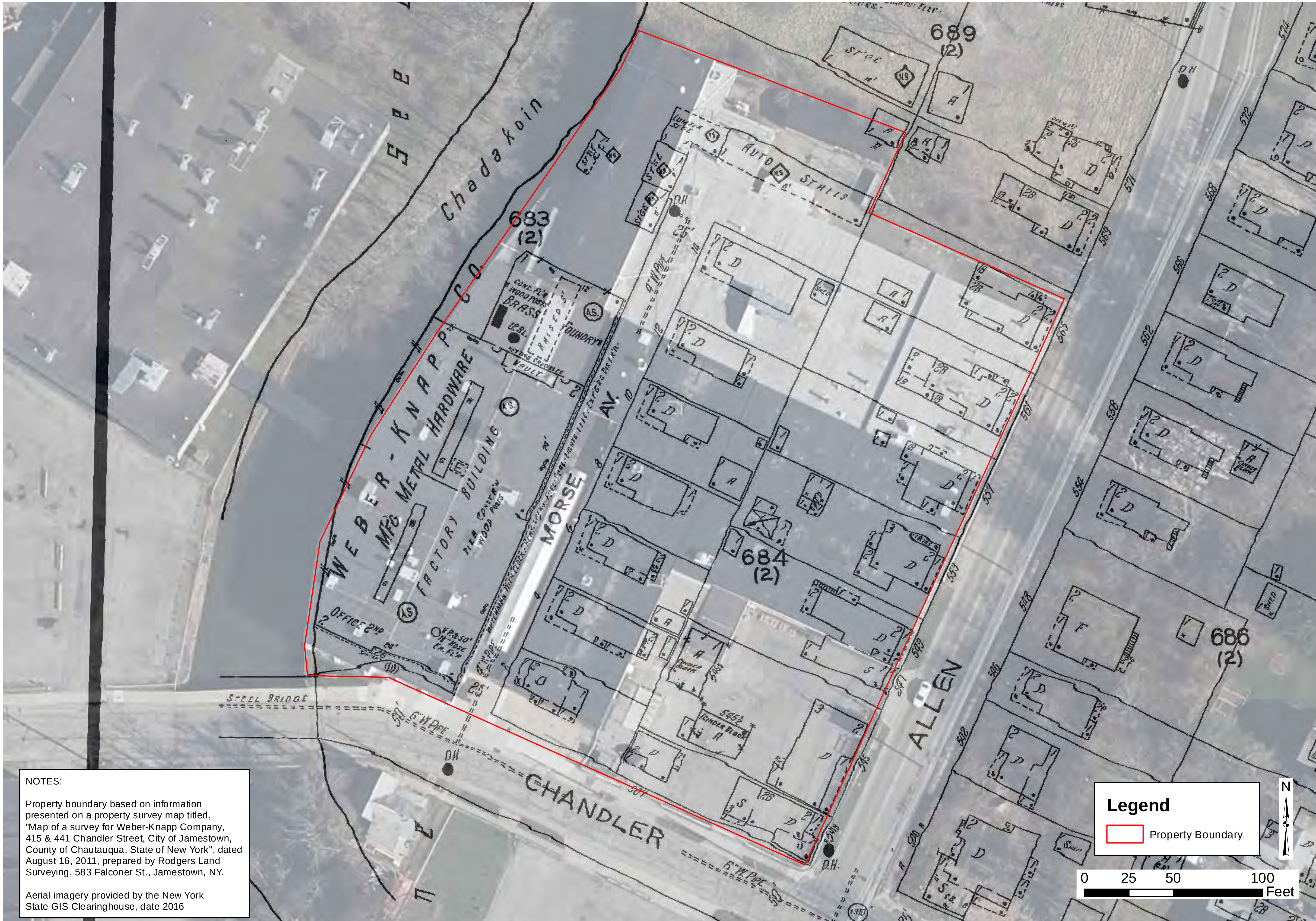
Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK
INTERIM REMEDIAL MEASURES WORK PLAN

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-18Weber\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

Last Date Saved: 09 Apr 2019 Document Path: E:\GIS Mapping\5529S-18\Weber\5529S-487 BCP 1930 Sanborn overlay.mxd

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

day
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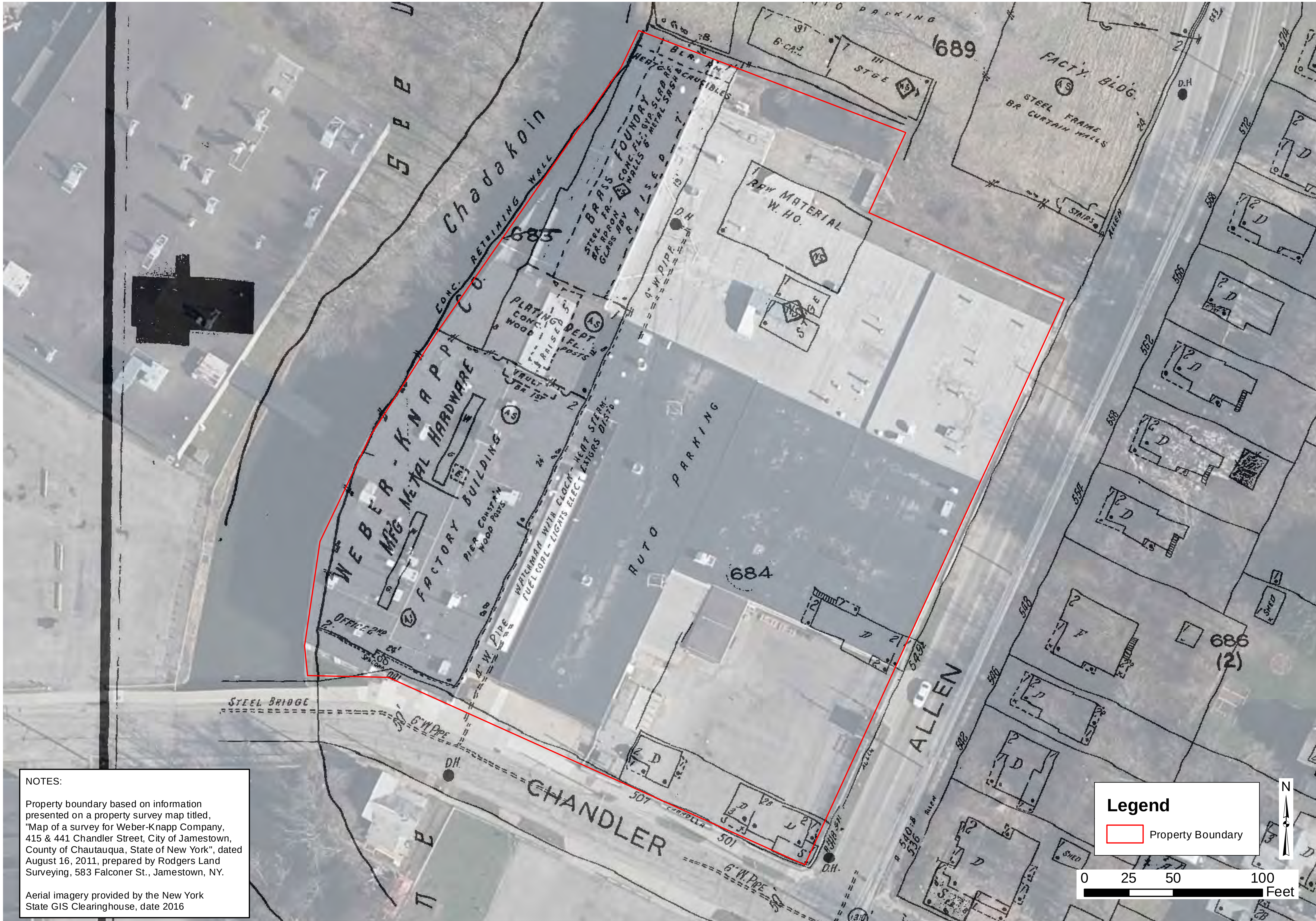
Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK

INTERIM REMEDIAL MEASURES WORK PLAN

Drawing Title
1930 Sanborn Fire Insurace Map Overlay

Project No.
5529S-18

APPENDIX A



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

DESIGNED BY	CAH
DATE	04-2019
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DATE DRAWN	04-2019
SCALE	AS NOTED
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day
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Project Title
441 CHANDLER STREET
JAMESTOWN, NEW YORK

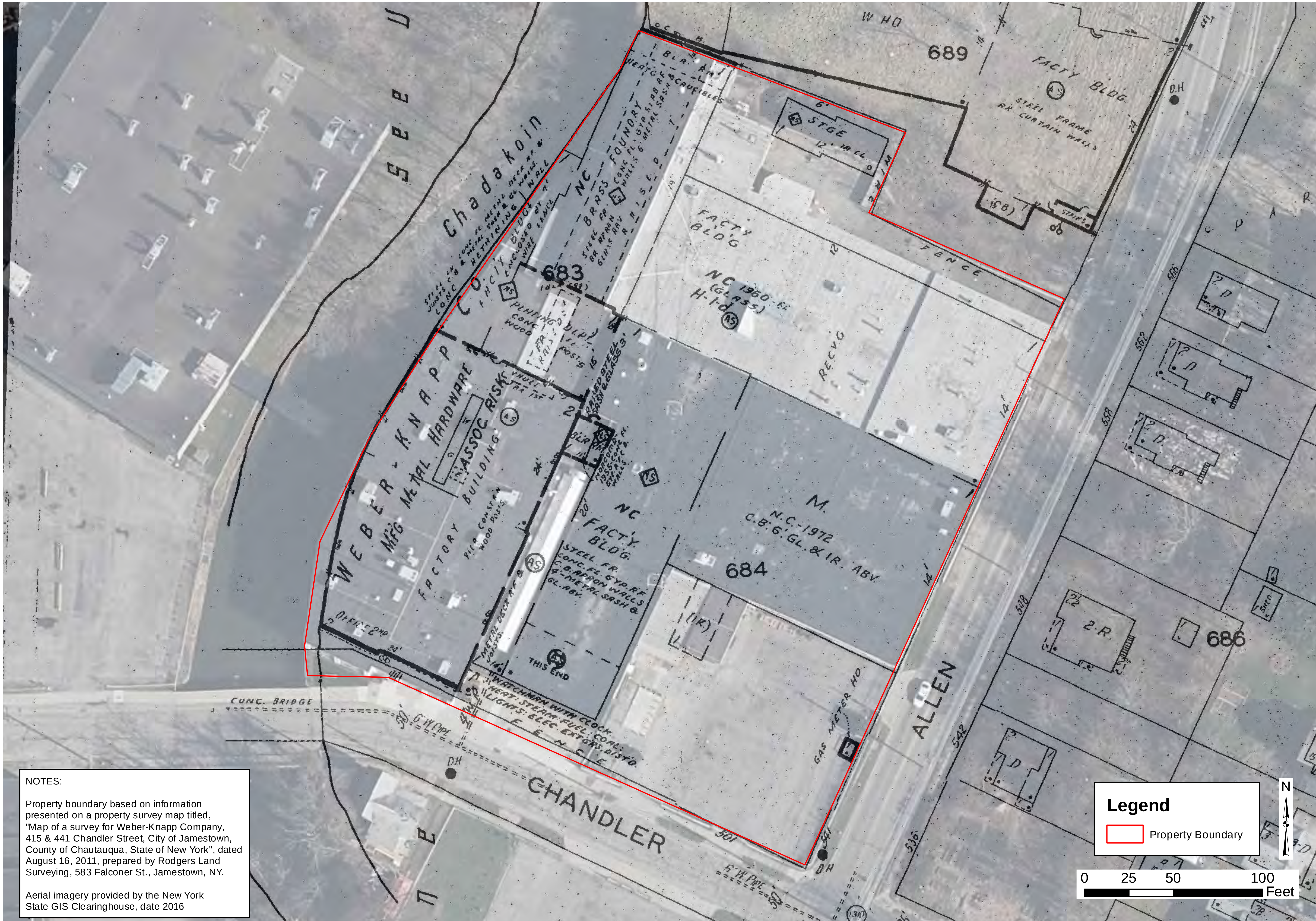
INTERIM REMEDIAL MEASURES WORK PLAN

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-18Weber\5529S-49 BCP 1949 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

DESIGNED BY CAH	DRAWN BY CAH	SCALE AS NOTED
DATE 04-2019	DATE DRAWN 04-2019	DATE ISSUED 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
INTERIM REMEDIAL MEASURES WORK PLAN

Drawing Title
1980 Sanborn Fire Insurance Map Overlay

Project No.
5529S-18

APPENDIX A

APPENDIX B

Vapor Degreaser Schematic

ITEM	QUAN	PART Nº	DESCRIPTION
1	1	4-74526	TANK DETAIL
2	1	4-74527	HOOD DETAIL
3	1	2-74601	1¼"-8 PIPE SINGLE BK. HDR. TYPE STEAM COIL
4	1	2-74600	1¼"-8 PIPE SINGLE BK HDR TYPE STEAM COIL
5	1	1-47143	1¼"-6 PASS HAIRPIN TYPE STEAM COIL
6	1	2-59640	1"-8 HIGH COOLING COIL-R.H INLET
7	1	2-62008	1"-8 HIGH COOLING COIL-L.H. INLET
8	2	3-18228	1¼"-GALV. SOLVENT COOLER
9	1	3-36785	1¼" x 1½" STN. STL. WATER SEPARATOR
10	1	1-47147	CHIP PAN
11	2	3-74545	SPROCKET FRAME
12	2	3-74545	" "
13	2	3-74545	" "
14	2	3-74545.	" "
15	2	3-74545	SPROCKET FRAME
16	2	1-54636	SPROCKET FRAME
17	1	2-47140	POSITIONING ARM GUIDES
18	1	"	" " "
19	1	"	" " "
20	2	3-47146	ROTATING BASKET GEARRACK
21	1	"	" " " "
22	1	"	" " " "
23	1	2-54637	" " " "
24	1	"	" " " "
25	2	NP-32	PILLOW BLOCKS
26	2	T-59441	SPEC'L-12 GAP TOOTH SPKT. BUSHED FOR 2"ϕ SHAFT
27	6	T-59440	" 9 GAP TOOTH " " " " "
28	12	T-59439	" 7 GAP TOOTH " " " " "
29	2	T-59439	" 7 GAP TOOTH " BORED 2"ϕ K.S. ½" x ¼"
30	2	G-162	30T. SPKT-15.82" P.D BORE 2"ϕ K.S. ½" x ¼"
31	2	T-24599	10T. SPKT- 5.35" P.D. BORE 2"ϕ K.S. ½" x ¼"
32	1	G-149-A	38 T. SPKT. -20.03" P.D. 2"ϕ PLAIN BORE
33	1	G-163-A	SHEAR ARM - BORE 2"ϕ K.S. ½" x ¼"
34	1	T-24599	10T. SPKT. - 5.35" P.D. BORE 1⅝"ϕ K.S. ⅜" x 3/16"
35	1	350	FOOTE BROS "HYPOWER" REDUCER 40/1 RATIO
36	1		1½ HP 1750 RPM MOTOR 460V. 3PH. 60~
37	1		6.2" P.D SHEAVE 1"ϕ BORE ¼" x ⅛" K.S.
38	1		4.2" P.D. SHEAVE ⅞"ϕ BORE 3/16" x 3/32" K.S.
39	1		"A" SECTION "V" BELT 46" LG.
40	4	2-30331	SLEEVE BEARINGS
41	18	T-1729 DF	SPROCKET PINS 2"ϕ
42	17	4-74528	ROTATING FIXTURES
43	1	1-74535	EXHAUST HOUSING
44	1	S-90 EM	ABC UTILITY SET / ¾ HP MOTOR

CONVEYOR SPEED -12 FPM INTERMITTENT START- STOP
CONVEYOR SPACING- EVERY 12 LINKS (48")
CONVEYOR CHAIN- SPCL. S-102-B 4" PITCH
CHAIN LENGTH- 17 STATIONS 68'-0" EA. STRAND

WEBER-KNAPP COMPANY
P.O. # 4146

SYM.	DESCRIPTION	BY	DATE
A	B of M ADDED		

RECORD OF CHANGES

BARON · BLAKESLEE · INC.
CHICAGO, ILL. 60650

TITLE: SPECIAL TH TYPE LIQUID-LIQUID-VAPOR DEGREASER / ROTARY FIXTURE - STEAM

DR. BY	TR. BY	CHK. BY	SCALE	DATE
WW				11-13-67

FIRST MADE FOR S.O. 20175

DWG. NO. 4-74484-A

APPENDIX C

Test Boring Logs – IRM Delineation Studies

Test Boring IRM-01

Page 1 of 1

Project #:	5635S-19
Project Address:	441 Chandler Street
	Jamestown, New York
DAY Representative:	R. Kampff / H. McLennan
Drilling Contractor:	Nothnagle
Sampling Method:	Direct Push

Ground Elevation:	-	Datum:	-
Date Started:	9/26/2019	Date Ended:	9/26/2019
Borehole Depth:	10.2'	Borehole Diameter:	2.25"

Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings

Water Level (Date):

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
								Concrete	
1							0.3	Black/Dark Brown, fine to medium Sand and Gravel, intermixed Ash/Coal fragments, damp (FILL)	
2	NA	S-1	0.5-4	48	NA	1.7	0.7		
3							0.8	Light Brown, Sandy SILT, littls sub-rounded Gravel, moist	
4							0.5		
5							0.4	...little Clay	
							0.1		
6	NA	S-2	4-8	81	NA	1.5	0.1	Gray, Silty SAND, little Gravel, trace Shale fragments (GRAY GLACIAL TILL)	**Faint petroleum odor**
7							0.2		
8							0.5		
9	NA	S-3	8-10.2	61	NA	1.7	0.2		
10								Weathered/Broken Shale	
								Refusal @ 10.2'	
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 IRM-01

day
DAY ENVIRONMENTAL, INC.

Test Boring IRM-02

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: Nothnagle
Sampling Method: Direct Push

Ground Elevation: -
Datum: -
Date Started: 9/26/2019
Date Ended: 9/26/2019
Borehole Depth: 11.1'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1	NA	S-1	0.6-4	54	NA	2.6	6.7	Brown/Black, Sand and Gravel, intermixed with occassional Cinders and Coal fragments, damp (FILL)	
2							2.2		
3							0.6		
4							0.6	Red/Brown, Sandy SILT, little Gravel, moist	
5	NA	S-2	4-8	46	NA	1.1	1.7		
6							0.8		
7							0.6		
							0.4	Gray/Brown, Silty CLAY, trace Gravel, moist	
8	NA	S-3	8-11.1	89	NA	2.0	1.0	Gray/Brown, Silty SAND, little Gravel, moist	
9							0.4	Gray, fine to coarse SAND and GRAVEL, wet	
10								Gray, Clayey SILT, little Gravel, little broken Rock, wet (GRAY GLACIAL TILL)	
							0.2		
11							1.1		
							4.5	Gray, weathered SHALE	
12								Refusal @ 11.1'	
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 IRM-02

day

DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS

AN AFFILIATE OF DAY ENGINEERING, P.C.

Test Boring IRM-03

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: Nothnagle
Sampling Method: Direct Push

Ground Elevation: -
Datum: -
Date Started: 9/26/2019
Date Ended: 9/26/2019
Borehole Depth: 13.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1							1.2	Gray/Brown, Sandy Gravel, moist (FILL)	
2	NA	S-1	0.5-4	60	NA	85.4	1.3		
3							1.1	...Brick and Coal fragments	
4							0.4		
							0.7		
5							0.3	Red/Brown, Clayey SILT, little Gravel, moist-wet	
6	NA	S-2	4-8	58	NA	7.2	0.3		
7							0.1	Gray/Green, Silty CLAY, wet	
8							52.7		
9							310		
10	NA	S-3	8-12	54	NA	279.9	1662	Gray, Sandy SILT, little Clay, little Gravel, wet (GRAY GLACIAL TILL)	Strong petroleum/chemical odor
11							2348		
12	NA	S04	12-13	100	NA	3292	8325		
						170.5	5247	...Tan/Gray, broken Shale	
13								Refusal @ 13.0'	
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 IRM-03

1563 LYELL AVENUE
ROCHESTER, NEW YORK 14606
(585) 454-0210
FAX (585) 454-0825

www.dayenvironmental.com

420 LEXINGTON AVENUE, SUITE 300
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(212) 986-8645
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day

DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS

AN AFFILIATE OF DAY ENGINEERING, P.C.

Test Boring IRM-04

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: Nothnagle
Sampling Method: Direct Push

Ground Elevation: -
Datum: -
Date Started: 9/26/2019
Date Ended: 9/26/2019
Borehole Depth: 15.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1							1.9	Gray/Brown, Sandy Silt, little Gravel, occassional Brick fragments and Cinders, damp (FILL)	
2	NA	S-1	0.6-4	60	NA	25	1.1		
3							0.7		
4							0.6		
							0.5		
5							1.3	Gray/Green, Silty CLAY, little Sand, moist	
6	NA	S-2	4-8	62	NA	2.1	0.7		
7							0.5		
8							1.3		
9							1.4	Gray, Sandy SILT, little Clay, little Gravel, moist	
10	NA	S-3	8-12	56	NA	1.6	1.9		
11							0.7		
12							5.5	Gray, Clayey SILT, little Gravel, wet (GRAY GLACIAL TILL)	
13	NA	S-4	12-15	72	NA	1.5	2.8		
14							1.7		
							0.5		
15								Refusal @ 15.0'	
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 IRM-04

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Test Boring IRM-05

Page 1 of 1

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: Nothnagle
Sampling Method: Direct Push

Ground Elevation: -
Datum: -
Date Started: 9/26/2019
Date Ended: 9/26/2019
Borehole Depth: 14.5'
Borehole Diameter: 2.25"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date):

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
0								Concrete	
1	NA	S-1	0.6-4	29	NA	1.6	1.2	Tan/Brown, Silty Sand with occassional Brick fragments and Cinders, moist (FILL)	
3							0.4		
5	NA	S-2	4-8	56	NA	4.3	0.5	Tan/Gray, Sand and angular Gravel, moist (FILL)	
6							2.1		
7							1.5	Dark Gray, Silty CLAY, wet	
8	NA	S-3	8-12	75	NA	77	1.2		
9							2.8		
10							9.7	Gray, SAND and GRAVEL, some Silt, wet	
10.5								Gray, Silty SAND, little Clay, wet (GRAY GLACIAL TILL)	
11							163		Oil gobules
12	NA	S-4	12-14.5		NA	2.2	23.0		
12.5							2.7		
13							5.4		
13.5							1.3		
14.5								Refusal @ 14.5'	

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 IRM-05

Test Boring IRM-06

Project #:	5635S-19	Ground Elevation: -	Datum: -
Project Address:	441 Chandler Street, Jamestown, New York	Date Started: 9/26/2019	Date Ended: 9/26/2019
DAY Representative:	R. Kampff / H. McLennan	Borehole Depth: 18.5'	Borehole Diameter: 2.25"
Drilling Contractor:	Nothnagle	Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings	
Sampling Method:	Direct Push	Water Level (Date):	

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
0–0.5								Concrete	
1								Gray/Brown, Sand and Gravel, occassional Cinders, damp (FILL)	
2	NA	S-1	0.5-4	50	NA	0.9	0.2		
3							2.4	Brown, Clayey Silt, moist (FILL)	
4								Brown, Sand and Gravel, occassional Brick fragments, moist (FILL)	
5							1.7		
6	NA	S-2	4-8	38	NA	1.3	0.9	Gray/Brown, fine to medium SAND, some Gravel, little Silt, moist	
7							2.8	Gray/Brown, Silty SAND, little Gravel, moist	
8							1.7	...fine Sandy SILT, wet	Petroleum sheen, free product, no evident odor
9							5.0		
10	NA	S-3	8-12	71	NA	12.8	10.0		
11							108.1	Gray, Silty SAND, some Gravel, trace Clay, wet (GRAY GLACIAL TILL)	
12							67.6		
13							0.6		
14	NA	S-4	12-16	100	NA	15.7	0.6		
15							3.2	...Gray/Brown, Clayey SILT, little Sand, little angular Gravel	
16							1.1		

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 IRM-06

day

DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS

AN AFFILIATE OF DAY ENGINEERING, P.C.

Test Boring TB-06

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: Nothnagle
Sampling Method: Direct Push

Ground Elevation: -
Datum: -
Date Started: 9/26/2019
Date Ended: 9/26/2019
Borehole Depth: 18.5'
Borehole Diameter:
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
							0.5		
17	NA	S-5	16-18.5	90	NA	3.4	0.1		
							1.6	Red/Brown, Clayey SILT, some angular Gravel/fractured Shale, wet	
18							1.6	(RED/BROWN GLACIAL TILL)	
19								Refusal @ 18.5'	
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

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

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

Test Boring IRM-07

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: Nothnagle
Sampling Method: Direct Push

Ground Elevation: -
Datum: -
Date Started: 9/26/2019
Date Ended: 9/26/2019
Borehole Depth: 11.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1							0.3	Gray/Brown, Sandy Gravel, trace Clay, little Silt, occassional Coal/Ash fragments, moist (FILL)	
2	NA	S-1	0.6-4	40	NA	1.3	0.2		
3							0.3	...seam of angular Gravel	
4							0.5		
5								Gray/Brown/Red, Silty CLAY, trace Gravel, moist	
							3.4	Brown, Clayey SILT, trace Sand, moist	
6	NA	S-2	4-8	52	NA	1.7	3.1		
7							1.0	Gray, medium to coarse SAND, little Silt, wet	Sheen and free product w/petroleum odor
8							2.4		
9	NA	S-3	8-11	92	NA	36.5	52.8	Tan/Brown, Silty SAND, little sub-rounded Gravel, wet	
10							29.0	Gray, fractured/weathered SHALE	
11								Refusal @ 11.0'	
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 IRM-07

Test Boring IRM-08

Project #:	5635S-19	Ground Elevation: -	Datum: -
Project Address:	441 Chandler Street, Jamestown, New York	Date Started: 9/26/2019	Date Ended: 9/26/2019
DAY Representative:	R. Kampff / H. McLennan	Borehole Depth: 14.5'	Borehole Diameter: 2.25"
Drilling Contractor:	Nothnagle	Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings	
Sampling Method:	Direct Push	Water Level (Date):	

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
								Concrete	
1							4.9	Light Brown, Clayey Silt, some Sand, moist (FILL)	
2	NA	S-1	0.5-4	44	NA	2.4	13.9		
3									
4							2.7		
5							19.7		
6	NA	S-2	4-8	42	NA	3.8	5.3	Dark Gray, Clayey SAND, wet	
7							52.4	Dark Gray, Silty CLAY, wet	
8							5.9		Free product on soil sample (cutting oil?)
9							9.6	Dark Gray, Silty CLAY and fine to medium SAND, little Gravel, wet	
10	NA	S-3	8-12	69	NA	17.3	34.6	Gray, Silty SAND, some Clay, little Gravel, wet (GRAY GLACIAL TILL)	
11							20.4		
12							5.0		
13	NA	S-4	12-14.5	100	NA	2.8	10.4, 6.6		
14							10.8	Red/Brown, Clayey SILT, little Sand, little Gravel, wet (RED/BROWN GLACIAL TILL)	
15								Refusal @ 14.5'	
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 IRM-08

Test Boring IRM-09

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: Nothnagle
Sampling Method: Direct Push

Ground Elevation: -
Datum: -
Date Started: 9/26/2019
Date Ended: 9/26/2019
Borehole Depth: 12.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1							1.6	Dark Brown, Silty Sand, little Gravel, damp (FILL)	
2	NA	S-1	0.5-4	62	NA	0.9	0.8	...trace Blue/Green Granular material	
3							0.1	...little Clay	
4							0.2		
							0.2		
5							0.1	Tan/Brown, Clayey SILT, some Gravel, moist	
6	NA	S-2	4-8	69	NA	0.8	0.1	Dark Gray, Silty CLAY, little Gravel, moist to wet	
7							0.6		
8							0.9		
9							18		
10	NA	S-3	8-12	71	NA	97.6	162.6	Gray, Clayey SILT, some Gravel, little Sand, wet (GRAY GLACIAL TILL)	
11							264.2		
12								Refusal @ 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 IRM-09

day

DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS

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Test Boring IRM-10

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: Nothnagle
Sampling Method: Direct Push

Ground Elevation: -
Datum: -
Date Started: 9/26/2019
Date Ended: 9/26/2019
Borehole Depth: 15.0'
Borehole Diameter: 2.25"
Completion Method: ■ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
							0.2	Brown/Dark Brown, Sandy Silt, some Gravel, damp (FILL)	
1									
2	NA	S-1	0.5-4	35	NA	1.6	0.6		
3								...little Clay	
4							0.5		
5							0.2	Tan, Sandy Gravel (FILL)	
6	NA	S-2	4-8	23	NA	1.1			
7							0.2	Dark Gray, Silty CLAY, little Gravel, wet	
8									
9							0.2	Gray, Clayey SILT, little Sand, little Sub-angular Gravel, wet (GRAY GLACIAL TILL)	
10	NA	S-3	8-12	46	NA	1.0	0.2		
11							0.1		
12							0.4		
13	NA	S-4	12-15		NA	0.9	0.4	...Gray/Red	
14							0.6	Red/Brown, Silty SAND, some sub-angular Gravel with occassional fractured SHALE, trace Clay, wet (RED/BROWN GLACIAL TILL)	
15							0.7		
16								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 IRM-10

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Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: Nothnagle
Sampling Method: Direct Push

Test Boring IRM-11

Ground Elevation: -
Datum: -
Date Started: 9/26/2019
Date Ended: 9/26/2019
Borehole Depth: 13.9'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1							1.2	Brown, medium to coarse Sand intermixed with Cinders, damp (FILL)	
2	NA	S-1	0.5-4	52	NA	1.7	0.7	...little Silty Clay	
3							2.1		
4							0.6		
5							0.7	Tan, Clayey Silt, little angular Gravel, damp (FILL)	
6	NA	S-2	4-8	46	NA	1.2	0.5		
7							0.4	Brown, Sandy Gravel, moist (FILL)	
8							0.5	PEAT	
								Gray, Silty CLAY, wet	
9							0.5	Gray/Brown, medium to coarse SAND, little Gravel, wet	
10	NA	S-3	8-12	50	NA	1.2	0.5		
11							0.5	Gray, Silty SAND, some sub-angular Gravel, trace Clay, wet	
12							0.6	(GRAY GLACIAL TILL)	
							0.3		
13	NA	S-4	12-13.9	100	NA	1.0	0.3		
14							0.2	Refusal @ 13.9'	
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 IRM-11

Test Boring IRM-12

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: TREC
Sampling Method: Geoprobe 6610 Track Mount

Ground Elevation: -
Datum: -
Date Started: 10/24/2019
Date Ended: 10/24/2019
Borehole Depth: 8.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1							2.2	Red/Brown, Silty Sand, some Gravel, damp (FILL)	
2	NA	S-1	0.5-4	62	NA	0.6	2.8		
								...trace Black Cinders	
3							1.7		
								Gray/Green, Clayey SILT, moist	
4							0.3		
							0.2	...some angular Gravel	
5							0.3		
6	NA	S-2	4-8	48	NA	0.3	1.1		
7							1.9	Gray, Clayey SILT, little Sand, little angular Gravel, wet	Petroleum odor
8								Bottom of Hole @ 8.0'	
9									
10									
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 IRM-12

Test Boring IRM-13

Project #: 5635S-19
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: TREC
Sampling Method: Geoprobe 6610 Track Mount

Ground Elevation: -
Datum: -
Date Started: 10/24/2019
Date Ended: 10/24/2019
Borehole Depth: 11.3'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1							0.3	Red/Brown, fine Sandy Silt, little Gravel, moist (FILL)	
2	NA	S-1	0.5-4	79	NA	14.9	1.7		
3							0.3	Black, Cinders and Ash (FILL)	
								Gray/Brown, Clayey SILT, little angular Gravel, moist	
4							0.0		
							1.9	...light Gray, trace Gravel, wet	Slight Petroleum/Chemical Odor
5							0.7		
6	NA	S-2	4-8	52	NA	1.1	0.7		
7							2.3	Red/Brown, Sandy SILT, little angular Gravel, wet	
8							1.9		
9							28.2		
10	NA	S-3	8-11.3	71	NA	759.5	376.6	Gray, Silty SAND, some Gravel, Broken Rock, wet (GRAY GLACIAL TILL)	Chemical Odor
11							7,021		
12								Refusal @ 11.3'	
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 IRM-13

Test Boring IRM-14

Project #: 5635S-19
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: TREC
Sampling Method: Geoprobe 6610 Track Mount

Ground Elevation: -
Datum: -
Date Started: 10/24/2019
Date Ended: 10/24/2019
Borehole Depth: 8.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1							5.0	Dark Brown, Sandy Silt, little Gravel, moist (FILL)	
2	NA	S-1	0.6-4	66	NA	10.1	27.6		
3							20.5	Black, Sand and Gravel, with frequent Cinders, moist (FILL)	
4							2.1	Gray/Brown, Clayey SILT, little Gravel, moist	
5							27.3		
6	NA	S-2	4-8	100	NA	4.0	4.6		
7							2.6	Light Gray, Silty CLAY, little Sand, little Gravel, wet	**Petroleum Odor**
8							19.5		
9								Bottom of Hole @ 8.0'	
10									
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 IRM-14

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Test Boring IRM-15

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: TREC
Sampling Method: Geoprobe 6610 Track Mount

Ground Elevation: -
Datum: -
Date Started: 10/24/2019
Date Ended: 10/24/2019
Borehole Depth: 8.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1							1.7	Red/Brown, Silty Sand, trace Brick fragments, trace Gravel, moist (FILL)	
2	NA	S-1	0.5-4	64	NA	4.9	1.8		
3							5.3	Black Cinders (FILL)	
4							0.2	Gray, Clayey SILT, trace Sand, moist	
							0.1		
5								...some angular Gravel	
							0.3	...wet	
6	NA	S-2	4-8	29	NA	1.9			
							0.2		
7									
8								Gray, Silty CLAY, trace Gravel, wet	
								Bottom of Hole @ 8.0'	
9									
10									
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 IRM-15

day
DAY ENVIRONMENTAL, INC.

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Test Boring IRM-16

Project #:	5635S-19
Project Address:	441 Chandler Street
	Jamestown, New York
DAY Representative:	R. Kampff / H. McLennan
Drilling Contractor:	TREC
Sampling Method:	Geoprobe 6610 Track Mount

Ground Elevation:	-	Datum:	-
Date Started:	10/24/2019	Date Ended:	10/24/2019
Borehole Depth:	11.5'	Borehole Diameter:	2.25"

Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings

Water Level (Date):

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
								Concrete	
1							2.0	Red/Brown, Slty Sand, little Gravel, occassional Brick fragments, moist	
2	NA	S-1	0.4-4	74	NA	114.9	0.9	...Black, little Cinders	
3							0.2		
4							0.1	Gray, Gravel/Broken Rock (FILL)	
5							3.7		
								Light Gray, Sandy Gravel (concrete-like FILL)	
6	NA	S-2	4-8	48	NA	443.8	0.3	Tan/Brown, Clayey SILT, little Gravel, moist	
7							0.1		
8							0.0	Medium/Dark Gray, Silty CLAY, some Gravel, wet	
							13,114		
9								Dark Gray, Clayey SILT, some Sand, trace Gravel, wet	Product with Strong Chemical (TCE) Odor
							15,000+		
10	NA	S-3	8-11.5	52	NA	15,000+			
							7,521	Dark Gray, Silty SAND, some Gravel, trace Clay, wet	
11								(GRAY GLACIAL TILL)	
							2,060		
12								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 IRM-16

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Test Boring IRM-17

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: TREC
Sampling Method: Geoprobe 6610 Track Mount

Ground Elevation: -
Datum: -
Date Started: 10/24/2019
Date Ended: 10/24/2019
Borehole Depth: 11.5'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1							33.2	Broken Concrete	
								Dark Brown/Black, Sandy Gravel, some Sand, little Concrete fragments, trace Cinders, moist (FILL)	
2	NA	S-1	0.6-4	67	NA	9.3	21.9		
3							46.7		
4							26.7	Medium Gray, Clayey SILT, little Sand, wet	
							10.3		
5							7.1	...little Gravel	
6	NA	S-2	4-8	31	NA	4.1			
7							20.9	...some sub-round Gravel	
8									
9							23.2	***Collection tube could not be removed without disturbing sample - unable to log sample***	
10	NA	S-3	8-11.5	-	NA	399.1			**Free Product (Cutting Oil?)**
11							690.9		
12								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 IRM-17

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DAY ENVIRONMENTAL, INC.
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Test Boring IRM-18

Project #: 5635S-19
Project Address: 441 Chandler Street, Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: TREC
Sampling Method: Geoprobe 6610 Track Mount

Ground Elevation: -
Datum: -
Date Started: 10/24/2019
Date Ended: 10/24/2019
Borehole Depth: 8.0'
Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	
1	NA	S-1	0.5-4	57	NA	1.6	3.3	Broken Concrete	
2							2.6	Red/Brown/Black, Sandy Silt, little Gravel, trace Ash, occassional Brick fragments, moist (FILL)	
3							1.4	Gray, Clayey Silt, moist (FILL)	
4							0.6		
5	NA	S-2	4-8	62	NA	1.9	2.3	Gray/Black, Sandy Silt, some Gravel, moist (FILL)	
6							0.9		
7							4.2		
8							1.3	Medium Gray, SILT, little Sand, some sub-round Gravel, moist (GRAY GLACIAL TILL)	
9								Bottom of Hole @ 8.0'	
10									
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 IRM-18

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Test Boring IRM-19

Project #:	5635S-19
Project Address:	441 Chandler Street, Jamestown, New York
DAY Representative:	R. Kampff / H. McLennan
Drilling Contractor:	TREC
Sampling Method:	Geoprobe 6610 Track Mount
Ground Elevation:	-
Datum:	-
Date Started:	10/24/2019
Date Ended:	10/24/2019
Borehole Depth:	11.7'
Borehole Diameter:	2.25"
Completion Method:	☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):	

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
								Concrete	
1							1.2	Brown/Black, Sand and Gravel, little Cinders, damp (FILL)	
2	NA	S-1	0.5-4	59	NA	5.5	1.1		
3							0.7	Dark Gray, Clayey Silt, some Gravel, moist (FILL)	
4							0.6		
5							6.0	...tan	
6	NA	S-2	4-8	44	NA	34.1	7.7		
7							2.5	Medium Gray, Clayey SAND, little sub-round Gravel, wet	
8							5.1		
9							171.2	Gray, Silty SAND, some angular Gravel, wet (GRAY GLACIAL TILL)	
10	NA	S-3	8-11.7	-	NA	6,587	228.7		
11							2,000		Solvent Odor
							7,873	...Rock fragments	
12								Refusal @ 11.7'	
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 IRM-19

Test Boring IRM-20

Project #: 5635S-19
Project Address: 441 Chandler Street
Jamestown, New York
DAY Representative: R. Kampff / H. McLennan
Drilling Contractor: TREC
Sampling Method: Geoprobe 6610 Track Mount

Ground Elevation: -   Datum: -
Date Started: 10/24/2019   Date Ended: 10/24/2019
Borehole Depth: 11.2'   Borehole Diameter: 2.25"
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ■ Backfilled with Cuttings
Water Level (Date):

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
								Concrete	Refusal encountered in original test boring located 1 foot northwest. Refusal at 4-inches on apparent cast iron pipe.
1							340.6	Black, Silty Sand, some Gravel, moist (FILL)	
2	NA	S-1	0.5-4	62	NA	83.2	208.6		
3							117.7		
4							23.5	Dark Gray, Sandy Silt, trace Gravel, moist (FILL)	
							11.7		
5							23.7	Tan/Brown, Silty SAND, little Gravel, trace Clay, moist	
6	NA	S-2	4-8	70	NA	24.4	233.9		
7							5.7	Dark Gray, Silty CLAY, some Gravel, wet	
8							3.4		
9	NA	S-3	8-11.2	-	NA	19.9	32.4		
10							2.8	Gray, SAND and GRAVEL, some Silt, wet (GRAY GLACIAL TILL)	
11							26.2		
12								Refusal @ 11.2'	
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 IRM-20

APPENDIX D

Analytical Laboratory Reports and Chain-of-Custody Documentation
IRM Delineation Studies

ANALYTICAL REPORT

Lab Number:	L1944926
Client:	Day Environmental, Inc. 1563 Lyell Avenue Rochester, NY 14606
ATTN:	Ray Kampff
Phone:	(585) 454-0210
Project Name:	WEBER KNAPP
Project Number:	5635$-19
Report Date:	10/16/19

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1944926-01	IRM-06 (8-8.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 11:40	09/27/19
L1944926-02	IRM-06 (10-10.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 11:48	09/27/19
L1944926-03	IRM-06 (14-15)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 11:52	09/27/19
L1944926-04	IRM-07 (8-8.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 12:33	09/27/19
L1944926-05	IRM-07 (9-9.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 12:38	09/27/19
L1944926-06	IRM-01 (8.5-9)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 13:33	09/27/19
L1944926-07	IRM-02 (9.5-10)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 13:51	09/27/19
L1944926-08	IRM-03 (8-8.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 14:52	09/27/19
L1944926-09	IRM-03 (12-12.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 14:58	09/27/19
L1944926-10	IRM-08 (8-8.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 15:31	09/27/19
L1944926-11	IRM-08 (10-10.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 15:37	09/27/19
L1944926-12	IRM-08 (14.2-14.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 15:41	09/27/19
L1944926-13	IRM-04 (12-12.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 16:11	09/27/19
L1944926-14	IRM-05 (12-12.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/26/19 16:41	09/27/19
L1944926-15	IRM-09 (10-12)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/27/19 08:30	09/27/19
L1944926-16	IRM-11 (11-11.5)	SOIL	441 CHANDLER ST, JAMESTOWN, NY	09/27/19 11:23	09/27/19
L1944926-17	EB-092719	WATER	441 CHANDLER ST, JAMESTOWN, NY	09/27/19 11:40	09/27/19
L1944926-18	FIELD BLANK	WATER	441 CHANDLER ST, JAMESTOWN, NY	09/27/19 00:00	09/27/19

Project Name: WEBER KNAPP | **Lab Number:** L1944926
Project Number: 5635$-19 | **Report Date:** 10/16/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission

October 15, 2019: This final report includes the results of all requested analyses.

October 07, 2019: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L1944926-15: The analysis of TCLP Volatiles was not received in the recommended container. The analysis was performed at the client's request.

L1944926-15: One container for the Volatile Organics analysis was received broken; however, there was adequate sample remaining to perform the requested analysis.

L1944926-18: A sample identified as "FIELD BLANK" was received but not listed on the Chain of Custody. At the client's request, this sample was not analyzed.

Volatile Organics

L1944926-01 and -06: The analysis of Volatile Organics by EPA Method 5035/8260 Low Level could not be performed due to the elevated concentrations of non-target compounds in the sample.

L1944926-10: The internal standard (IS) response for 1,4-dichlorobenzene-d4 (35%) and the surrogate recovery for 4-bromofluorobenzene (195%) were outside the acceptance criteria; however, re-analysis achieved similar results: 1,4-dichlorobenzene-d4 (31%) and 4-bromofluorobenzene (202%). The results of both analyses are reported.

Perfluorinated Alkyl Acids by Isotope Dilution

WG1293004-1 and WG1293004-3: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

The WG1293004-3 LCSD recovery, associated with L1944926-15, is below the acceptance criteria for

Case Narrative (continued)

perfluorooctanesulfonamide (fosa) (27%); however, it has been identified as a "difficult" analyte and is within acceptance criteria in the LCS. The results of the associated sample are reported; however, all results are considered to have a potentially low bias for this compound.
The WG1293004-2/-3 LCS/LCSD RPD, associated with L1944926-15, is above the acceptance criteria for perfluorooctanesulfonamide (fosa) (121%).
WG1294098-9: The continuing calibration standard had the response for Perfluorohexanesulfonic Acid-Branched (br-PFHxS) outside of acceptance criteria. The response for Perfluorohexanesulfonic Acid (PFHxS) was within acceptance criteria; therefore, no further action was taken.
WG1294098-9: The continuing calibration standard had the response for 8:2FTS outside the acceptance criteria for the method. This value represents less than 10% of all compounds; therefore, the calibration was accepted.
WG1295704-1: The continuing calibration standard had the response for Perfluorohexanesulfonic Acid-Branched (br-PFHxS) outside of acceptance criteria. The response for Perfluorohexanesulfonic Acid (PFHxS) was within acceptance criteria; therefore, no further action was taken.
WG1295704-1: The continuing calibration standard had the response for 8:2FTS outside the acceptance criteria for the method. This value represents less than 10% of all compounds; therefore, the calibration was accepted.

Total Metals
L1944926-15: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.
The WG1290910-3/-4 MS/MSD recoveries for aluminum (406%/198%), calcium (MS 0%), iron (914%/479%), magnesium (59%/49%) and manganese (25%/48%), performed on L1944926-15, do not apply because the sample concentrations are greater than four times the spike amounts added.

Cyanide, Total
The WG1290006-2/-3 LCS/LCSD recoveries (73%/61%), associated with L1944926-15, are outside our in-

Case Narrative (continued)

house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker Cristin Walker

Title: Technical Director/Representative Date: 10/16/19

ORGANICS

VOLATILES

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-01	Date Collected:	09/26/19 11:40
Client ID:	IRM-06 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 11:32
Analyst: MM
Percent Solids: 70%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	2.4	J	ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
dibromofluoromethane	113		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-01 Date Collected: 09/26/19 11:40
Client ID: IRM-06 (8-8.5) Date Received: 09/27/19
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 01:32
Analyst: MV
Percent Solids: 70%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	490	220	1
1,1-Dichloroethane	ND		ug/kg	98	14.	1
Chloroform	25	J	ug/kg	150	14.	1
Carbon tetrachloride	ND		ug/kg	98	22.	1
1,2-Dichloropropane	ND		ug/kg	98	12.	1
Dibromochloromethane	ND		ug/kg	98	14.	1
1,1,2-Trichloroethane	ND		ug/kg	98	26.	1
Tetrachloroethene	ND		ug/kg	49	19.	1
Chlorobenzene	ND		ug/kg	49	12.	1
Trichlorofluoromethane	ND		ug/kg	390	68.	1
1,2-Dichloroethane	ND		ug/kg	98	25.	1
1,1,1-Trichloroethane	ND		ug/kg	49	16.	1
Bromodichloromethane	ND		ug/kg	49	11.	1
trans-1,3-Dichloropropene	ND		ug/kg	98	27.	1
cis-1,3-Dichloropropene	ND		ug/kg	49	16.	1
Bromoform	ND		ug/kg	390	24.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	49	16.	1
Benzene	ND		ug/kg	49	16.	1
Toluene	ND		ug/kg	98	53.	1
Ethylbenzene	ND		ug/kg	98	14.	1
Chloromethane	ND		ug/kg	390	92.	1
Bromomethane	ND		ug/kg	200	57.	1
Vinyl chloride	37	J	ug/kg	98	33.	1
Chloroethane	ND		ug/kg	200	44.	1
1,1-Dichloroethene	ND		ug/kg	98	23.	1
trans-1,2-Dichloroethene	ND		ug/kg	150	13.	1
Trichloroethene	100		ug/kg	49	13.	1
1,2-Dichlorobenzene	ND		ug/kg	200	14.	1

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-01	Date Collected:	09/26/19 11:40
Client ID:	IRM-06 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	200	14.	1
1,4-Dichlorobenzene	ND		ug/kg	200	17.	1
Methyl tert butyl ether	ND		ug/kg	200	20.	1
p/m-Xylene	ND		ug/kg	200	55.	1
o-Xylene	ND		ug/kg	98	28.	1
cis-1,2-Dichloroethene	98		ug/kg	98	17.	1
Styrene	ND		ug/kg	98	19.	1
Dichlorodifluoromethane	ND		ug/kg	980	90.	1
Acetone	580	J	ug/kg	980	470	1
Carbon disulfide	ND		ug/kg	980	450	1
2-Butanone	ND		ug/kg	980	220	1
4-Methyl-2-pentanone	ND		ug/kg	980	120	1
2-Hexanone	ND		ug/kg	980	120	1
Bromochloromethane	ND		ug/kg	200	20.	1
1,2-Dibromoethane	ND		ug/kg	98	27.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	290	98.	1
Isopropylbenzene	ND		ug/kg	98	11.	1
1,2,3-Trichlorobenzene	ND		ug/kg	200	32.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	27.	1
Methyl Acetate	760		ug/kg	390	93.	1
Cyclohexane	ND		ug/kg	980	53.	1
1,4-Dioxane	ND		ug/kg	7800	3400	1
Freon-113	ND		ug/kg	390	68.	1
Methyl cyclohexane	ND		ug/kg	390	59.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	95		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-02	Date Collected:	09/26/19 11:48
Client ID:	IRM-06 (10-10.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 12:20
Analyst: KJD
Percent Solids: 89%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	1000		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
dibromofluoromethane	110		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-02 D	Date Collected:	09/26/19 11:48
Client ID:	IRM-06 (10-10.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 01:59
Analyst: MV
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	2400	1100	10
1,1-Dichloroethane	ND		ug/kg	470	68.	10
Chloroform	120	J	ug/kg	710	66.	10
Carbon tetrachloride	ND		ug/kg	470	110	10
1,2-Dichloropropane	ND		ug/kg	470	59.	10
Dibromochloromethane	ND		ug/kg	470	66.	10
1,1,2-Trichloroethane	ND		ug/kg	470	130	10
Tetrachloroethene	ND		ug/kg	240	93.	10
Chlorobenzene	ND		ug/kg	240	60.	10
Trichlorofluoromethane	ND		ug/kg	1900	330	10
1,2-Dichloroethane	ND		ug/kg	470	120	10
1,1,1-Trichloroethane	ND		ug/kg	240	79.	10
Bromodichloromethane	ND		ug/kg	240	52.	10
trans-1,3-Dichloropropene	ND		ug/kg	470	130	10
cis-1,3-Dichloropropene	ND		ug/kg	240	75.	10
Bromoform	ND		ug/kg	1900	120	10
1,1,2,2-Tetrachloroethane	ND		ug/kg	240	78.	10
Benzene	ND		ug/kg	240	78.	10
Toluene	ND		ug/kg	470	260	10
Ethylbenzene	ND		ug/kg	470	67.	10
Chloromethane	ND		ug/kg	1900	440	10
Bromomethane	ND		ug/kg	940	270	10
Vinyl chloride	ND		ug/kg	470	160	10
Chloroethane	ND		ug/kg	940	210	10
1,1-Dichloroethene	ND		ug/kg	470	110	10
trans-1,2-Dichloroethene	ND		ug/kg	710	65.	10
Trichloroethene	81000		ug/kg	240	65.	10
1,2-Dichlorobenzene	ND		ug/kg	940	68.	10

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-02 D
Client ID: IRM-06 (10-10.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/26/19 11:48
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	940	70.	10
1,4-Dichlorobenzene	ND		ug/kg	940	81.	10
Methyl tert butyl ether	ND		ug/kg	940	95.	10
p/m-Xylene	ND		ug/kg	940	260	10
o-Xylene	ND		ug/kg	470	140	10
cis-1,2-Dichloroethene	5700		ug/kg	470	83.	10
Styrene	ND		ug/kg	470	93.	10
Dichlorodifluoromethane	ND		ug/kg	4700	430	10
Acetone	ND		ug/kg	4700	2300	10
Carbon disulfide	ND		ug/kg	4700	2200	10
2-Butanone	ND		ug/kg	4700	1000	10
4-Methyl-2-pentanone	ND		ug/kg	4700	600	10
2-Hexanone	ND		ug/kg	4700	560	10
Bromochloromethane	ND		ug/kg	940	97.	10
1,2-Dibromoethane	ND		ug/kg	470	130	10
1,2-Dibromo-3-chloropropane	ND		ug/kg	1400	470	10
Isopropylbenzene	ND		ug/kg	470	52.	10
1,2,3-Trichlorobenzene	ND		ug/kg	940	150	10
1,2,4-Trichlorobenzene	ND		ug/kg	940	130	10
Methyl Acetate	ND		ug/kg	1900	450	10
Cyclohexane	ND		ug/kg	4700	260	10
1,4-Dioxane	ND		ug/kg	38000	16000	10
Freon-113	ND		ug/kg	1900	330	10
Methyl cyclohexane	ND		ug/kg	1900	280	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	97		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-03	Date Collected:	09/26/19 11:52
Client ID:	IRM-06 (14-15)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 12:44
Analyst: KJD
Percent Solids: 86%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	5.0		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
dibromofluoromethane	111		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-03 Date Collected: 09/26/19 11:52
Client ID: IRM-06 (14-15) Date Received: 09/27/19
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 02:27
Analyst: MV
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	290	130	1
1,1-Dichloroethane	ND		ug/kg	58	8.4	1
Chloroform	14	J	ug/kg	87	8.1	1
Carbon tetrachloride	ND		ug/kg	58	13.	1
1,2-Dichloropropane	ND		ug/kg	58	7.2	1
Dibromochloromethane	ND		ug/kg	58	8.1	1
1,1,2-Trichloroethane	ND		ug/kg	58	15.	1
Tetrachloroethene	ND		ug/kg	29	11.	1
Chlorobenzene	ND		ug/kg	29	7.3	1
Trichlorofluoromethane	ND		ug/kg	230	40.	1
1,2-Dichloroethane	ND		ug/kg	58	15.	1
1,1,1-Trichloroethane	ND		ug/kg	29	9.7	1
Bromodichloromethane	ND		ug/kg	29	6.3	1
trans-1,3-Dichloropropene	ND		ug/kg	58	16.	1
cis-1,3-Dichloropropene	ND		ug/kg	29	9.1	1
Bromoform	ND		ug/kg	230	14.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	29	9.6	1
Benzene	ND		ug/kg	29	9.6	1
Toluene	ND		ug/kg	58	31.	1
Ethylbenzene	ND		ug/kg	58	8.2	1
Chloromethane	ND		ug/kg	230	54.	1
Bromomethane	ND		ug/kg	120	34.	1
Vinyl chloride	50	J	ug/kg	58	19.	1
Chloroethane	ND		ug/kg	120	26.	1
1,1-Dichloroethene	ND		ug/kg	58	14.	1
trans-1,2-Dichloroethene	ND		ug/kg	87	7.9	1
Trichloroethene	170		ug/kg	29	7.9	1
1,2-Dichlorobenzene	ND		ug/kg	120	8.3	1

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-03	Date Collected:	09/26/19 11:52
Client ID:	IRM-06 (14-15)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	120	8.6	1
1,4-Dichlorobenzene	ND		ug/kg	120	9.9	1
Methyl tert butyl ether	ND		ug/kg	120	12.	1
p/m-Xylene	ND		ug/kg	120	32.	1
o-Xylene	ND		ug/kg	58	17.	1
cis-1,2-Dichloroethene	650		ug/kg	58	10.	1
Styrene	ND		ug/kg	58	11.	1
Dichlorodifluoromethane	ND		ug/kg	580	53.	1
Acetone	ND		ug/kg	580	280	1
Carbon disulfide	ND		ug/kg	580	260	1
2-Butanone	ND		ug/kg	580	130	1
4-Methyl-2-pentanone	ND		ug/kg	580	74.	1
2-Hexanone	ND		ug/kg	580	68.	1
Bromochloromethane	ND		ug/kg	120	12.	1
1,2-Dibromoethane	ND		ug/kg	58	16.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	170	58.	1
Isopropylbenzene	ND		ug/kg	58	6.3	1
1,2,3-Trichlorobenzene	ND		ug/kg	120	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	16.	1
Methyl Acetate	ND		ug/kg	230	55.	1
Cyclohexane	ND		ug/kg	580	31.	1
1,4-Dioxane	ND		ug/kg	4600	2000	1
Freon-113	ND		ug/kg	230	40.	1
Methyl cyclohexane	ND		ug/kg	230	35.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	84		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	94		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-04	Date Collected:	09/26/19 12:33
Client ID:	IRM-07 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 13:08
Analyst: KJD
Percent Solids: 88%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	24		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
dibromofluoromethane	112		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-04 D	Date Collected:	09/26/19 12:33
Client ID:	IRM-07 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 13:03
Analyst: MKS
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	630	290	2
1,1-Dichloroethane	ND		ug/kg	120	18.	2
Chloroform	29	J	ug/kg	190	18.	2
Carbon tetrachloride	ND		ug/kg	120	29.	2
1,2-Dichloropropane	ND		ug/kg	120	16.	2
Dibromochloromethane	ND		ug/kg	120	18.	2
1,1,2-Trichloroethane	ND		ug/kg	120	34.	2
Tetrachloroethene	ND		ug/kg	63	25.	2
Chlorobenzene	ND		ug/kg	63	16.	2
Trichlorofluoromethane	ND		ug/kg	500	87.	2
1,2-Dichloroethane	ND		ug/kg	120	32.	2
1,1,1-Trichloroethane	ND		ug/kg	63	21.	2
Bromodichloromethane	ND		ug/kg	63	14.	2
trans-1,3-Dichloropropene	ND		ug/kg	120	34.	2
cis-1,3-Dichloropropene	ND		ug/kg	63	20.	2
Bromoform	ND		ug/kg	500	31.	2
1,1,2,2-Tetrachloroethane	ND		ug/kg	63	21.	2
Benzene	ND		ug/kg	63	21.	2
Toluene	81	J	ug/kg	120	68.	2
Ethylbenzene	24	J	ug/kg	120	18.	2
Chloromethane	ND		ug/kg	500	120	2
Bromomethane	ND		ug/kg	250	73.	2
Vinyl chloride	ND		ug/kg	120	42.	2
Chloroethane	ND		ug/kg	250	57.	2
1,1-Dichloroethene	ND		ug/kg	120	30.	2
trans-1,2-Dichloroethene	ND		ug/kg	190	17.	2
Trichloroethene	16000		ug/kg	63	17.	2
1,2-Dichlorobenzene	ND		ug/kg	250	18.	2

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-04 D	Date Collected:	09/26/19 12:33
Client ID:	IRM-07 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	250	18.	2
1,4-Dichlorobenzene	ND		ug/kg	250	21.	2
Methyl tert butyl ether	ND		ug/kg	250	25.	2
p/m-Xylene	97	J	ug/kg	250	70.	2
o-Xylene	58	J	ug/kg	120	36.	2
cis-1,2-Dichloroethene	130		ug/kg	120	22.	2
Styrene	ND		ug/kg	120	25.	2
Dichlorodifluoromethane	ND		ug/kg	1200	110	2
Acetone	710	J	ug/kg	1200	600	2
Carbon disulfide	ND		ug/kg	1200	570	2
2-Butanone	ND		ug/kg	1200	280	2
4-Methyl-2-pentanone	ND		ug/kg	1200	160	2
2-Hexanone	ND		ug/kg	1200	150	2
Bromochloromethane	ND		ug/kg	250	26.	2
1,2-Dibromoethane	ND		ug/kg	120	35.	2
1,2-Dibromo-3-chloropropane	ND		ug/kg	380	120	2
Isopropylbenzene	ND		ug/kg	120	14.	2
1,2,3-Trichlorobenzene	ND		ug/kg	250	40.	2
1,2,4-Trichlorobenzene	ND		ug/kg	250	34.	2
Methyl Acetate	ND		ug/kg	500	120	2
Cyclohexane	ND		ug/kg	1200	68.	2
1,4-Dioxane	ND		ug/kg	10000	4400	2
Freon-113	ND		ug/kg	500	87.	2
Methyl cyclohexane	250	J	ug/kg	500	76.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	95		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-05
Client ID: IRM-07 (9-9.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/26/19 12:38
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 17:38
Analyst: KJD
Percent Solids: 96%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	110		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	109		70-130
dibromofluoromethane	110		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-05	Date Collected:	09/26/19 12:38
Client ID:	IRM-07 (9-9.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 13:30
Analyst: MKS
Percent Solids: 96%

Parameter	**Result**	**Qualifier**	**Units**	**RL**	**MDL**	**Dilution Factor**
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	410	190	1
1,1-Dichloroethane	ND		ug/kg	82	12.	1
Chloroform	19	J	ug/kg	120	11.	1
Carbon tetrachloride	ND		ug/kg	82	19.	1
1,2-Dichloropropane	ND		ug/kg	82	10.	1
Dibromochloromethane	ND		ug/kg	82	11.	1
1,1,2-Trichloroethane	ND		ug/kg	82	22.	1
Tetrachloroethene	20	J	ug/kg	41	16.	1
Chlorobenzene	ND		ug/kg	41	10.	1
Trichlorofluoromethane	ND		ug/kg	330	57.	1
1,2-Dichloroethane	ND		ug/kg	82	21.	1
1,1,1-Trichloroethane	ND		ug/kg	41	14.	1
Bromodichloromethane	ND		ug/kg	41	8.9	1
trans-1,3-Dichloropropene	ND		ug/kg	82	22.	1
cis-1,3-Dichloropropene	ND		ug/kg	41	13.	1
Bromoform	ND		ug/kg	330	20.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	41	14.	1
Benzene	ND		ug/kg	41	14.	1
Toluene	ND		ug/kg	82	44.	1
Ethylbenzene	ND		ug/kg	82	12.	1
Chloromethane	ND		ug/kg	330	76.	1
Bromomethane	ND		ug/kg	160	47.	1
Vinyl chloride	41	J	ug/kg	82	27.	1
Chloroethane	ND		ug/kg	160	37.	1
1,1-Dichloroethene	ND		ug/kg	82	19.	1
trans-1,2-Dichloroethene	ND		ug/kg	120	11.	1
Trichloroethene	8600		ug/kg	41	11.	1
1,2-Dichlorobenzene	ND		ug/kg	160	12.	1

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-05	Date Collected:	09/26/19 12:38
Client ID:	IRM-07 (9-9.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	160	12.	1
1,4-Dichlorobenzene	ND		ug/kg	160	14.	1
Methyl tert butyl ether	ND		ug/kg	160	16.	1
p/m-Xylene	ND		ug/kg	160	46.	1
o-Xylene	ND		ug/kg	82	24.	1
cis-1,2-Dichloroethene	2600		ug/kg	82	14.	1
Styrene	ND		ug/kg	82	16.	1
Dichlorodifluoromethane	ND		ug/kg	820	75.	1
Acetone	520	J	ug/kg	820	390	1
Carbon disulfide	ND		ug/kg	820	370	1
2-Butanone	ND		ug/kg	820	180	1
4-Methyl-2-pentanone	ND		ug/kg	820	100	1
2-Hexanone	ND		ug/kg	820	96.	1
Bromochloromethane	ND		ug/kg	160	17.	1
1,2-Dibromoethane	ND		ug/kg	82	23.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	240	81.	1
Isopropylbenzene	ND		ug/kg	82	8.9	1
1,2,3-Trichlorobenzene	ND		ug/kg	160	26.	1
1,2,4-Trichlorobenzene	ND		ug/kg	160	22.	1
Methyl Acetate	ND		ug/kg	330	78.	1
Cyclohexane	ND		ug/kg	820	44.	1
1,4-Dioxane	ND		ug/kg	6500	2900	1
Freon-113	ND		ug/kg	330	56.	1
Methyl cyclohexane	62	J	ug/kg	330	49.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	96		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-06	Date Collected:	09/26/19 13:33
Client ID:	IRM-01 (8.5-9)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 18:03
Analyst: KJD
Percent Solids: 92%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
dibromofluoromethane	111		70-130

Project Name: WEBER KNAPP | **Lab Number:** L1944926

Project Number: 5635$-19 | **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-06
Client ID: IRM-01 (8.5-9)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/26/19 13:33
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 13:57
Analyst: MKS
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	230	100	1
1,1-Dichloroethane	ND		ug/kg	46	6.7	1
Chloroform	12	J	ug/kg	69	6.5	1
Carbon tetrachloride	ND		ug/kg	46	11.	1
1,2-Dichloropropane	ND		ug/kg	46	5.8	1
Dibromochloromethane	ND		ug/kg	46	6.5	1
1,1,2-Trichloroethane	ND		ug/kg	46	12.	1
Tetrachloroethene	ND		ug/kg	23	9.1	1
Chlorobenzene	ND		ug/kg	23	5.9	1
Trichlorofluoromethane	ND		ug/kg	180	32.	1
1,2-Dichloroethane	ND		ug/kg	46	12.	1
1,1,1-Trichloroethane	ND		ug/kg	23	7.7	1
Bromodichloromethane	ND		ug/kg	23	5.0	1
trans-1,3-Dichloropropene	ND		ug/kg	46	13.	1
cis-1,3-Dichloropropene	ND		ug/kg	23	7.3	1
Bromoform	ND		ug/kg	180	11.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	23	7.7	1
Benzene	ND		ug/kg	23	7.7	1
Toluene	ND		ug/kg	46	25.	1
Ethylbenzene	ND		ug/kg	46	6.5	1
Chloromethane	ND		ug/kg	180	43.	1
Bromomethane	ND		ug/kg	92	27.	1
Vinyl chloride	ND		ug/kg	46	15.	1
Chloroethane	ND		ug/kg	92	21.	1
1,1-Dichloroethene	ND		ug/kg	46	11.	1
trans-1,2-Dichloroethene	ND		ug/kg	69	6.3	1
Trichloroethene	140		ug/kg	23	6.3	1
1,2-Dichlorobenzene	ND		ug/kg	92	6.7	1

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-06	Date Collected:	09/26/19 13:33
Client ID:	IRM-01 (8.5-9)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	92	6.8	1
1,4-Dichlorobenzene	ND		ug/kg	92	7.9	1
Methyl tert butyl ether	ND		ug/kg	92	9.3	1
p/m-Xylene	ND		ug/kg	92	26.	1
o-Xylene	ND		ug/kg	46	13.	1
cis-1,2-Dichloroethene	ND		ug/kg	46	8.1	1
Styrene	ND		ug/kg	46	9.1	1
Dichlorodifluoromethane	ND		ug/kg	460	42.	1
Acetone	ND		ug/kg	460	220	1
Carbon disulfide	ND		ug/kg	460	210	1
2-Butanone	ND		ug/kg	460	100	1
4-Methyl-2-pentanone	ND		ug/kg	460	59.	1
2-Hexanone	ND		ug/kg	460	54.	1
Bromochloromethane	ND		ug/kg	92	9.5	1
1,2-Dibromoethane	ND		ug/kg	46	13.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	140	46.	1
Isopropylbenzene	ND		ug/kg	46	5.0	1
1,2,3-Trichlorobenzene	ND		ug/kg	92	15.	1
1,2,4-Trichlorobenzene	ND		ug/kg	92	12.	1
Methyl Acetate	ND		ug/kg	180	44.	1
Cyclohexane	ND		ug/kg	460	25.	1
1,4-Dioxane	ND		ug/kg	3700	1600	1
Freon-113	ND		ug/kg	180	32.	1
Methyl cyclohexane	ND		ug/kg	180	28.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	96		70-130

Project Name: WEBER KNAPP | **Lab Number:** L1944926

Project Number: 5635$-19 | **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-07
Client ID: IRM-02 (9.5-10)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/26/19 13:51
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 21:21
Analyst: MM
Percent Solids: 91%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
dibromofluoromethane	112		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-07	Date Collected:	09/26/19 13:51
Client ID:	IRM-02 (9.5-10)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Matrix:	Soil
Analytical Method:	1,8260C
Analytical Date:	10/04/19 16:46
Analyst:	MKS
Percent Solids:	91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.9	3.6	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.23	1
Chloroform	0.30	J	ug/kg	2.4	0.22	1
Carbon tetrachloride	ND		ug/kg	1.6	0.36	1
1,2-Dichloropropane	ND		ug/kg	1.6	0.20	1
Dibromochloromethane	ND		ug/kg	1.6	0.22	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.42	1
Tetrachloroethene	ND		ug/kg	0.79	0.31	1
Chlorobenzene	ND		ug/kg	0.79	0.20	1
Trichlorofluoromethane	ND		ug/kg	6.3	1.1	1
1,2-Dichloroethane	ND		ug/kg	1.6	0.40	1
1,1,1-Trichloroethane	ND		ug/kg	0.79	0.26	1
Bromodichloromethane	ND		ug/kg	0.79	0.17	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	0.43	1
cis-1,3-Dichloropropene	ND		ug/kg	0.79	0.25	1
Bromoform	ND		ug/kg	6.3	0.39	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.79	0.26	1
Benzene	ND		ug/kg	0.79	0.26	1
Toluene	ND		ug/kg	1.6	0.86	1
Ethylbenzene	ND		ug/kg	1.6	0.22	1
Chloromethane	ND		ug/kg	6.3	1.5	1
Bromomethane	ND		ug/kg	3.2	0.92	1
Vinyl chloride	1.9		ug/kg	1.6	0.53	1
Chloroethane	ND		ug/kg	3.2	0.71	1
1,1-Dichloroethene	ND		ug/kg	1.6	0.38	1
trans-1,2-Dichloroethene	ND		ug/kg	2.4	0.22	1
Trichloroethene	3.2		ug/kg	0.79	0.22	1
1,2-Dichlorobenzene	ND		ug/kg	3.2	0.23	1

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-07
Client ID: IRM-02 (9.5-10)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/26/19 13:51
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	3.2	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	3.2	0.27	1
Methyl tert butyl ether	ND		ug/kg	3.2	0.32	1
p/m-Xylene	ND		ug/kg	3.2	0.88	1
o-Xylene	ND		ug/kg	1.6	0.46	1
cis-1,2-Dichloroethene	14		ug/kg	1.6	0.28	1
Styrene	ND		ug/kg	1.6	0.31	1
Dichlorodifluoromethane	ND		ug/kg	16	1.4	1
Acetone	41		ug/kg	16	7.6	1
Carbon disulfide	ND		ug/kg	16	7.2	1
2-Butanone	ND		ug/kg	16	3.5	1
4-Methyl-2-pentanone	ND		ug/kg	16	2.0	1
2-Hexanone	ND		ug/kg	16	1.9	1
Bromochloromethane	ND		ug/kg	3.2	0.32	1
1,2-Dibromoethane	ND		ug/kg	1.6	0.44	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	1.6	1
Isopropylbenzene	ND		ug/kg	1.6	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.2	0.51	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.2	0.43	1
Methyl Acetate	ND		ug/kg	6.3	1.5	1
Cyclohexane	ND		ug/kg	16	0.86	1
1,4-Dioxane	ND		ug/kg	130	55.	1
Freon-113	ND		ug/kg	6.3	1.1	1
Methyl cyclohexane	ND		ug/kg	6.3	0.95	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	97		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-08	Date Collected:	09/26/19 14:52
Client ID:	IRM-03 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 21:45
Analyst: MM
Percent Solids: 77%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	86		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
dibromofluoromethane	113		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-08	Date Collected:	09/26/19 14:52
Client ID:	IRM-03 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 14:24
Analyst: MKS
Percent Solids: 77%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	430	200	1
1,1-Dichloroethane	ND		ug/kg	85	12.	1
Chloroform	21	J	ug/kg	130	12.	1
Carbon tetrachloride	ND		ug/kg	85	20.	1
1,2-Dichloropropane	ND		ug/kg	85	11.	1
Dibromochloromethane	ND		ug/kg	85	12.	1
1,1,2-Trichloroethane	ND		ug/kg	85	23.	1
Tetrachloroethene	ND		ug/kg	43	17.	1
Chlorobenzene	ND		ug/kg	43	11.	1
Trichlorofluoromethane	ND		ug/kg	340	59.	1
1,2-Dichloroethane	ND		ug/kg	85	22.	1
1,1,1-Trichloroethane	ND		ug/kg	43	14.	1
Bromodichloromethane	ND		ug/kg	43	9.3	1
trans-1,3-Dichloropropene	ND		ug/kg	85	23.	1
cis-1,3-Dichloropropene	ND		ug/kg	43	13.	1
Bromoform	ND		ug/kg	340	21.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	43	14.	1
Benzene	ND		ug/kg	43	14.	1
Toluene	ND		ug/kg	85	46.	1
Ethylbenzene	ND		ug/kg	85	12.	1
Chloromethane	ND		ug/kg	340	79.	1
Bromomethane	ND		ug/kg	170	50.	1
Vinyl chloride	ND		ug/kg	85	28.	1
Chloroethane	ND		ug/kg	170	38.	1
1,1-Dichloroethene	ND		ug/kg	85	20.	1
trans-1,2-Dichloroethene	ND		ug/kg	130	12.	1
Trichloroethene	3100		ug/kg	43	12.	1
1,2-Dichlorobenzene	ND		ug/kg	170	12.	1

Project Name: WEBER KNAPP | **Lab Number:** L1944926
Project Number: 5635$-19 | **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-08	Date Collected:	09/26/19 14:52
Client ID:	IRM-03 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	170	13.	1
1,4-Dichlorobenzene	ND		ug/kg	170	14.	1
Methyl tert butyl ether	ND		ug/kg	170	17.	1
p/m-Xylene	ND		ug/kg	170	48.	1
o-Xylene	ND		ug/kg	85	25.	1
cis-1,2-Dichloroethene	ND		ug/kg	85	15.	1
Styrene	ND		ug/kg	85	17.	1
Dichlorodifluoromethane	ND		ug/kg	850	78.	1
Acetone	450	J	ug/kg	850	410	1
Carbon disulfide	ND		ug/kg	850	390	1
2-Butanone	ND		ug/kg	850	190	1
4-Methyl-2-pentanone	ND		ug/kg	850	110	1
2-Hexanone	ND		ug/kg	850	100	1
Bromochloromethane	ND		ug/kg	170	17.	1
1,2-Dibromoethane	ND		ug/kg	85	24.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	260	85.	1
Isopropylbenzene	ND		ug/kg	85	9.3	1
1,2,3-Trichlorobenzene	ND		ug/kg	170	27.	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	23.	1
Methyl Acetate	370		ug/kg	340	81.	1
Cyclohexane	ND		ug/kg	850	46.	1
1,4-Dioxane	ND		ug/kg	6800	3000	1
Freon-113	ND		ug/kg	340	59.	1
Methyl cyclohexane	ND		ug/kg	340	51.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	98		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-09	Date Collected:	09/26/19 14:58
Client ID:	IRM-03 (12-12.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 22:09
Analyst: MM
Percent Solids: 84%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	2.4	J	ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	6000	E	ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
dibromofluoromethane	109		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-09 D
Date Collected: 09/26/19 14:58
Client ID: IRM-03 (12-12.5)
Date Received: 09/27/19
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 08:56
Analyst: MM
Percent Solids: 84%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Trichloroethene	5600		ug/l	50	18.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
dibromofluoromethane	109		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-09 D
Client ID: IRM-03 (12-12.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/26/19 14:58
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 13:29
Analyst: MKS
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	54000	25000	200
1,1-Dichloroethane	ND		ug/kg	11000	1600	200
Chloroform	ND		ug/kg	16000	1500	200
Carbon tetrachloride	ND		ug/kg	11000	2500	200
1,2-Dichloropropane	ND		ug/kg	11000	1300	200
Dibromochloromethane	ND		ug/kg	11000	1500	200
1,1,2-Trichloroethane	ND		ug/kg	11000	2900	200
Tetrachloroethene	ND		ug/kg	5400	2100	200
Chlorobenzene	ND		ug/kg	5400	1400	200
Trichlorofluoromethane	ND		ug/kg	43000	7500	200
1,2-Dichloroethane	ND		ug/kg	11000	2800	200
1,1,1-Trichloroethane	ND		ug/kg	5400	1800	200
Bromodichloromethane	ND		ug/kg	5400	1200	200
trans-1,3-Dichloropropene	ND		ug/kg	11000	2900	200
cis-1,3-Dichloropropene	ND		ug/kg	5400	1700	200
Bromoform	ND		ug/kg	43000	2600	200
1,1,2,2-Tetrachloroethane	ND		ug/kg	5400	1800	200
Benzene	ND		ug/kg	5400	1800	200
Toluene	ND		ug/kg	11000	5900	200
Ethylbenzene	1500	J	ug/kg	11000	1500	200
Chloromethane	ND		ug/kg	43000	10000	200
Bromomethane	ND		ug/kg	22000	6300	200
Vinyl chloride	ND		ug/kg	11000	3600	200
Chloroethane	ND		ug/kg	22000	4900	200
1,1-Dichloroethene	ND		ug/kg	11000	2600	200
trans-1,2-Dichloroethene	ND		ug/kg	16000	1500	200
Trichloroethene	1700000		ug/kg	5400	1500	200
1,2-Dichlorobenzene	ND		ug/kg	22000	1600	200

Project Name: WEBER KNAPP | **Lab Number:** L1944926
Project Number: 5635$-19 | **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-09 D	Date Collected:	09/26/19 14:58
Client ID:	IRM-03 (12-12.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	22000	1600	200
1,4-Dichlorobenzene	ND		ug/kg	22000	1800	200
Methyl tert butyl ether	ND		ug/kg	22000	2200	200
p/m-Xylene	ND		ug/kg	22000	6000	200
o-Xylene	ND		ug/kg	11000	3100	200
cis-1,2-Dichloroethene	9000	J	ug/kg	11000	1900	200
Styrene	ND		ug/kg	11000	2100	200
Dichlorodifluoromethane	ND		ug/kg	110000	9900	200
Acetone	ND		ug/kg	110000	52000	200
Carbon disulfide	ND		ug/kg	110000	49000	200
2-Butanone	ND		ug/kg	110000	24000	200
4-Methyl-2-pentanone	ND		ug/kg	110000	14000	200
2-Hexanone	ND		ug/kg	110000	13000	200
Bromochloromethane	ND		ug/kg	22000	2200	200
1,2-Dibromoethane	ND		ug/kg	11000	3000	200
1,2-Dibromo-3-chloropropane	ND		ug/kg	32000	11000	200
Isopropylbenzene	ND		ug/kg	11000	1200	200
1,2,3-Trichlorobenzene	ND		ug/kg	22000	3500	200
1,2,4-Trichlorobenzene	ND		ug/kg	22000	2900	200
Methyl Acetate	ND		ug/kg	43000	10000	200
Cyclohexane	ND		ug/kg	110000	5900	200
1,4-Dioxane	ND		ug/kg	860000	380000	200
Freon-113	ND		ug/kg	43000	7500	200
Methyl cyclohexane	ND		ug/kg	43000	6500	200

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	102		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-10	Date Collected:	09/26/19 15:31
Client ID:	IRM-08 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 22:33
Analyst: MM
Percent Solids: 87%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	4.0	J	ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
dibromofluoromethane	110		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-10
Client ID: IRM-08 (8-8.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/26/19 15:31
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 17:25
Analyst: MKS
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.7	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.95	0.14	1
Chloroform	0.18	J	ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.95	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.95	0.12	1
Dibromochloromethane	ND		ug/kg	0.95	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.95	0.25	1
Tetrachloroethene	ND		ug/kg	0.47	0.18	1
Chlorobenzene	0.49		ug/kg	0.47	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.66	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.47	0.16	1
Bromodichloromethane	ND		ug/kg	0.47	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.47	0.15	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.47	0.16	1
Benzene	0.40	J	ug/kg	0.47	0.16	1
Toluene	1.5		ug/kg	0.95	0.51	1
Ethylbenzene	0.73	J	ug/kg	0.95	0.13	1
Chloromethane	ND		ug/kg	3.8	0.88	1
Bromomethane	ND		ug/kg	1.9	0.55	1
Vinyl chloride	1.6		ug/kg	0.95	0.32	1
Chloroethane	ND		ug/kg	1.9	0.43	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1
Trichloroethene	1.8		ug/kg	0.47	0.13	1
1,2-Dichlorobenzene	0.23	J	ug/kg	1.9	0.14	1

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-10	Date Collected:	09/26/19 15:31
Client ID:	IRM-08 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	0.33	J	ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	1.2	J	ug/kg	1.9	0.53	1
o-Xylene	2.9		ug/kg	0.95	0.28	1
cis-1,2-Dichloroethene	1.5		ug/kg	0.95	0.16	1
Styrene	ND		ug/kg	0.95	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.87	1
Acetone	31		ug/kg	9.5	4.6	1
Carbon disulfide	ND		ug/kg	9.5	4.3	1
2-Butanone	7.6	J	ug/kg	9.5	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	1.2	1
2-Hexanone	ND		ug/kg	9.5	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.95	0.26	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.94	1
Isopropylbenzene	3.5		ug/kg	0.95	0.10	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
Methyl Acetate	ND		ug/kg	3.8	0.90	1
Cyclohexane	3.7	J	ug/kg	9.5	0.52	1
1,4-Dioxane	ND		ug/kg	76	33.	1
Freon-113	ND		ug/kg	3.8	0.66	1
Methyl cyclohexane	7.1		ug/kg	3.8	0.57	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	**195**	Q	70-130
Dibromofluoromethane	94		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-10 R Date Collected: 09/26/19 15:31
Client ID: IRM-08 (8-8.5) Date Received: 09/27/19
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/05/19 12:44
Analyst: MV
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.5	2.0	1
1,1-Dichloroethane	ND		ug/kg	0.90	0.13	1
Chloroform	0.19	J	ug/kg	1.3	0.12	1
Carbon tetrachloride	ND		ug/kg	0.90	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.90	0.11	1
Dibromochloromethane	ND		ug/kg	0.90	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.90	0.24	1
Tetrachloroethene	ND		ug/kg	0.45	0.18	1
Chlorobenzene	ND		ug/kg	0.45	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.6	0.62	1
1,2-Dichloroethane	ND		ug/kg	0.90	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.45	0.15	1
Bromodichloromethane	ND		ug/kg	0.45	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.90	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	0.45	0.14	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.45	0.15	1
Benzene	0.32	J	ug/kg	0.45	0.15	1
Toluene	1.4		ug/kg	0.90	0.49	1
Ethylbenzene	0.78	J	ug/kg	0.90	0.13	1
Chloromethane	ND		ug/kg	3.6	0.84	1
Bromomethane	ND		ug/kg	1.8	0.52	1
Vinyl chloride	0.48	J	ug/kg	0.90	0.30	1
Chloroethane	ND		ug/kg	1.8	0.40	1
1,1-Dichloroethene	ND		ug/kg	0.90	0.21	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1
Trichloroethene	6.8		ug/kg	0.45	0.12	1
1,2-Dichlorobenzene	0.26	J	ug/kg	1.8	0.13	1

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-10	R	Date Collected:	09/26/19 15:31
Client ID:	IRM-08 (8-8.5)		Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY		Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	1.3	J	ug/kg	1.8	0.50	1
o-Xylene	3.2		ug/kg	0.90	0.26	1
cis-1,2-Dichloroethene	1.1		ug/kg	0.90	0.16	1
Styrene	ND		ug/kg	0.90	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.0	0.82	1
Acetone	31		ug/kg	9.0	4.3	1
Carbon disulfide	ND		ug/kg	9.0	4.1	1
2-Butanone	7.5	J	ug/kg	9.0	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.0	1.1	1
2-Hexanone	ND		ug/kg	9.0	1.0	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.90	0.25	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.90	1
Isopropylbenzene	4.0		ug/kg	0.90	0.10	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1
1,2,4-Trichlorobenzene	0.29	J	ug/kg	1.8	0.24	1
Methyl Acetate	1.1	J	ug/kg	3.6	0.85	1
Cyclohexane	2.9	J	ug/kg	9.0	0.49	1
1,4-Dioxane	ND		ug/kg	72	32.	1
Freon-113	ND		ug/kg	3.6	0.62	1
Methyl cyclohexane	6.7		ug/kg	3.6	0.54	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	**202**	Q	70-130
Dibromofluoromethane	94		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-11
Client ID: IRM-08 (10-10.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/26/19 15:37
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 22:57
Analyst: MM
Percent Solids: 85%
TCLP/SPLP Ext. Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	1.2	J	ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	500		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
dibromofluoromethane	110		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-11	Date Collected:	09/26/19 15:37
Client ID:	IRM-08 (10-10.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 14:20
Analyst: MKS
Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	270	120	1
1,1-Dichloroethane	ND		ug/kg	54	7.8	1
Chloroform	ND		ug/kg	80	7.5	1
Carbon tetrachloride	ND		ug/kg	54	12.	1
1,2-Dichloropropane	ND		ug/kg	54	6.7	1
Dibromochloromethane	ND		ug/kg	54	7.5	1
1,1,2-Trichloroethane	ND		ug/kg	54	14.	1
Tetrachloroethene	ND		ug/kg	27	10.	1
Chlorobenzene	ND		ug/kg	27	6.8	1
Trichlorofluoromethane	ND		ug/kg	210	37.	1
1,2-Dichloroethane	ND		ug/kg	54	14.	1
1,1,1-Trichloroethane	ND		ug/kg	27	9.0	1
Bromodichloromethane	ND		ug/kg	27	5.8	1
trans-1,3-Dichloropropene	ND		ug/kg	54	15.	1
cis-1,3-Dichloropropene	ND		ug/kg	27	8.5	1
Bromoform	ND		ug/kg	210	13.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	27	8.9	1
Benzene	ND		ug/kg	27	8.9	1
Toluene	ND		ug/kg	54	29.	1
Ethylbenzene	ND		ug/kg	54	7.6	1
Chloromethane	ND		ug/kg	210	50.	1
Bromomethane	ND		ug/kg	110	31.	1
Vinyl chloride	210		ug/kg	54	18.	1
Chloroethane	ND		ug/kg	110	24.	1
1,1-Dichloroethene	ND		ug/kg	54	13.	1
trans-1,2-Dichloroethene	ND		ug/kg	80	7.4	1
Trichloroethene	170		ug/kg	27	7.4	1
1,2-Dichlorobenzene	ND		ug/kg	110	7.7	1

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-11	Date Collected:	09/26/19 15:37
Client ID:	IRM-08 (10-10.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	110	7.9	1
1,4-Dichlorobenzene	ND		ug/kg	110	9.2	1
Methyl tert butyl ether	ND		ug/kg	110	11.	1
p/m-Xylene	ND		ug/kg	110	30.	1
o-Xylene	ND		ug/kg	54	16.	1
cis-1,2-Dichloroethene	1300		ug/kg	54	9.4	1
Styrene	ND		ug/kg	54	10.	1
Dichlorodifluoromethane	ND		ug/kg	540	49.	1
Acetone	ND		ug/kg	540	260	1
Carbon disulfide	ND		ug/kg	540	240	1
2-Butanone	ND		ug/kg	540	120	1
4-Methyl-2-pentanone	ND		ug/kg	540	69.	1
2-Hexanone	ND		ug/kg	540	63.	1
Bromochloromethane	ND		ug/kg	110	11.	1
1,2-Dibromoethane	ND		ug/kg	54	15.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	160	54.	1
Isopropylbenzene	ND		ug/kg	54	5.8	1
1,2,3-Trichlorobenzene	ND		ug/kg	110	17.	1
1,2,4-Trichlorobenzene	ND		ug/kg	110	15.	1
Methyl Acetate	ND		ug/kg	210	51.	1
Cyclohexane	ND		ug/kg	540	29.	1
1,4-Dioxane	ND		ug/kg	4300	1900	1
Freon-113	ND		ug/kg	210	37.	1
Methyl cyclohexane	ND		ug/kg	210	32.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	100		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-12
Client ID: IRM-08 (14.2-14.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/26/19 15:41
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 23:21
Analyst: MM
Percent Solids: 87%
TCLP/SPLP Ext. Date: 10/01/19 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	2.8	J	ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
dibromofluoromethane	115		70-130

Project Name: WEBER KNAPP | **Lab Number:** L1944926

Project Number: 5635$-19 | **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-12	Date Collected:	09/26/19 15:41
Client ID:	IRM-08 (14.2-14.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 18:04
Analyst: MKS
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.98	0.12	1
Dibromochloromethane	ND		ug/kg	0.98	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.98	0.26	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Bromodichloromethane	ND		ug/kg	0.49	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.15	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	ND		ug/kg	0.98	0.53	1
Ethylbenzene	ND		ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	3.9	0.91	1
Bromomethane	ND		ug/kg	2.0	0.57	1
Vinyl chloride	36		ug/kg	0.98	0.33	1
Chloroethane	ND		ug/kg	2.0	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1
Trichloroethene	32		ug/kg	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1

Project Name: WEBER KNAPP | **Lab Number:** L1944926

Project Number: 5635$-19 | **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-12	Date Collected:	09/26/19 15:41
Client ID:	IRM-08 (14.2-14.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.55	1
o-Xylene	ND		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	38		ug/kg	0.98	0.17	1
Styrene	ND		ug/kg	0.98	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.90	1
Acetone	7.4	J	ug/kg	9.8	4.7	1
Carbon disulfide	ND		ug/kg	9.8	4.4	1
2-Butanone	ND		ug/kg	9.8	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	1.2	1
2-Hexanone	ND		ug/kg	9.8	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.98	0.27	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.98	1
Isopropylbenzene	ND		ug/kg	0.98	0.11	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
Methyl Acetate	ND		ug/kg	3.9	0.93	1
Cyclohexane	ND		ug/kg	9.8	0.53	1
1,4-Dioxane	ND		ug/kg	78	34.	1
Freon-113	ND		ug/kg	3.9	0.68	1
Methyl cyclohexane	ND		ug/kg	3.9	0.59	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	96		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-13
Client ID: IRM-04 (12-12.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/26/19 16:11
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 01:44
Analyst: MM
Percent Solids: 89%
TCLP/SPLP Ext. Date: 10/01/19 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
dibromofluoromethane	114		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-13	Date Collected:	09/26/19 16:11
Client ID:	IRM-04 (12-12.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 18:44
Analyst: MKS
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.5	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.91	0.13	1
Chloroform	0.19	J	ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.91	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.91	0.11	1
Dibromochloromethane	ND		ug/kg	0.91	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.91	0.24	1
Tetrachloroethene	ND		ug/kg	0.45	0.18	1
Chlorobenzene	ND		ug/kg	0.45	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.6	0.63	1
1,2-Dichloroethane	ND		ug/kg	0.91	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.45	0.15	1
Bromodichloromethane	ND		ug/kg	0.45	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.91	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.45	0.14	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.45	0.15	1
Benzene	ND		ug/kg	0.45	0.15	1
Toluene	ND		ug/kg	0.91	0.49	1
Ethylbenzene	ND		ug/kg	0.91	0.13	1
Chloromethane	ND		ug/kg	3.6	0.84	1
Bromomethane	ND		ug/kg	1.8	0.53	1
Vinyl chloride	ND		ug/kg	0.91	0.30	1
Chloroethane	ND		ug/kg	1.8	0.41	1
1,1-Dichloroethene	ND		ug/kg	0.91	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.12	1
Trichloroethene	4.0		ug/kg	0.45	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-13	Date Collected:	09/26/19 16:11
Client ID:	IRM-04 (12-12.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.13	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.15	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.51	1
o-Xylene	ND		ug/kg	0.91	0.26	1
cis-1,2-Dichloroethene	0.74	J	ug/kg	0.91	0.16	1
Styrene	ND		ug/kg	0.91	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.1	0.83	1
Acetone	ND		ug/kg	9.1	4.4	1
Carbon disulfide	ND		ug/kg	9.1	4.1	1
2-Butanone	ND		ug/kg	9.1	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.1	1.2	1
2-Hexanone	ND		ug/kg	9.1	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.18	1
1,2-Dibromoethane	ND		ug/kg	0.91	0.25	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.7	0.90	1
Isopropylbenzene	ND		ug/kg	0.91	0.10	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.29	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
Methyl Acetate	ND		ug/kg	3.6	0.86	1
Cyclohexane	ND		ug/kg	9.1	0.49	1
1,4-Dioxane	ND		ug/kg	72	32.	1
Freon-113	ND		ug/kg	3.6	0.63	1
Methyl cyclohexane	ND		ug/kg	3.6	0.55	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	96		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-14	Date Collected:	09/26/19 16:41
Client ID:	IRM-05 (12-12.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 01:20
Analyst: MM
Percent Solids: 89%
TCLP/SPLP Ext. Date: 10/01/19 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	5.0	J	ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	38		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
dibromofluoromethane	113		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-14	Date Collected:	09/26/19 16:41
Client ID:	IRM-05 (12-12.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 14:46
Analyst: MKS
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	310	140	1
1,1-Dichloroethane	ND		ug/kg	62	9.0	1
Chloroform	ND		ug/kg	93	8.6	1
Carbon tetrachloride	ND		ug/kg	62	14.	1
1,2-Dichloropropane	ND		ug/kg	62	7.7	1
Dibromochloromethane	ND		ug/kg	62	8.6	1
1,1,2-Trichloroethane	ND		ug/kg	62	16.	1
Tetrachloroethene	ND		ug/kg	31	12.	1
Chlorobenzene	ND		ug/kg	31	7.8	1
Trichlorofluoromethane	ND		ug/kg	250	43.	1
1,2-Dichloroethane	ND		ug/kg	62	16.	1
1,1,1-Trichloroethane	ND		ug/kg	31	10.	1
Bromodichloromethane	ND		ug/kg	31	6.7	1
trans-1,3-Dichloropropene	ND		ug/kg	62	17.	1
cis-1,3-Dichloropropene	ND		ug/kg	31	9.8	1
Bromoform	ND		ug/kg	250	15.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	31	10.	1
Benzene	ND		ug/kg	31	10.	1
Toluene	ND		ug/kg	62	34.	1
Ethylbenzene	ND		ug/kg	62	8.7	1
Chloromethane	ND		ug/kg	250	58.	1
Bromomethane	ND		ug/kg	120	36.	1
Vinyl chloride	36	J	ug/kg	62	21.	1
Chloroethane	ND		ug/kg	120	28.	1
1,1-Dichloroethene	ND		ug/kg	62	15.	1
trans-1,2-Dichloroethene	ND		ug/kg	93	8.5	1
Trichloroethene	1000		ug/kg	31	8.5	1
1,2-Dichlorobenzene	ND		ug/kg	120	8.9	1

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-14	Date Collected:	09/26/19 16:41
Client ID:	IRM-05 (12-12.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	120	9.1	1
1,4-Dichlorobenzene	ND		ug/kg	120	10.	1
Methyl tert butyl ether	ND		ug/kg	120	12.	1
p/m-Xylene	ND		ug/kg	120	35.	1
o-Xylene	ND		ug/kg	62	18.	1
cis-1,2-Dichloroethene	1700		ug/kg	62	11.	1
Styrene	ND		ug/kg	62	12.	1
Dichlorodifluoromethane	ND		ug/kg	620	56.	1
Acetone	ND		ug/kg	620	300	1
Carbon disulfide	ND		ug/kg	620	280	1
2-Butanone	ND		ug/kg	620	140	1
4-Methyl-2-pentanone	ND		ug/kg	620	79.	1
2-Hexanone	ND		ug/kg	620	73.	1
Bromochloromethane	ND		ug/kg	120	13.	1
1,2-Dibromoethane	ND		ug/kg	62	17.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	180	62.	1
Isopropylbenzene	ND		ug/kg	62	6.7	1
1,2,3-Trichlorobenzene	ND		ug/kg	120	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	120	17.	1
Methyl Acetate	ND		ug/kg	250	59.	1
Cyclohexane	ND		ug/kg	620	34.	1
1,4-Dioxane	ND		ug/kg	4900	2200	1
Freon-113	ND		ug/kg	250	43.	1
Methyl cyclohexane	ND		ug/kg	250	37.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-15
Client ID: IRM-09 (10-12)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/27/19 08:30
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/03/19 23:44
Analyst: MM
Percent Solids: 91%
TCLP/SPLP Ext. Date: 10/01/19 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	120		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
dibromofluoromethane	113		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-15	Date Collected:	09/27/19 08:30
Client ID:	IRM-09 (10-12)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/07/19 12:16
Analyst: JC
Percent Solids: 91%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	330	150	1
1,1-Dichloroethane	ND		ug/kg	65	9.5	1
Chloroform	ND		ug/kg	98	9.1	1
Carbon tetrachloride	ND		ug/kg	65	15.	1
1,2-Dichloropropane	ND		ug/kg	65	8.2	1
Dibromochloromethane	ND		ug/kg	65	9.1	1
1,1,2-Trichloroethane	ND		ug/kg	65	17.	1
Tetrachloroethene	ND		ug/kg	33	13.	1
Chlorobenzene	ND		ug/kg	33	8.3	1
Trichlorofluoromethane	ND		ug/kg	260	45.	1
1,2-Dichloroethane	ND		ug/kg	65	17.	1
1,1,1-Trichloroethane	ND		ug/kg	33	11.	1
Bromodichloromethane	ND		ug/kg	33	7.1	1
trans-1,3-Dichloropropene	ND		ug/kg	65	18.	1
cis-1,3-Dichloropropene	ND		ug/kg	33	10.	1
Bromoform	ND		ug/kg	260	16.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	33	11.	1
Benzene	ND		ug/kg	33	11.	1
Toluene	ND		ug/kg	65	35.	1
Ethylbenzene	ND		ug/kg	65	9.2	1
Chloromethane	ND		ug/kg	260	61.	1
Bromomethane	ND		ug/kg	130	38.	1
Vinyl chloride	ND		ug/kg	65	22.	1
Chloroethane	ND		ug/kg	130	30.	1
1,1-Dichloroethene	ND		ug/kg	65	16.	1
trans-1,2-Dichloroethene	ND		ug/kg	98	8.9	1
Trichloroethene	14000		ug/kg	33	8.9	1
1,2-Dichlorobenzene	ND		ug/kg	130	9.4	1

Project Name: WEBER KNAPP
Lab Number: L1944926
Project Number: 5635$-19
Report Date: 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-15	Date Collected:	09/27/19 08:30
Client ID:	IRM-09 (10-12)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	130	9.7	1
1,4-Dichlorobenzene	ND		ug/kg	130	11.	1
Methyl tert butyl ether	ND		ug/kg	130	13.	1
p/m-Xylene	ND		ug/kg	130	36.	1
o-Xylene	ND		ug/kg	65	19.	1
cis-1,2-Dichloroethene	2000		ug/kg	65	11.	1
Styrene	ND		ug/kg	65	13.	1
Dichlorodifluoromethane	ND		ug/kg	650	60.	1
Acetone	ND		ug/kg	650	310	1
Carbon disulfide	ND		ug/kg	650	300	1
2-Butanone	ND		ug/kg	650	140	1
4-Methyl-2-pentanone	ND		ug/kg	650	84.	1
2-Hexanone	ND		ug/kg	650	77.	1
Bromochloromethane	ND		ug/kg	130	13.	1
1,2-Dibromoethane	ND		ug/kg	65	18.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	200	65.	1
Isopropylbenzene	ND		ug/kg	65	7.1	1
1,2,3-Trichlorobenzene	ND		ug/kg	130	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	130	18.	1
Methyl Acetate	ND		ug/kg	260	62.	1
Cyclohexane	ND		ug/kg	650	36.	1
1,4-Dioxane	ND		ug/kg	5200	2300	1
Freon-113	ND		ug/kg	260	45.	1
Methyl cyclohexane	96	J	ug/kg	260	39.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	101		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-16
Client ID: IRM-11 (11-11.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/27/19 11:23
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/04/19 00:08
Analyst: MM
Percent Solids: 92%
TCLP/SPLP Ext. Date: 10/01/19 18:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
dibromofluoromethane	114		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-16
Client ID: IRM-11 (11-11.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/27/19 11:23
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/05/19 12:05
Analyst: MV
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.6	2.1	1
1,1-Dichloroethane	ND		ug/kg	0.92	0.13	1
Chloroform	0.18	J	ug/kg	1.4	0.13	1
Carbon tetrachloride	ND		ug/kg	0.92	0.21	1
1,2-Dichloropropane	ND		ug/kg	0.92	0.11	1
Dibromochloromethane	ND		ug/kg	0.92	0.13	1
1,1,2-Trichloroethane	ND		ug/kg	0.92	0.24	1
Tetrachloroethene	ND		ug/kg	0.46	0.18	1
Chlorobenzene	ND		ug/kg	0.46	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.7	0.64	1
1,2-Dichloroethane	ND		ug/kg	0.92	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.46	0.15	1
Bromodichloromethane	ND		ug/kg	0.46	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.92	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	0.46	0.14	1
Bromoform	ND		ug/kg	3.7	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.46	0.15	1
Benzene	ND		ug/kg	0.46	0.15	1
Toluene	0.50	J	ug/kg	0.92	0.50	1
Ethylbenzene	ND		ug/kg	0.92	0.13	1
Chloromethane	ND		ug/kg	3.7	0.85	1
Bromomethane	ND		ug/kg	1.8	0.53	1
Vinyl chloride	0.37	J	ug/kg	0.92	0.31	1
Chloroethane	ND		ug/kg	1.8	0.41	1
1,1-Dichloroethene	ND		ug/kg	0.92	0.22	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.12	1
Trichloroethene	0.94		ug/kg	0.46	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.8	0.13	1

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-16
Client ID: IRM-11 (11-11.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/27/19 11:23
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	1.8	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	1.8	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.8	0.18	1
p/m-Xylene	ND		ug/kg	1.8	0.51	1
o-Xylene	ND		ug/kg	0.92	0.27	1
cis-1,2-Dichloroethene	0.56	J	ug/kg	0.92	0.16	1
Styrene	ND		ug/kg	0.92	0.18	1
Dichlorodifluoromethane	ND		ug/kg	9.2	0.84	1
Acetone	ND		ug/kg	9.2	4.4	1
Carbon disulfide	ND		ug/kg	9.2	4.2	1
2-Butanone	ND		ug/kg	9.2	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	9.2	1.2	1
2-Hexanone	ND		ug/kg	9.2	1.1	1
Bromochloromethane	ND		ug/kg	1.8	0.19	1
1,2-Dibromoethane	ND		ug/kg	0.92	0.26	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.8	0.92	1
Isopropylbenzene	ND		ug/kg	0.92	0.10	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.8	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.8	0.25	1
Methyl Acetate	ND		ug/kg	3.7	0.87	1
Cyclohexane	ND		ug/kg	9.2	0.50	1
1,4-Dioxane	ND		ug/kg	73	32.	1
Freon-113	ND		ug/kg	3.7	0.64	1
Methyl cyclohexane	ND		ug/kg	3.7	0.55	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	96		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-17	Date Collected:	09/27/19 11:40
Client ID:	EB-092719	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/04/19 15:50
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-17	Date Collected:	09/27/19 11:40
Client ID:	EB-092719	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	13		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/03/19 11:08
Analyst: MM
TCLP/SPLP Extraction Date: 10/01/19 17:01

Extraction Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01-06 Batch: WG1291819-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	98		70-130
dibromofluoromethane	111		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method:	1,8260C
Analytical Date:	10/04/19 08:08
Analyst:	MM
TCLP/SPLP Extraction Date:	10/01/19 17:01

Extraction Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 09 Batch: WG1292147-10					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
dibromofluoromethane	106		70-130

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/03/19 20:09
Analyst: KJD
TCLP/SPLP Extraction Date: 10/01/19 17:01

Extraction Date: 10/01/19 17:01

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 07-16 Batch: WG1292147-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
dibromofluoromethane	108		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/03/19 18:43
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01-03 Batch: WG1292194-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	15	J	ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/03/19 18:43
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01-03 Batch: WG1292194-5					
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Isopropylbenzene	ND		ug/kg	50	5.4
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
Methyl Acetate	ND		ug/kg	200	48.
Cyclohexane	ND		ug/kg	500	27.
1,4-Dioxane	ND		ug/kg	4000	1800
Freon-113	ND		ug/kg	200	35.
Methyl cyclohexane	ND		ug/kg	200	30.

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/03/19 18:43
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01-03 Batch: WG1292194-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	95		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 07:08
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-06,08 Batch: WG1292309-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	14	J	ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 07:08
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-06,08 Batch: WG1292309-5					
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Isopropylbenzene	ND		ug/kg	50	5.4
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
Methyl Acetate	ND		ug/kg	200	48.
Cyclohexane	ND		ug/kg	500	27.
1,4-Dioxane	ND		ug/kg	4000	1800
Freon-113	ND		ug/kg	200	35.
Methyl cyclohexane	ND		ug/kg	200	30.

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 07:08
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-06,08 Batch: WG1292309-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	83		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	95		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 08:22
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 17 Batch: WG1292323-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 08:22
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 17 Batch: WG1292323-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 08:22
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 17 Batch: WG1292323-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	97		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 07:32
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 09,11,14 Batch: WG1292529-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 07:32
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 09,11,14 Batch: WG1292529-5					
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Isopropylbenzene	ND		ug/kg	50	5.4
1,2,3-Trichlorobenzene	28	J	ug/kg	100	16.
1,2,4-Trichlorobenzene	20	J	ug/kg	100	14.
Methyl Acetate	ND		ug/kg	200	48.
Cyclohexane	ND		ug/kg	500	27.
1,4-Dioxane	ND		ug/kg	4000	1800
Freon-113	ND		ug/kg	200	35.
Methyl cyclohexane	ND		ug/kg	200	30.

Project Name: WEBER KNAPP　　**Lab Number:** L1944926
Project Number: 5635$-19　　**Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 07:32
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 09,11,14 Batch: WG1292529-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

Project Name: WEBER KNAPP
Lab Number: L1944926
Project Number: 5635$-19
Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/05/19 10:07
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 10,16 Batch: WG1292558-10					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	0.19	J	ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/05/19 10:07
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 10,16 Batch: WG1292558-10					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/05/19 10:07
Analyst: KJD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 10,16 Batch: WG1292558-10					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	96		70-130

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 08:55
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 07,10,12-13 Batch: WG1292558-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	0.36	J	ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 08:55
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 07,10,12-13 Batch: WG1292558-5					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Project Name: WEBER KNAPP
Lab Number: L1944926
Project Number: 5635$-19
Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/04/19 08:55
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 07,10,12-13 Batch: WG1292558-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	95		70-130

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/07/19 07:03
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 15 Batch: WG1293151-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	ND		ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/07/19 07:03
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 15 Batch: WG1293151-5					
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Isopropylbenzene	ND		ug/kg	50	5.4
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
Methyl Acetate	ND		ug/kg	200	48.
Cyclohexane	ND		ug/kg	500	27.
1,4-Dioxane	ND		ug/kg	4000	1800
Freon-113	ND		ug/kg	200	35.
Methyl cyclohexane	ND		ug/kg	200	30.

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/07/19 07:03
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 15 Batch: WG1293151-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01-06 Batch: WG1291819-3 WG1291819-4								
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	110		110		63-132	0		20
Tetrachloroethene	100		110		70-130	10		20
Chlorobenzene	100		110		75-130	10		25
1,2-Dichloroethane	120		110		70-130	9		20
Benzene	110		100		70-130	10		25
Vinyl chloride	99		100		55-140	1		20
1,1-Dichloroethene	95		98		61-145	3		25
Trichloroethene	110		100		70-130	10		25
1,4-Dichlorobenzene	110		100		70-130	10		20
2-Butanone	110		110		63-138	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	109		104		70-130
Toluene-d8	99		101		70-130
4-Bromofluorobenzene	97		96		70-130
dibromofluoromethane	104		102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 07-16 Batch: WG1292147-3 WG1292147-4								
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		25
1,2-Dichloroethane	110		120		70-130	9		20
Benzene	100		100		70-130	0		25
Vinyl chloride	96		100		55-140	4		20
1,1-Dichloroethene	89		100		61-145	12		25
Trichloroethene	100		110		70-130	10		25
1,4-Dichlorobenzene	99		100		70-130	1		20
2-Butanone	95		100		63-138	5		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		105		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	99		99		70-130
dibromofluoromethane	105		103		70-130

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 09 Batch: WG1292147-8 WG1292147-9								
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	110		120		63-132	9		20
Tetrachloroethene	100		110		70-130	10		20
Chlorobenzene	100		100		75-130	0		25
1,2-Dichloroethane	110		110		70-130	0		20
Benzene	100		100		70-130	0		25
Vinyl chloride	100		100		55-140	0		20
1,1-Dichloroethene	100		110		61-145	10		25
Trichloroethene	100		110		70-130	10		25
1,4-Dichlorobenzene	100		100		70-130	0		20
2-Butanone	94		96		63-138	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		101		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	95		96		70-130
dibromofluoromethane	104		102		70-130

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-03 Batch: WG1292194-3 WG1292194-4								
Methylene chloride	109		107		70-130	2		30
1,1-Dichloroethane	111		109		70-130	2		30
Chloroform	100		99		70-130	1		30
Carbon tetrachloride	102		101		70-130	1		30
1,2-Dichloropropane	115		114		70-130	1		30
Dibromochloromethane	102		101		70-130	1		30
1,1,2-Trichloroethane	104		100		70-130	4		30
Tetrachloroethene	114		110		70-130	4		30
Chlorobenzene	109		105		70-130	4		30
Trichlorofluoromethane	91		88		70-139	3		30
1,2-Dichloroethane	97		96		70-130	1		30
1,1,1-Trichloroethane	104		102		70-130	2		30
Bromodichloromethane	106		106		70-130	0		30
trans-1,3-Dichloropropene	102		101		70-130	1		30
cis-1,3-Dichloropropene	117		116		70-130	1		30
Bromoform	99		98		70-130	1		30
1,1,2,2-Tetrachloroethane	96		96		70-130	0		30
Benzene	115		113		70-130	2		30
Toluene	108		104		70-130	4		30
Ethylbenzene	106		103		70-130	3		30
Chloromethane	117		112		52-130	4		30
Bromomethane	79		77		57-147	3		30
Vinyl chloride	88		83		67-130	6		30

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-03 Batch: WG1292194-3 WG1292194-4								
Chloroethane	74		68		50-151	8		30
1,1-Dichloroethene	91		113		65-135	22		30
trans-1,2-Dichloroethene	118		115		70-130	3		30
Trichloroethene	115		112		70-130	3		30
1,2-Dichlorobenzene	102		101		70-130	1		30
1,3-Dichlorobenzene	104		101		70-130	3		30
1,4-Dichlorobenzene	104		100		70-130	4		30
Methyl tert butyl ether	107		105		66-130	2		30
p/m-Xylene	112		108		70-130	4		30
o-Xylene	111		107		70-130	4		30
cis-1,2-Dichloroethene	116		112		70-130	4		30
Styrene	105		101		70-130	4		30
Dichlorodifluoromethane	96		92		30-146	4		30
Acetone	105		99		54-140	6		30
Carbon disulfide	108		108		59-130	0		30
2-Butanone	105		114		70-130	8		30
4-Methyl-2-pentanone	102		102		70-130	0		30
2-Hexanone	87		88		70-130	1		30
Bromochloromethane	118		112		70-130	5		30
1,2-Dibromoethane	105		104		70-130	1		30
1,2-Dibromo-3-chloropropane	88		88		68-130	0		30
Isopropylbenzene	104		100		70-130	4		30
1,2,3-Trichlorobenzene	107		106		70-130	1		30

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01-03 Batch: WG1292194-3 WG1292194-4								
1,2,4-Trichlorobenzene	113		111		70-130	2		30
Methyl Acetate	108		106		51-146	2		30
Cyclohexane	117		113		59-142	3		30
1,4-Dioxane	103		101		65-136	2		30
Freon-113	106		106		50-139	0		30
Methyl cyclohexane	110		108		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	80		83		70-130
Toluene-d8	98		96		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	96		97		70-130

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08 Batch: WG1292309-3 WG1292309-4								
Methylene chloride	95		90		70-130	5		30
1,1-Dichloroethane	98		91		70-130	7		30
Chloroform	90		86		70-130	5		30
Carbon tetrachloride	96		89		70-130	8		30
1,2-Dichloropropane	103		97		70-130	6		30
Dibromochloromethane	94		90		70-130	4		30
1,1,2-Trichloroethane	92		89		70-130	3		30
Tetrachloroethene	104		97		70-130	7		30
Chlorobenzene	97		92		70-130	5		30
Trichlorofluoromethane	90		81		70-139	11		30
1,2-Dichloroethane	87		84		70-130	4		30
1,1,1-Trichloroethane	95		88		70-130	8		30
Bromodichloromethane	97		92		70-130	5		30
trans-1,3-Dichloropropene	91		89		70-130	2		30
cis-1,3-Dichloropropene	106		100		70-130	6		30
Bromoform	91		90		70-130	1		30
1,1,2,2-Tetrachloroethane	87		84		70-130	4		30
Benzene	102		95		70-130	7		30
Toluene	96		90		70-130	6		30
Ethylbenzene	96		89		70-130	8		30
Chloromethane	107		96		52-130	11		30
Bromomethane	93		83		57-147	11		30
Vinyl chloride	80		71		67-130	12		30

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08 Batch: WG1292309-3 WG1292309-4								
Chloroethane	71		64		50-151	10		30
1,1-Dichloroethene	90		92		65-135	2		30
trans-1,2-Dichloroethene	105		96		70-130	9		30
Trichloroethene	103		96		70-130	7		30
1,2-Dichlorobenzene	94		89		70-130	5		30
1,3-Dichlorobenzene	95		90		70-130	5		30
1,4-Dichlorobenzene	94		90		70-130	4		30
Methyl tert butyl ether	98		94		66-130	4		30
p/m-Xylene	100		93		70-130	7		30
o-Xylene	99		93		70-130	6		30
cis-1,2-Dichloroethene	104		98		70-130	6		30
Styrene	95		90		70-130	5		30
Dichlorodifluoromethane	92		82		30-146	11		30
Acetone	101		84		54-140	18		30
Carbon disulfide	97		89		59-130	9		30
2-Butanone	94		92		70-130	2		30
4-Methyl-2-pentanone	95		92		70-130	3		30
2-Hexanone	83		79		70-130	5		30
Bromochloromethane	104		101		70-130	3		30
1,2-Dibromoethane	96		93		70-130	3		30
1,2-Dibromo-3-chloropropane	84		83		68-130	1		30
Isopropylbenzene	95		87		70-130	9		30
1,2,3-Trichlorobenzene	101		98		70-130	3		30

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06,08 Batch: WG1292309-3 WG1292309-4								
1,2,4-Trichlorobenzene	107		102		70-130	5		30
Methyl Acetate	96		93		51-146	3		30
Cyclohexane	108		100		59-142	8		30
1,4-Dioxane	104		104		65-136	0		30
Freon-113	98		91		50-139	7		30
Methyl cyclohexane	106		97		70-130	9		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	83		81		70-130
Toluene-d8	95		96		70-130
4-Bromofluorobenzene	93		94		70-130
Dibromofluoromethane	98		97		70-130

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 17 Batch: WG1292323-3 WG1292323-4								
Methylene chloride	94		89		70-130	5		20
1,1-Dichloroethane	110		99		70-130	11		20
Chloroform	89		80		70-130	11		20
Carbon tetrachloride	84		77		63-132	9		20
1,2-Dichloropropane	110		99		70-130	11		20
Dibromochloromethane	91		86		63-130	6		20
1,1,2-Trichloroethane	100		94		70-130	6		20
Tetrachloroethene	98		88		70-130	11		20
Chlorobenzene	94		88		75-130	7		20
Trichlorofluoromethane	80		76		62-150	5		20
1,2-Dichloroethane	88		84		70-130	5		20
1,1,1-Trichloroethane	78		74		67-130	5		20
Bromodichloromethane	87		82		67-130	6		20
trans-1,3-Dichloropropene	84		79		70-130	6		20
cis-1,3-Dichloropropene	87		82		70-130	6		20
Bromoform	89		86		54-136	3		20
1,1,2,2-Tetrachloroethane	96		92		67-130	4		20
Benzene	96		89		70-130	8		20
Toluene	100		92		70-130	8		20
Ethylbenzene	100		89		70-130	12		20
Chloromethane	120		110		64-130	9		20
Bromomethane	82		74		39-139	10		20
Vinyl chloride	100		94		55-140	6		20

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 17 Batch: WG1292323-3 WG1292323-4								
Chloroethane	92		80		55-138	14		20
1,1-Dichloroethene	94		89		61-145	5		20
trans-1,2-Dichloroethene	98		90		70-130	9		20
Trichloroethene	91		85		70-130	7		20
1,2-Dichlorobenzene	100		94		70-130	6		20
1,3-Dichlorobenzene	100		91		70-130	9		20
1,4-Dichlorobenzene	98		90		70-130	9		20
Methyl tert butyl ether	76		71		63-130	7		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	95		90		70-130	5		20
cis-1,2-Dichloroethene	91		94		70-130	3		20
Styrene	95		90		70-130	5		20
Dichlorodifluoromethane	76		72		36-147	5		20
Acetone	100		100		58-148	0		20
Carbon disulfide	94		90		51-130	4		20
2-Butanone	100		94		63-138	6		20
4-Methyl-2-pentanone	90		91		59-130	1		20
2-Hexanone	88		91		57-130	3		20
Bromochloromethane	96		92		70-130	4		20
1,2-Dibromoethane	90		89		70-130	1		20
1,2-Dibromo-3-chloropropane	89		86		41-144	3		20
Isopropylbenzene	94		89		70-130	5		20
1,2,3-Trichlorobenzene	86		82		70-130	5		20

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 17 Batch: WG1292323-3 WG1292323-4								
1,2,4-Trichlorobenzene	88		81		70-130	8		20
Methyl Acetate	110		120		70-130	9		20
Cyclohexane	110		110		70-130	0		20
1,4-Dioxane	100		110		56-162	10		20
Freon-113	97		92		70-130	5		20
Methyl cyclohexane	91		87		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		92		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	96		94		70-130
Dibromofluoromethane	97		96		70-130

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 09,11,14 Batch: WG1292529-3 WG1292529-4								
Methylene chloride	87		83		70-130	5		30
1,1-Dichloroethane	100		97		70-130	3		30
Chloroform	103		101		70-130	2		30
Carbon tetrachloride	111		108		70-130	3		30
1,2-Dichloropropane	99		98		70-130	1		30
Dibromochloromethane	102		100		70-130	2		30
1,1,2-Trichloroethane	95		96		70-130	1		30
Tetrachloroethene	98		97		70-130	1		30
Chlorobenzene	93		93		70-130	0		30
Trichlorofluoromethane	109		106		70-139	3		30
1,2-Dichloroethane	108		104		70-130	4		30
1,1,1-Trichloroethane	106		101		70-130	5		30
Bromodichloromethane	103		100		70-130	3		30
trans-1,3-Dichloropropene	102		99		70-130	3		30
cis-1,3-Dichloropropene	102		99		70-130	3		30
Bromoform	102		101		70-130	1		30
1,1,2,2-Tetrachloroethane	89		87		70-130	2		30
Benzene	96		93		70-130	3		30
Toluene	97		96		70-130	1		30
Ethylbenzene	97		96		70-130	1		30
Chloromethane	93		87		52-130	7		30
Bromomethane	107		95		57-147	12		30
Vinyl chloride	98		93		67-130	5		30

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 09,11,14 Batch: WG1292529-3 WG1292529-4								
Chloroethane	107		103		50-151	4		30
1,1-Dichloroethene	100		95		65-135	5		30
trans-1,2-Dichloroethene	104		97		70-130	7		30
Trichloroethene	101		99		70-130	2		30
1,2-Dichlorobenzene	99		97		70-130	2		30
1,3-Dichlorobenzene	99		96		70-130	3		30
1,4-Dichlorobenzene	98		96		70-130	2		30
Methyl tert butyl ether	102		98		66-130	4		30
p/m-Xylene	97		95		70-130	2		30
o-Xylene	97		95		70-130	2		30
cis-1,2-Dichloroethene	103		99		70-130	4		30
Styrene	98		97		70-130	1		30
Dichlorodifluoromethane	104		98		30-146	6		30
Acetone	94		91		54-140	3		30
Carbon disulfide	96		91		59-130	5		30
2-Butanone	81		75		70-130	8		30
4-Methyl-2-pentanone	92		94		70-130	2		30
2-Hexanone	81		77		70-130	5		30
Bromochloromethane	110		107		70-130	3		30
1,2-Dibromoethane	104		100		70-130	4		30
1,2-Dibromo-3-chloropropane	96		94		68-130	2		30
Isopropylbenzene	98		95		70-130	3		30
1,2,3-Trichlorobenzene	95		94		70-130	1		30

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 09,11,14 Batch: WG1292529-3 WG1292529-4								
1,2,4-Trichlorobenzene	97		95		70-130	2		30
Methyl Acetate	97		96		51-146	1		30
Cyclohexane	100		95		59-142	5		30
1,4-Dioxane	94		91		65-136	3		30
Freon-113	102		98		50-139	4		30
Methyl cyclohexane	99		94		70-130	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		102		70-130
Toluene-d8	96		98		70-130
4-Bromofluorobenzene	97		97		70-130
Dibromofluoromethane	106		104		70-130

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Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 07,10,12-13 Batch: WG1292558-3 WG1292558-4								
Methylene chloride	91		87		70-130	4		30
1,1-Dichloroethane	101		100		70-130	1		30
Chloroform	93		90		70-130	3		30
Carbon tetrachloride	88		87		70-130	1		30
1,2-Dichloropropane	102		99		70-130	3		30
Dibromochloromethane	85		86		70-130	1		30
1,1,2-Trichloroethane	91		91		70-130	0		30
Tetrachloroethene	76		74		70-130	3		30
Chlorobenzene	87		84		70-130	4		30
Trichlorofluoromethane	94		92		70-139	2		30
1,2-Dichloroethane	98		97		70-130	1		30
1,1,1-Trichloroethane	90		88		70-130	2		30
Bromodichloromethane	90		90		70-130	0		30
trans-1,3-Dichloropropene	95		94		70-130	1		30
cis-1,3-Dichloropropene	95		94		70-130	1		30
Bromoform	80		81		70-130	1		30
1,1,2,2-Tetrachloroethane	95		95		70-130	0		30
Benzene	93		90		70-130	3		30
Toluene	90		88		70-130	2		30
Ethylbenzene	94		91		70-130	3		30
Chloromethane	128		121		52-130	6		30
Bromomethane	92		93		57-147	1		30
Vinyl chloride	104		100		67-130	4		30

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Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 07,10,12-13 Batch: WG1292558-3 WG1292558-4								
Chloroethane	113		108		50-151	5		30
1,1-Dichloroethene	92		89		65-135	3		30
trans-1,2-Dichloroethene	92		89		70-130	3		30
Trichloroethene	91		88		70-130	3		30
1,2-Dichlorobenzene	89		88		70-130	1		30
1,3-Dichlorobenzene	92		90		70-130	2		30
1,4-Dichlorobenzene	91		89		70-130	2		30
Methyl tert butyl ether	94		94		66-130	0		30
p/m-Xylene	90		87		70-130	3		30
o-Xylene	88		86		70-130	2		30
cis-1,2-Dichloroethene	92		88		70-130	4		30
Styrene	91		90		70-130	1		30
Dichlorodifluoromethane	132		125		30-146	5		30
Acetone	126		131		54-140	4		30
Carbon disulfide	94		92		59-130	2		30
2-Butanone	114		113		70-130	1		30
4-Methyl-2-pentanone	104		104		70-130	0		30
2-Hexanone	111		112		70-130	1		30
Bromochloromethane	86		86		70-130	0		30
1,2-Dibromoethane	88		87		70-130	1		30
1,2-Dibromo-3-chloropropane	81		84		68-130	4		30
Isopropylbenzene	97		93		70-130	4		30
1,2,3-Trichlorobenzene	85		85		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 07,10,12-13 Batch: WG1292558-3 WG1292558-4								
1,2,4-Trichlorobenzene	88		87		70-130	1		30
Methyl Acetate	113		114		51-146	1		30
Cyclohexane	105		101		59-142	4		30
1,4-Dioxane	95		94		65-136	1		30
Freon-113	90		86		50-139	5		30
Methyl cyclohexane	89		85		70-130	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		104		70-130
Toluene-d8	98		98		70-130
4-Bromofluorobenzene	107		107		70-130
Dibromofluoromethane	94		95		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 10,16 Batch: WG1292558-8 WG1292558-9								
Methylene chloride	89		92		70-130	3		30
1,1-Dichloroethane	105		106		70-130	1		30
Chloroform	94		97		70-130	3		30
Carbon tetrachloride	100		101		70-130	1		30
1,2-Dichloropropane	101		104		70-130	3		30
Dibromochloromethane	87		91		70-130	4		30
1,1,2-Trichloroethane	95		98		70-130	3		30
Tetrachloroethene	85		84		70-130	1		30
Chlorobenzene	89		90		70-130	1		30
Trichlorofluoromethane	113		112		70-139	1		30
1,2-Dichloroethane	98		101		70-130	3		30
1,1,1-Trichloroethane	99		99		70-130	0		30
Bromodichloromethane	90		94		70-130	4		30
trans-1,3-Dichloropropene	96		98		70-130	2		30
cis-1,3-Dichloropropene	95		99		70-130	4		30
Bromoform	83		86		70-130	4		30
1,1,2,2-Tetrachloroethane	98		100		70-130	2		30
Benzene	96		97		70-130	1		30
Toluene	96		95		70-130	1		30
Ethylbenzene	99		98		70-130	1		30
Chloromethane	**131**	Q	127		52-130	3		30
Bromomethane	93		101		57-147	8		30
Vinyl chloride	121		118		67-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 10,16 Batch: WG1292558-8 WG1292558-9								
Chloroethane	120		118		50-151	2		30
1,1-Dichloroethene	107		105		65-135	2		30
trans-1,2-Dichloroethene	99		99		70-130	0		30
Trichloroethene	97		96		70-130	1		30
1,2-Dichlorobenzene	90		92		70-130	2		30
1,3-Dichlorobenzene	93		94		70-130	1		30
1,4-Dichlorobenzene	92		93		70-130	1		30
Methyl tert butyl ether	95		100		66-130	5		30
p/m-Xylene	95		95		70-130	0		30
o-Xylene	92		93		70-130	1		30
cis-1,2-Dichloroethene	94		95		70-130	1		30
Styrene	94		96		70-130	2		30
Dichlorodifluoromethane	**157**	Q	**152**	Q	30-146	3		30
Acetone	128		116		54-140	10		30
Carbon disulfide	105		103		59-130	2		30
2-Butanone	116		115		70-130	1		30
4-Methyl-2-pentanone	110		110		70-130	0		30
2-Hexanone	114		113		70-130	1		30
Bromochloromethane	89		91		70-130	2		30
1,2-Dibromoethane	90		93		70-130	3		30
1,2-Dibromo-3-chloropropane	85		88		68-130	3		30
Isopropylbenzene	102		102		70-130	0		30
1,2,3-Trichlorobenzene	87		88		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 10,16 Batch: WG1292558-8 WG1292558-9								
1,2,4-Trichlorobenzene	89		90		70-130	1		30
Methyl Acetate	113		112		51-146	1		30
Cyclohexane	125		122		59-142	2		30
1,4-Dioxane	92		94		65-136	2		30
Freon-113	112		111		50-139	1		30
Methyl cyclohexane	108		106		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		103		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	106		107		70-130
Dibromofluoromethane	94		96		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 15 Batch: WG1293151-3 WG1293151-4								
Methylene chloride	93		88		70-130	6		30
1,1-Dichloroethane	104		100		70-130	4		30
Chloroform	108		105		70-130	3		30
Carbon tetrachloride	111		108		70-130	3		30
1,2-Dichloropropane	104		100		70-130	4		30
Dibromochloromethane	111		104		70-130	7		30
1,1,2-Trichloroethane	107		102		70-130	5		30
Tetrachloroethene	104		100		70-130	4		30
Chlorobenzene	101		95		70-130	6		30
Trichlorofluoromethane	112		108		70-139	4		30
1,2-Dichloroethane	109		104		70-130	5		30
1,1,1-Trichloroethane	108		104		70-130	4		30
Bromodichloromethane	108		105		70-130	3		30
trans-1,3-Dichloropropene	110		104		70-130	6		30
cis-1,3-Dichloropropene	109		105		70-130	4		30
Bromoform	112		109		70-130	3		30
1,1,2,2-Tetrachloroethane	98		96		70-130	2		30
Benzene	103		98		70-130	5		30
Toluene	103		98		70-130	5		30
Ethylbenzene	104		98		70-130	6		30
Chloromethane	95		88		52-130	8		30
Bromomethane	108		102		57-147	6		30
Vinyl chloride	102		96		67-130	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 15 Batch: WG1293151-3 WG1293151-4								
Chloroethane	118		110		50-151	7		30
1,1-Dichloroethene	106		100		65-135	6		30
trans-1,2-Dichloroethene	107		104		70-130	3		30
Trichloroethene	107		103		70-130	4		30
1,2-Dichlorobenzene	106		103		70-130	3		30
1,3-Dichlorobenzene	106		102		70-130	4		30
1,4-Dichlorobenzene	104		101		70-130	3		30
Methyl tert butyl ether	110		106		66-130	4		30
p/m-Xylene	103		98		70-130	5		30
o-Xylene	103		98		70-130	5		30
cis-1,2-Dichloroethene	109		106		70-130	3		30
Styrene	104		102		70-130	2		30
Dichlorodifluoromethane	105		100		30-146	5		30
Acetone	110		100		54-140	10		30
Carbon disulfide	102		97		59-130	5		30
2-Butanone	83		84		70-130	1		30
4-Methyl-2-pentanone	105		97		70-130	8		30
2-Hexanone	94		85		70-130	10		30
Bromochloromethane	115		109		70-130	5		30
1,2-Dibromoethane	110		105		70-130	5		30
1,2-Dibromo-3-chloropropane	104		102		68-130	2		30
Isopropylbenzene	102		99		70-130	3		30
1,2,3-Trichlorobenzene	104		102		70-130	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP | **Lab Number:** L1944926

Project Number: 5635$-19 | **Report Date:** 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 15 Batch: WG1293151-3 WG1293151-4								
1,2,4-Trichlorobenzene	108		105		70-130	3		30
Methyl Acetate	99		92		51-146	7		30
Cyclohexane	100		96		59-142	4		30
1,4-Dioxane	100		112		65-136	11		30
Freon-113	105		102		50-139	3		30
Methyl cyclohexane	106		100		70-130	6		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	100		101		70-130
Toluene-d8	97		96		70-130
4-Bromofluorobenzene	97		97		70-130
Dibromofluoromethane	103		106		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 15 QC Batch ID: WG1293151-6 WG1293151-7 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)												
Methylene chloride	ND	6500	6100	93		6400	98		70-130	5		30
1,1-Dichloroethane	ND	6500	7100	109		7300	112		70-130	2		30
Chloroform	ND	6500	7000	108		7500	115		70-130	7		30
Carbon tetrachloride	ND	6500	8100	125		8100	125		70-130	0		30
1,2-Dichloropropane	ND	6500	6800	104		7000	108		70-130	3		30
Dibromochloromethane	ND	6500	7100	109		7200	111		70-130	2		30
1,1,2-Trichloroethane	ND	6500	6400	99		6600	102		70-130	3		30
Tetrachloroethene	ND	6500	7300	112		6800	104		70-130	8		30
Chlorobenzene	ND	6500	6500	101		6200	95		70-130	5		30
Trichlorofluoromethane	ND	6500	7800	120		7800	120		70-139	0		30
1,2-Dichloroethane	ND	6500	6800	105		7300	112		70-130	6		30
1,1,1-Trichloroethane	ND	6500	7600	117		7700	118		70-130	0		30
Bromodichloromethane	ND	6500	7100	109		7400	113		70-130	4		30
trans-1,3-Dichloropropene	ND	6500	7100	109		7300	112		70-130	3		30
cis-1,3-Dichloropropene	ND	6500	7200	110		7400	114		70-130	3		30
Bromoform	ND	6500	7000	107		7400	114		70-130	6		30
1,1,2,2-Tetrachloroethane	ND	6500	5700	87		6100	94		70-130	7		30
Benzene	ND	6500	6900	106		7000	108		70-130	1		30
Toluene	ND	6500	7000	107		6700	102		70-130	5		30
Ethylbenzene	ND	6500	7000	108		6400	99		70-130	9		30
Chloromethane	ND	6500	6400	99		6700	104		52-130	5		30
Bromomethane	ND	6500	6400	99		7000	107		57-147	8		30
Vinyl chloride	ND	6500	7600	116		8100	124		67-130	7		30

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 15 QC Batch ID: WG1293151-6 WG1293151-7 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)												
Chloroethane	ND	6500	5300	82		5400	84		50-151	2		30
1,1-Dichloroethene	ND	6500	7500	116		7800	121		65-135	4		30
trans-1,2-Dichloroethene	ND	6500	7500	115		7600	117		70-130	2		30
Trichloroethene	14000	6500	21000E	102		20000E	98		70-130	1		30
1,2-Dichlorobenzene	ND	6500	6700	102		6400	98		70-130	4		30
1,3-Dichlorobenzene	ND	6500	6900	106		6300	97		70-130	8		30
1,4-Dichlorobenzene	ND	6500	6600	102		6100	94		70-130	8		30
Methyl tert butyl ether	ND	6500	6800	104		7500	115		66-130	10		30
p/m-Xylene	ND	13000	14000	105		13000	96		70-130	9		30
o-Xylene	ND	13000	13000	103		13000	97		70-130	6		30
cis-1,2-Dichloroethene	2000	6500	9500	115		9700	118		70-130	2		30
Styrene	ND	13000	14000	106		13000	101		70-130	5		30
Dichlorodifluoromethane	ND	6500	7600	118		7900	122		30-146	3		30
Acetone	ND	6500	5800	89		6800	104		54-140	15		30
Carbon disulfide	ND	6500	7200	111		7400	113		59-130	2		30
2-Butanone	ND	6500	5200	80		6200	96		70-130	17		30
4-Methyl-2-pentanone	ND	6500	6000	93		6600	102		70-130	9		30
2-Hexanone	ND	6500	5400	83		6100	93		70-130	11		30
Bromochloromethane	ND	6500	7200	111		7500	116		70-130	4		30
1,2-Dibromoethane	ND	6500	6800	105		7100	109		70-130	4		30
1,2-Dibromo-3-chloropropane	ND	6500	6500	100		7300	112		68-130	12		30
Isopropylbenzene	ND	6500	7200	111		6600	101		70-130	9		30
1,2,3-Trichlorobenzene	ND	6500	6800	105		6800	105		70-130	0		30

Matrix Spike Analysis
Batch Quality Control

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 15 QC Batch ID: WG1293151-6 WG1293151-7 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)												
1,2,4-Trichlorobenzene	ND	6500	7000	108		6800	104		70-130	4		30
Methyl Acetate	ND	6500	6100	94		6900	107		51-146	13		30
Cyclohexane	ND	6500	7300	112		7300	113		59-142	1		30
1,4-Dioxane	ND	330000	280000	83		330000	99		65-136	17		30
Freon-113	ND	6500	7700	119		7900	122		50-139	3		30
Methyl cyclohexane	96J	6500	7700	119		7800	119		70-130	0		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		102		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	103		105		70-130
Toluene-d8	97		95		70-130

SEMIVOLATILES

Project Name: WEBER KNAPP
Lab Number: L1944926
Project Number: 5635$-19
Report Date: 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-15
Client ID: IRM-09 (10-12)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/27/19 08:30
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 10/04/19 22:46
Analyst: SZ
Percent Solids: 91%
Extraction Method: EPA 3546
Extraction Date: 10/02/19 17:37

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	ND		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	ND		ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-15	Date Collected:	09/27/19 08:30
Client ID:	IRM-09 (10-12)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	ND		ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	ND		ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	ND		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	25.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	380	67.	1
4-Nitrophenol	ND		ug/kg	250	73.	1
2,4-Dinitrophenol	ND		ug/kg	860	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	86.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	ND		ug/kg	180	17.	1
Atrazine	ND		ug/kg	140	62.	1
Benzaldehyde	ND		ug/kg	240	48.	1

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-15	Date Collected:	09/27/19 08:30
Client ID:	IRM-09 (10-12)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	180	54.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	36.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	58		30-120
2,4,6-Tribromophenol	80		10-136
4-Terphenyl-d14	66		18-120

Project Name: WEBER KNAPP | **Lab Number:** L1944926

Project Number: 5635$-19 | **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-15	Date Collected:	09/27/19 08:30
Client ID:	IRM-09 (10-12)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method:	EPA 537(M)
Analytical Method:	122,537(M)	Extraction Date:	10/07/19 10:48
Analytical Date:	10/12/19 05:43		
Analyst:	JW		
Percent Solids:	91%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ug/kg	0.966	0.022	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	0.966	0.044	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	0.966	0.038	1
Perfluorohexanoic Acid (PFHxA)	0.051	J	ug/kg	0.966	0.051	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	0.966	0.044	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	0.966	0.058	1
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	0.966	0.041	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	0.966	0.173	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	0.966	0.132	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	0.966	0.072	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	0.966	0.126	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	0.966	0.065	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	0.966	0.277	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	0.966	0.195	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	0.966	0.045	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	0.966	0.148	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	0.966	0.095	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	0.966	0.082	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	0.966	0.068	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	0.966	0.198	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	0.966	0.052	1
PFOA/PFOS, Total	ND		ug/kg	0.966	0.041	1

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-15	Date Collected:	09/27/19 08:30
Client ID:	IRM-09 (10-12)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	87		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	96		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	87		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	87		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	66		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	90		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	95		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	93		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	92		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	62		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	92		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	16		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	58		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	83		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	69		26-160

Project Name: WEBER KNAPP
Lab Number: L1944926
Project Number: 5635$-19
Report Date: 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-17
Client ID: EB-092719
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/27/19 11:40
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/04/19 02:50
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/02/19 18:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-17	Date Collected:	09/27/19 11:40
Client ID:	EB-092719	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	45		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	62		10-120
4-Terphenyl-d14	72		41-149

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-17	Date Collected:	09/27/19 11:40
Client ID:	EB-092719	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	10/02/19 18:34
Analytical Date:	10/03/19 22:40		
Analyst:	CB		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-17	Date Collected:	09/27/19 11:40
Client ID:	EB-092719	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	90		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	95		41-149

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-17	Date Collected:	09/27/19 11:40
Client ID:	EB-092719	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Water	Extraction Method:	EPA 537
Analytical Method:	122,537(M)	Extraction Date:	10/11/19 07:15
Analytical Date:	10/13/19 17:22		
Analyst:	JW		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.24	0.457	1
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.24	0.444	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.24	0.267	1
Perfluorohexanoic Acid (PFHxA)	0.511	J	ng/l	2.24	0.368	1
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.24	0.252	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.24	0.422	1
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.24	0.264	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.24	1.49	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.24	0.771	1
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.24	0.350	1
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.24	0.565	1
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.24	0.341	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.24	1.36	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.24	0.726	1
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.24	0.291	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.24	1.10	1
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.24	0.650	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.24	0.901	1
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.24	0.417	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.24	0.367	1
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.24	0.278	1
PFOA/PFOS, Total	ND		ng/l	2.24	0.264	1

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-17	Date Collected:	09/27/19 11:40
Client ID:	EB-092719	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	60		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	84		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	59		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	61		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	92		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	69		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	75		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	72		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	84		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	71		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	67		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	44		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	69		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	23		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	59		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	63		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	58		33-143

Project Name: WEBER KNAPP

Project Number: 5635$-19

Lab Number: L1944926

Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/03/19 16:13
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/02/19 16:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 17 Batch: WG1291426-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/03/19 16:13
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/02/19 16:45

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 17 Batch: WG1291426-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	40		10-120
Nitrobenzene-d5	52		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	71		41-149

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method:	1,8270D	Extraction Method:	EPA 3546
Analytical Date:	10/03/19 13:43	Extraction Date:	10/02/19 17:37
Analyst:	ALS		

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 15 Batch: WG1291446-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/03/19 13:43
Analyst: ALS

Extraction Method: EPA 3546
Extraction Date: 10/02/19 17:37

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 15 Batch: WG1291446-1					
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method:	1,8270D	Extraction Method:	EPA 3546
Analytical Date:	10/03/19 13:43	Extraction Date:	10/02/19 17:37
Analyst:	ALS		

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 15 Batch: WG1291446-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	58.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	56		30-120
2,4,6-Tribromophenol	74		10-136
4-Terphenyl-d14	81		18-120

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/03/19 13:21
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 10/02/19 18:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 17 Batch: WG1291467-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method:	1,8270D-SIM	Extraction Method:	EPA 3510C
Analytical Date:	10/03/19 13:21	Extraction Date:	10/02/19 18:34
Analyst:	JJW		

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 17 Batch: WG1291467-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	47		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	88		41-149

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 10/10/19 20:42
Analyst: JW

Extraction Method: EPA 537(M)
Extraction Date: 10/07/19 10:48

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 15 Batch: WG1293004-1					
Perfluorobutanoic Acid (PFBA)	0.115	J	ug/kg	1.00	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039
Perfluorohexanoic Acid (PFHxA)	0.053	J	ug/kg	1.00	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.00	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.136
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.00	0.130
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.00	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.00	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.00	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054
PFOA/PFOS, Total	ND		ug/kg	1.00	0.042

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method:	122,537(M)	Extraction Method:	EPA 537(M)
Analytical Date:	10/10/19 20:42	Extraction Date:	10/07/19 10:48
Analyst:	JW		

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 15 Batch: WG1293004-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	**56**	Q	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	71		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	94		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	67		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	74		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	97		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	80		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	88		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	84		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	96		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	84		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	119		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	57		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	1		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	58		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	57		26-160

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 10/13/19 19:51
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 10/11/19 07:15

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 17 Batch: WG1294975-1					
Perfluorobutanoic Acid (PFBA)	ND		ng/l	2.00	0.408
Perfluoropentanoic Acid (PFPeA)	ND		ng/l	2.00	0.396
Perfluorobutanesulfonic Acid (PFBS)	ND		ng/l	2.00	0.238
Perfluorohexanoic Acid (PFHxA)	0.400	J	ng/l	2.00	0.328
Perfluoroheptanoic Acid (PFHpA)	ND		ng/l	2.00	0.225
Perfluorohexanesulfonic Acid (PFHxS)	ND		ng/l	2.00	0.376
Perfluorooctanoic Acid (PFOA)	ND		ng/l	2.00	0.236
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ng/l	2.00	1.33
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ng/l	2.00	0.688
Perfluorononanoic Acid (PFNA)	ND		ng/l	2.00	0.312
Perfluorooctanesulfonic Acid (PFOS)	ND		ng/l	2.00	0.504
Perfluorodecanoic Acid (PFDA)	ND		ng/l	2.00	0.304
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ng/l	2.00	1.21
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ng/l	2.00	0.648
Perfluoroundecanoic Acid (PFUnA)	ND		ng/l	2.00	0.260
Perfluorodecanesulfonic Acid (PFDS)	ND		ng/l	2.00	0.980
Perfluorooctanesulfonamide (FOSA)	ND		ng/l	2.00	0.580
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ng/l	2.00	0.804
Perfluorododecanoic Acid (PFDoA)	ND		ng/l	2.00	0.372
Perfluorotridecanoic Acid (PFTrDA)	ND		ng/l	2.00	0.327
Perfluorotetradecanoic Acid (PFTA)	ND		ng/l	2.00	0.248
PFOA/PFOS, Total	ND		ng/l	2.00	0.236

Project Name: WEBER KNAPP | **Lab Number:** L1944926
Project Number: 5635$-19 | **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 122,537(M)
Analytical Date: 10/13/19 19:51
Analyst: JW

Extraction Method: EPA 537
Extraction Date: 10/11/19 07:15

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 17 Batch: WG1294975-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	101		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	116		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	97		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	92		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	97		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	107		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	96		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	92		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	91		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	90		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	85		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	79		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	93		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	40		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	69		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	86		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	78		33-143

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 17 Batch: WG1291426-2 WG1291426-3								
Bis(2-chloroethyl)ether	61		60		40-140	2		30
3,3'-Dichlorobenzidine	87		72		40-140	19		30
2,4-Dinitrotoluene	102		86		48-143	17		30
2,6-Dinitrotoluene	96		83		40-140	15		30
4-Chlorophenyl phenyl ether	97		85		40-140	13		30
4-Bromophenyl phenyl ether	108		91		40-140	17		30
Bis(2-chloroisopropyl)ether	53		49		40-140	8		30
Bis(2-chloroethoxy)methane	67		62		40-140	8		30
Hexachlorocyclopentadiene	71		67		40-140	6		30
Isophorone	62		60		40-140	3		30
Nitrobenzene	67		64		40-140	5		30
NDPA/DPA	103		85		40-140	19		30
n-Nitrosodi-n-propylamine	68		65		29-132	5		30
Bis(2-ethylhexyl)phthalate	80		63		40-140	24		30
Butyl benzyl phthalate	93		77		40-140	19		30
Di-n-butylphthalate	93		73		40-140	24		30
Di-n-octylphthalate	80		64		40-140	22		30
Diethyl phthalate	107		87		40-140	21		30
Dimethyl phthalate	104		84		40-140	21		30
Biphenyl	83		75		40-140	10		30
4-Chloroaniline	63		59		40-140	7		30
2-Nitroaniline	84		72		52-143	15		30
3-Nitroaniline	82		66		25-145	22		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 17 Batch: WG1291426-2 WG1291426-3								
4-Nitroaniline	87		72		51-143	19		30
Dibenzofuran	88		78		40-140	12		30
1,2,4,5-Tetrachlorobenzene	80		73		2-134	9		30
Acetophenone	69		67		39-129	3		30
2,4,6-Trichlorophenol	91		76		30-130	18		30
p-Chloro-m-cresol	94		76		23-97	21		30
2-Chlorophenol	68		66		27-123	3		30
2,4-Dichlorophenol	80		74		30-130	8		30
2,4-Dimethylphenol	71		63		30-130	12		30
2-Nitrophenol	68		65		30-130	5		30
4-Nitrophenol	73		58		10-80	23		30
2,4-Dinitrophenol	64		59		20-130	8		30
4,6-Dinitro-o-cresol	107		94		20-164	13		30
Phenol	48		47		12-110	2		30
3-Methylphenol/4-Methylphenol	72		68		30-130	6		30
2,4,5-Trichlorophenol	96		79		30-130	19		30
Carbazole	103		85		55-144	19		30
Atrazine	118		100		40-140	17		30
Benzaldehyde	62		61		40-140	2		30
Caprolactam	39		36		10-130	8		30
2,3,4,6-Tetrachlorophenol	109		84		40-140	26		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 17 Batch: WG1291426-2 WG1291426-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	53		53		21-120
Phenol-d6	47		45		10-120
Nitrobenzene-d5	54		53		23-120
2-Fluorobiphenyl	66		59		15-120
2,4,6-Tribromophenol	**126**	Q	105		10-120
4-Terphenyl-d14	94		77		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 Batch: WG1291446-2 WG1291446-3								
Acenaphthene	67		76		31-137	13		50
Hexachlorobenzene	72		84		40-140	15		50
Bis(2-chloroethyl)ether	64		73		40-140	13		50
2-Chloronaphthalene	66		76		40-140	14		50
3,3'-Dichlorobenzidine	58		67		40-140	14		50
2,4-Dinitrotoluene	81		92		40-132	13		50
2,6-Dinitrotoluene	80		90		40-140	12		50
Fluoranthene	76		90		40-140	17		50
4-Chlorophenyl phenyl ether	72		81		40-140	12		50
4-Bromophenyl phenyl ether	70		83		40-140	17		50
Bis(2-chloroisopropyl)ether	78		87		40-140	11		50
Bis(2-chloroethoxy)methane	73		82		40-117	12		50
Hexachlorobutadiene	54		63		40-140	15		50
Hexachlorocyclopentadiene	52		59		40-140	13		50
Hexachloroethane	59		66		40-140	11		50
Isophorone	74		85		40-140	14		50
Naphthalene	61		69		40-140	12		50
Nitrobenzene	70		80		40-140	13		50
NDPA/DPA	78		89		36-157	13		50
n-Nitrosodi-n-propylamine	74		83		32-121	11		50
Bis(2-ethylhexyl)phthalate	80		96		40-140	18		50
Butyl benzyl phthalate	83		98		40-140	17		50
Di-n-butylphthalate	81		95		40-140	16		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 Batch: WG1291446-2 WG1291446-3								
Di-n-octylphthalate	80		95		40-140	17		50
Diethyl phthalate	79		90		40-140	13		50
Dimethyl phthalate	75		85		40-140	13		50
Benzo(a)anthracene	74		87		40-140	16		50
Benzo(a)pyrene	69		80		40-140	15		50
Benzo(b)fluoranthene	76		88		40-140	15		50
Benzo(k)fluoranthene	71		85		40-140	18		50
Chrysene	73		86		40-140	16		50
Acenaphthylene	69		78		40-140	12		50
Anthracene	74		86		40-140	15		50
Benzo(ghi)perylene	74		87		40-140	16		50
Fluorene	73		83		40-140	13		50
Phenanthrene	72		85		40-140	17		50
Dibenzo(a,h)anthracene	73		86		40-140	16		50
Indeno(1,2,3-cd)pyrene	74		88		40-140	17		50
Pyrene	77		90		35-142	16		50
Biphenyl	74		83		37-127	11		50
4-Chloroaniline	79		92		40-140	15		50
2-Nitroaniline	79		89		47-134	12		50
3-Nitroaniline	65		75		26-129	14		50
4-Nitroaniline	74		85		41-125	14		50
Dibenzofuran	68		78		40-140	14		50
2-Methylnaphthalene	66		76		40-140	14		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 Batch: WG1291446-2 WG1291446-3								
1,2,4,5-Tetrachlorobenzene	67		77		40-117	14		50
Acetophenone	72		82		14-144	13		50
2,4,6-Trichlorophenol	72		83		30-130	14		50
p-Chloro-m-cresol	80		91		26-103	13		50
2-Chlorophenol	66		74		25-102	11		50
2,4-Dichlorophenol	70		80		30-130	13		50
2,4-Dimethylphenol	73		82		30-130	12		50
2-Nitrophenol	68		78		30-130	14		50
4-Nitrophenol	92		106		11-114	14		50
2,4-Dinitrophenol	68		75		4-130	10		50
4,6-Dinitro-o-cresol	79		88		10-130	11		50
Pentachlorophenol	73		85		17-109	15		50
Phenol	72		82		26-90	13		50
2-Methylphenol	72		83		30-130.	14		50
3-Methylphenol/4-Methylphenol	72		84		30-130	15		50
2,4,5-Trichlorophenol	78		87		30-130	11		50
Carbazole	78		91		54-128	15		50
Atrazine	92		102		40-140	10		50
Benzaldehyde	63		70		40-140	11		50
Caprolactam	96		108		15-130	12		50
2,3,4,6-Tetrachlorophenol	68		84		40-140	21		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 Batch: WG1291446-2 WG1291446-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	68		76		25-120
Phenol-d6	76		84		10-120
Nitrobenzene-d5	59		66		23-120
2-Fluorobiphenyl	55		61		30-120
2,4,6-Tribromophenol	73		80		10-136
4-Terphenyl-d14	64		75		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 17 Batch: WG1291467-2 WG1291467-3								
Acenaphthene	99		93		40-140	6		40
2-Chloronaphthalene	94		88		40-140	7		40
Fluoranthene	112		114		40-140	2		40
Hexachlorobutadiene	92		85		40-140	8		40
Naphthalene	90		82		40-140	9		40
Benzo(a)anthracene	110		110		40-140	0		40
Benzo(a)pyrene	113		114		40-140	1		40
Benzo(b)fluoranthene	115		117		40-140	2		40
Benzo(k)fluoranthene	116		118		40-140	2		40
Chrysene	111		110		40-140	1		40
Acenaphthylene	96		93		40-140	3		40
Anthracene	108		108		40-140	0		40
Benzo(ghi)perylene	116		115		40-140	1		40
Fluorene	102		99		40-140	3		40
Phenanthrene	103		103		40-140	0		40
Dibenzo(a,h)anthracene	119		119		40-140	0		40
Indeno(1,2,3-cd)pyrene	121		117		40-140	3		40
Pyrene	112		113		40-140	1		40
2-Methylnaphthalene	92		85		40-140	8		40
Pentachlorophenol	92		91		40-140	1		40
Hexachlorobenzene	104		104		40-140	0		40
Hexachloroethane	88		82		40-140	7		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP

Project Number: 5635$-19

Lab Number: L1944926

Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 17 Batch: WG1291467-2 WG1291467-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	67		61		21-120
Phenol-d6	56		51		10-120
Nitrobenzene-d5	92		83		23-120
2-Fluorobiphenyl	98		84		15-120
2,4,6-Tribromophenol	88		91		10-120
4-Terphenyl-d14	100		103		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 15 Batch: WG1293004-2 WG1293004-3								
Perfluorobutanoic Acid (PFBA)	107		108		71-135	11		30
Perfluoropentanoic Acid (PFPeA)	98		100		69-132	11		30
Perfluorobutanesulfonic Acid (PFBS)	99		98		72-128	12		30
Perfluorohexanoic Acid (PFHxA)	105		106		70-132	12		30
Perfluoroheptanoic Acid (PFHpA)	105		107		71-131	11		30
Perfluorohexanesulfonic Acid (PFHxS)	113		110		67-130	5		30
Perfluorooctanoic Acid (PFOA)	109		111		69-133	13		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	124		123		64-140	11		30
Perfluoroheptanesulfonic Acid (PFHpS)	110		104		70-132	19		30
Perfluorononanoic Acid (PFNA)	107		104		72-129	15		30
Perfluorooctanesulfonic Acid (PFOS)	112		104		68-136	5		30
Perfluorodecanoic Acid (PFDA)	106		108		69-133	14		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	110		110		65-137	19		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	102		117		63-144	14		30
Perfluoroundecanoic Acid (PFUnA)	106		104		64-136	14		30
Perfluorodecanesulfonic Acid (PFDS)	108		109		59-134	7		30
Perfluorooctanesulfonamide (FOSA)	84		**27**	Q	67-137	**121**	Q	30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	103		100		61-139	17		30
Perfluorododecanoic Acid (PFDoA)	111		106		69-135	15		30
Perfluorotridecanoic Acid (PFTrDA)	114		122		66-139	13		30
Perfluorotetradecanoic Acid (PFTA)	102		106		69-133	12		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 15 Batch: WG1293004-2 WG1293004-3

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	69		**48**	Q	60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	82		**63**	Q	65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	84		83		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	74		**60**	Q	61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		68		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	86		83		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	82		74		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	89		91		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	83		81		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	83		84		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	85		79		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	101		114		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	68		70		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86		88		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	1		1		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	61		62		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	77		78		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	60		54		26-160

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 17 Batch: WG1294975-2 WG1294975-3								
Perfluorobutanoic Acid (PFBA)	122		122		67-148	0		30
Perfluoropentanoic Acid (PFPeA)	115		115		63-161	0		30
Perfluorobutanesulfonic Acid (PFBS)	128		128		65-157	0		30
Perfluorohexanoic Acid (PFHxA)	122		122		69-168	0		30
Perfluoroheptanoic Acid (PFHpA)	123		124		58-159	1		30
Perfluorohexanesulfonic Acid (PFHxS)	124		124		69-177	0		30
Perfluorooctanoic Acid (PFOA)	127		127		63-159	0		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	129		139		49-187	7		30
Perfluoroheptanesulfonic Acid (PFHpS)	135		133		61-179	1		30
Perfluorononanoic Acid (PFNA)	122		127		68-171	4		30
Perfluorooctanesulfonic Acid (PFOS)	120		124		52-151	3		30
Perfluorodecanoic Acid (PFDA)	126		124		63-171	2		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	133		140		56-173	5		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	138		138		60-166	0		30
Perfluoroundecanoic Acid (PFUnA)	126		124		60-153	2		30
Perfluorodecanesulfonic Acid (PFDS)	115		126		38-156	9		30
Perfluorooctanesulfonamide (FOSA)	136		125		46-170	8		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	115		117		45-170	2		30
Perfluorododecanoic Acid (PFDoA)	132		133		67-153	1		30
Perfluorotridecanoic Acid (PFTrDA)	147		155		48-158	5		30
Perfluorotetradecanoic Acid (PFTA)	126		125		59-182	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 17 Batch: WG1294975-2 WG1294975-3

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	95		95		2-156
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	106		105		16-173
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	91		87		31-159
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	91		92		21-145
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	91		90		30-139
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	94		92		47-153
Perfluoro[13C8]Octanoic Acid (M8PFOA)	91		89		36-149
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	84		78		1-244
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	92		85		34-146
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	92		81		42-146
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	91		83		38-144
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	91		83		7-170
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	70		66		1-181
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	89		78		40-144
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	43		41		1-87
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	73		64		23-146
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	80		69		24-161
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	74		70		33-143

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 QC Batch ID: WG1291446-4 WG1291446-5 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)												
Acenaphthene	ND	1450	1100	76		1000	69		31-137	10		50
Hexachlorobenzene	ND	1450	1200	83		1200	83		40-140	0		50
Bis(2-chloroethyl)ether	ND	1450	1100	76		1000	69		40-140	10		50
2-Chloronaphthalene	ND	1450	1000	69		950	66		40-140	5		50
3,3'-Dichlorobenzidine	ND	1450	1200	83		1300	90		40-140	8		50
2,4-Dinitrotoluene	ND	1450	1400	96		1400	97		40-132	0		50
2,6-Dinitrotoluene	ND	1450	1200	83		1200	83		40-140	0		50
Fluoranthene	ND	1450	1200	83		1200	83		40-140	0		50
4-Chlorophenyl phenyl ether	ND	1450	1100	76		1100	76		40-140	0		50
4-Bromophenyl phenyl ether	ND	1450	1200	83		1200	83		40-140	0		50
Bis(2-chloroisopropyl)ether	ND	1450	940	65		840	58		40-140	11		50
Bis(2-chloroethoxy)methane	ND	1450	1100	76		1000	69		40-117	10		50
Hexachlorobutadiene	ND	1450	1000	69		900	62		40-140	11		50
Hexachlorocyclopentadiene	ND	1450	680	47		620	43		40-140	9		50
Hexachloroethane	ND	1450	1000	69		940	65		40-140	6		50
Isophorone	ND	1450	1200	83		1100	76		40-140	9		50
Naphthalene	ND	1450	1100	76		980	68		40-140	12		50
Nitrobenzene	ND	1450	1200	83		1100	76		40-140	9		50
NDPA/DPA	ND	1450	1200	83		1200	83		36-157	0		50
n-Nitrosodi-n-propylamine	ND	1450	1200	83		1100	76		32-121	9		50
Bis(2-ethylhexyl)phthalate	ND	1450	1400	96		1400	97		40-140	0		50
Butyl benzyl phthalate	ND	1450	1400	96		1400	97		40-140	0		50
Di-n-butylphthalate	ND	1450	1400	96		1400	97		40-140	0		50

Matrix Spike Analysis

Batch Quality Control

Project Name: WEBER KNAPP

Project Number: 5635$-19

Lab Number: L1944926

Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 QC Batch ID: WG1291446-4 WG1291446-5 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)												
Di-n-octylphthalate	ND	1450	1600	110		1600	110		40-140	0		50
Diethyl phthalate	ND	1450	1200	83		1200	83		40-140	0		50
Dimethyl phthalate	ND	1450	1100	76		1100	76		40-140	0		50
Benzo(a)anthracene	ND	1450	1300	89		1400	97		40-140	7		50
Benzo(a)pyrene	ND	1450	1200	83		1200	83		40-140	0		50
Benzo(b)fluoranthene	ND	1450	1200	83		1200	83		40-140	0		50
Benzo(k)fluoranthene	ND	1450	1200	83		1200	83		40-140	0		50
Chrysene	ND	1450	1200	83		1200	83		40-140	0		50
Acenaphthylene	ND	1450	1100	76		1000	69		40-140	10		50
Anthracene	ND	1450	1200	83		1200	83		40-140	0		50
Benzo(ghi)perylene	ND	1450	1200	83		1300	90		40-140	8		50
Fluorene	ND	1450	1200	83		1100	76		40-140	9		50
Phenanthrene	ND	1450	1200	83		1200	83		40-140	0		50
Dibenzo(a,h)anthracene	ND	1450	1300	89		1300	90		40-140	0		50
Indeno(1,2,3-cd)pyrene	ND	1450	1400	96		1400	97		40-140	0		50
Pyrene	ND	1450	1200	83		1200	83		35-142	0		50
Biphenyl	ND	1450	1100	76		1000	69		37-127	10		50
4-Chloroaniline	ND	1450	1100	76		1000	69		40-140	10		50
2-Nitroaniline	ND	1450	1300	89		1300	90		47-134	0		50
3-Nitroaniline	ND	1450	1100	76		1100	76		26-129	0		50
4-Nitroaniline	ND	1450	1200	83		1200	83		41-125	0		50
Dibenzofuran	ND	1450	1200	83		1100	76		40-140	9		50
2-Methylnaphthalene	ND	1450	1100	76		980	68		40-140	12		50

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 QC Batch ID: WG1291446-4 WG1291446-5 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)												
1,2,4,5-Tetrachlorobenzene	ND	1450	1100	76		1000	69		40-117	10		50
Acetophenone	ND	1450	1200	83		1100	76		14-144	9		50
2,4,6-Trichlorophenol	ND	1450	1200	83		1200	83		30-130	0		50
p-Chloro-m-cresol	ND	1450	1300	89		1200	83		26-103	8		50
2-Chlorophenol	ND	1450	1200	83		1100	76		25-102	9		50
2,4-Dichlorophenol	ND	1450	1200	83		1100	76		30-130	9		50
2,4-Dimethylphenol	ND	1450	1200	83		1100	76		30-130	9		50
2-Nitrophenol	ND	1450	1300	89		1100	76		30-130	17		50
4-Nitrophenol	ND	1450	1400	96		1400	97		11-114	0		50
2,4-Dinitrophenol	ND	1450	250J	17		280J	19		4-130	11		50
4,6-Dinitro-o-cresol	ND	1450	940	65		950	66		10-130	1		50
Pentachlorophenol	ND	1450	1000	69		1100	76		17-109	10		50
Phenol	ND	1450	1100	76		1000	69		26-90	10		50
2-Methylphenol	ND	1450	1300	89		1200	83		30-130.	8		50
3-Methylphenol/4-Methylphenol	ND	1450	1200	83		1200	83		30-130	0		50
2,4,5-Trichlorophenol	ND	1450	1200	83		1200	83		30-130	0		50
Carbazole	ND	1450	1300	89		1300	90		54-128	0		50
Atrazine	ND	1450	1400	96		1400	97		40-140	0		50
Benzaldehyde	ND	1450	1300	89		1200	83		40-140	8		50
Caprolactam	ND	1450	1300	89		1200	83		15-130	8		50
2,3,4,6-Tetrachlorophenol	ND	1450	1200	83		1200	83		40-140	0		50

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 15 QC Batch ID: WG1291446-4 WG1291446-5 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	90		89		10-136
2-Fluorobiphenyl	72		66		30-120
2-Fluorophenol	76		78		25-120
4-Terphenyl-d14	86		87		18-120
Nitrobenzene-d5	87		78		23-120
Phenol-d6	90		81		10-120

PCBS

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-15	Date Collected:	09/27/19 08:30
Client ID:	IRM-09 (10-12)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	10/02/19 17:32
Analytical Date:	10/04/19 00:01	Cleanup Method:	EPA 3665A
Analyst:	WR	Cleanup Date:	10/03/19
Percent Solids:	91%	Cleanup Method:	EPA 3660B
		Cleanup Date:	10/03/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.6	3.16	1	A
Aroclor 1221	ND		ug/kg	35.6	3.57	1	A
Aroclor 1232	ND		ug/kg	35.6	7.56	1	A
Aroclor 1242	ND		ug/kg	35.6	4.80	1	A
Aroclor 1248	ND		ug/kg	35.6	5.35	1	A
Aroclor 1254	ND		ug/kg	35.6	3.90	1	A
Aroclor 1260	ND		ug/kg	35.6	6.59	1	A
Aroclor 1262	ND		ug/kg	35.6	4.53	1	A
Aroclor 1268	ND		ug/kg	35.6	3.69	1	A
PCBs, Total	ND		ug/kg	35.6	3.16	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	47		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	45		30-150	B

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-17	Date Collected:	09/27/19 11:40
Client ID:	EB-092719	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8082A	Extraction Date:	10/02/19 02:58
Analytical Date:	10/03/19 06:02	Cleanup Method:	EPA 3665A
Analyst:	HT	Cleanup Date:	10/03/19
		Cleanup Method:	EPA 3660B
		Cleanup Date:	10/03/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	55		30-150	B

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 10/01/19 14:44
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 10/01/19 08:07
Cleanup Method: EPA 3665A
Cleanup Date: 10/01/19
Cleanup Method: EPA 3660B
Cleanup Date: 10/01/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 17 Batch: WG1290608-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

Method Blank Analysis
Batch Quality Control

Analytical Method:	1,8082A	Extraction Method:	EPA 3546
Analytical Date:	10/02/19 13:33	Extraction Date:	10/02/19 04:29
Analyst:	JM	Cleanup Method:	EPA 3665A
		Cleanup Date:	10/02/19
		Cleanup Method:	EPA 3660B
		Cleanup Date:	10/02/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 15 Batch: WG1291038-1						
Aroclor 1016	ND		ug/kg	32.8	2.91	A
Aroclor 1221	ND		ug/kg	32.8	3.28	A
Aroclor 1232	ND		ug/kg	32.8	6.95	A
Aroclor 1242	ND		ug/kg	32.8	4.42	A
Aroclor 1248	ND		ug/kg	32.8	4.91	A
Aroclor 1254	ND		ug/kg	32.8	3.58	A
Aroclor 1260	ND		ug/kg	32.8	6.06	A
Aroclor 1262	ND		ug/kg	32.8	4.16	A
Aroclor 1268	ND		ug/kg	32.8	3.39	A
PCBs, Total	ND		ug/kg	32.8	2.91	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	63		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 17 Batch: WG1290608-2 WG1290608-3									
Aroclor 1016	73		69		40-140	6		50	A
Aroclor 1260	71		66		40-140	7		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		59		30-150	A
Decachlorobiphenyl	77		71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		57		30-150	B
Decachlorobiphenyl	75		72		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 15 Batch: WG1291038-2 WG1291038-3									
Aroclor 1016	82		81		40-140	1		50	A
Aroclor 1260	80		83		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		74		30-150	A
Decachlorobiphenyl	78		72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		75		30-150	B
Decachlorobiphenyl	69		64		30-150	B

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 15 QC Batch ID: WG1291038-6 WG1291038-7 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)													
Aroclor 1016	ND	227	174	77		172	75		40-140	1		50	A
Aroclor 1260	ND	227	153	68		158	69		40-140	3		50	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	58		59		30-150	A
Decachlorobiphenyl	44		46		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		55		30-150	B
Decachlorobiphenyl	43		44		30-150	B

METALS

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-15	Date Collected:	09/27/19 08:30
Client ID:	IRM-09 (10-12)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		
Percent Solids:	91%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7630		mg/kg	8.33	2.25	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Antimony, Total	1.30	J	mg/kg	4.16	0.316	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Arsenic, Total	11.2		mg/kg	0.833	0.173	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Barium, Total	31.4		mg/kg	0.833	0.145	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Beryllium, Total	0.242	J	mg/kg	0.416	0.028	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Cadmium, Total	0.925		mg/kg	0.833	0.082	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Calcium, Total	8770		mg/kg	8.33	2.92	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Chromium, Total	10.8		mg/kg	0.833	0.080	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Cobalt, Total	8.04		mg/kg	1.67	0.138	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Copper, Total	19.9		mg/kg	0.833	0.215	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Iron, Total	18800		mg/kg	4.16	0.752	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Lead, Total	8.77		mg/kg	4.16	0.223	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Magnesium, Total	5610		mg/kg	8.33	1.28	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Manganese, Total	411		mg/kg	0.833	0.132	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Mercury, Total	ND		mg/kg	0.082	0.054	1	10/01/19 21:16	10/02/19 20:34	EPA 7471B	1,7471B	GD
Nickel, Total	17.6		mg/kg	2.08	0.202	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Potassium, Total	568		mg/kg	208	12.0	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Selenium, Total	0.250	J	mg/kg	1.67	0.215	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Silver, Total	ND		mg/kg	0.833	0.236	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Sodium, Total	60.1	J	mg/kg	167	2.62	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Thallium, Total	ND		mg/kg	1.67	0.262	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Vanadium, Total	11.3		mg/kg	0.833	0.169	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS
Zinc, Total	46.4		mg/kg	4.16	0.244	2	10/01/19 18:50	10/02/19 14:45	EPA 3050B	1,6010D	PS

Project Name: WEBER KNAPP
Lab Number: L1944926
Project Number: 5635$-19
Report Date: 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-17
Date Collected: 09/27/19 11:40
Client ID: EB-092719
Date Received: 09/27/19
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.00493	J	mg/l	0.0100	0.00327	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Barium, Total	0.00053		mg/l	0.00050	0.00017	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Calcium, Total	0.0531	J	mg/l	0.100	0.0394	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Iron, Total	0.0366	J	mg/l	0.0500	0.0191	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Manganese, Total	0.00095	J	mg/l	0.00100	0.00044	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00010	0.00004	1	10/01/19 19:43	10/02/19 12:00	EPA 7470A	1,7470A	GD
Nickel, Total	ND		mg/l	0.00200	0.00055	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Sodium, Total	0.327		mg/l	0.200	0.0293	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/01/19 19:30	10/03/19 14:02	EPA 3005A	1,6020B	AM

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 15 Batch: WG1290910-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Antimony, Total	ND		mg/kg	2.00	0.152	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Arsenic, Total	0.132	J	mg/kg	0.400	0.083	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Barium, Total	ND		mg/kg	0.400	0.070	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Beryllium, Total	ND		mg/kg	0.200	0.013	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Cadmium, Total	ND		mg/kg	0.400	0.039	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Calcium, Total	ND		mg/kg	4.00	1.40	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Chromium, Total	ND		mg/kg	0.400	0.038	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Cobalt, Total	ND		mg/kg	0.800	0.066	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Copper, Total	ND		mg/kg	0.400	0.103	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Iron, Total	ND		mg/kg	2.00	0.361	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Lead, Total	ND		mg/kg	2.00	0.107	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Magnesium, Total	ND		mg/kg	4.00	0.616	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Manganese, Total	ND		mg/kg	0.400	0.064	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Nickel, Total	ND		mg/kg	1.00	0.097	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Potassium, Total	ND		mg/kg	100	5.76	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Selenium, Total	ND		mg/kg	0.800	0.103	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Silver, Total	ND		mg/kg	0.400	0.113	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Sodium, Total	4.13	J	mg/kg	80.0	1.26	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Thallium, Total	ND		mg/kg	0.800	0.126	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Vanadium, Total	ND		mg/kg	0.400	0.081	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS
Zinc, Total	ND		mg/kg	2.00	0.117	1	10/01/19 18:50	10/02/19 14:37	1,6010D	PS

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 17 Batch: WG1290935-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM

Project Name: WEBER KNAPP **Lab Number:** L1944926

Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Barium, Total	ND		mg/l	0.00050	0.00017	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Sodium, Total	ND		mg/l	0.200	0.0293	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Thallium, Total	0.00017	J	mg/l	0.00050	0.00014	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/01/19 19:30	10/03/19 12:26	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 15 Batch: WG1290938-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	10/01/19 21:16	10/02/19 18:38	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 17 Batch: WG1290948-1										
Mercury, Total	ND		mg/l	0.00010	0.00004	1	10/01/19 19:43	10/02/19 11:44	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP | **Lab Number:** L1944926

Project Number: 5635$-19 | **Report Date:** 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 15 Batch: WG1290910-2 SRM Lot Number: D105-540								
Aluminum, Total	63		-		51-149	-		
Antimony, Total	163		-		19-249	-		
Arsenic, Total	106		-		70-130	-		
Barium, Total	97		-		75-125	-		
Beryllium, Total	101		-		75-125	-		
Cadmium, Total	96		-		75-125	-		
Calcium, Total	93		-		73-127	-		
Chromium, Total	98		-		70-130	-		
Cobalt, Total	97		-		75-125	-		
Copper, Total	106		-		75-125	-		
Iron, Total	80		-		38-162	-		
Lead, Total	96		-		71-128	-		
Magnesium, Total	82		-		63-137	-		
Manganese, Total	97		-		76-124	-		
Nickel, Total	101		-		70-131	-		
Potassium, Total	79		-		60-140	-		
Selenium, Total	102		-		63-137	-		
Silver, Total	105		-		69-131	-		
Sodium, Total	102		-		37-162	-		
Thallium, Total	97		-		68-132	-		
Vanadium, Total	98		-		65-135	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Lab Number: L1944926
Project Number: 5635$-19
Report Date: 10/16/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 15 Batch: WG1290910-2 SRM Lot Number: D105-540					
Zinc, Total	97	-	70-130	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 17 Batch: WG1290935-2					
Aluminum, Total	108	-	80-120	-	
Antimony, Total	82	-	80-120	-	
Arsenic, Total	102	-	80-120	-	
Barium, Total	106	-	80-120	-	
Beryllium, Total	105	-	80-120	-	
Cadmium, Total	108	-	80-120	-	
Calcium, Total	102	-	80-120	-	
Chromium, Total	102	-	80-120	-	
Cobalt, Total	101	-	80-120	-	
Copper, Total	98	-	80-120	-	
Iron, Total	111	-	80-120	-	
Lead, Total	108	-	80-120	-	
Magnesium, Total	101	-	80-120	-	
Manganese, Total	104	-	80-120	-	
Nickel, Total	102	-	80-120	-	
Potassium, Total	104	-	80-120	-	
Selenium, Total	110	-	80-120	-	
Silver, Total	101	-	80-120	-	
Sodium, Total	94	-	80-120	-	
Thallium, Total	108	-	80-120	-	
Vanadium, Total	102	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP

Project Number: 5635$-19

Lab Number: L1944926

Report Date: 10/16/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 17 Batch: WG1290935-2					
Zinc, Total	107	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 15 Batch: WG1290938-2 SRM Lot Number: D105-540					
Mercury, Total	94	-	60-141	-	
Total Metals - Mansfield Lab Associated sample(s): 17 Batch: WG1290948-2					
Mercury, Total	95	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 15 QC Batch ID: WG1290910-3 WG1290910-4 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)												
Aluminum, Total	7630	175	8340	**406**	Q	7960	**198**	Q	75-125	5		20
Antimony, Total	1.30J	43.8	40.8	93		39.6	95		75-125	3		20
Arsenic, Total	11.2	10.5	20.8	91		20.1	89		75-125	3		20
Barium, Total	31.4	175	205	99		193	97		75-125	6		20
Beryllium, Total	0.242J	4.38	4.34	99		4.12	99		75-125	5		20
Cadmium, Total	0.925	4.46	4.94	90		4.77	90		75-125	4		20
Calcium, Total	8770	875	8520	**0**	Q	9540	92		75-125	11		20
Chromium, Total	10.8	17.5	27.5	95		26.4	93		75-125	4		20
Cobalt, Total	8.04	43.8	45.1	85		43.2	84		75-125	4		20
Copper, Total	19.9	21.9	42.1	101		41.1	102		75-125	2		20
Iron, Total	18800	87.5	19600	**914**	Q	19200	**479**	Q	75-125	2		20
Lead, Total	8.77	44.6	47.9	88		45.9	87		75-125	4		20
Magnesium, Total	5610	875	6130	**59**	Q	6020	**49**	Q	75-125	2		20
Manganese, Total	411	43.8	422	**25**	Q	431	**48**	Q	75-125	2		20
Nickel, Total	17.6	43.8	56.0	88		54.0	87		75-125	4		20
Potassium, Total	568	875	1360	90		1320	90		75-125	3		20
Selenium, Total	0.250J	10.5	9.89	94		9.49	95		75-125	4		20
Silver, Total	ND	26.2	26.5	101		25.6	102		75-125	3		20
Sodium, Total	60.1J	875	943	108		905	108		75-125	4		20
Thallium, Total	ND	10.5	8.91	85		8.63	86		75-125	3		20
Vanadium, Total	11.3	43.8	54.4	98		52.4	98		75-125	4		20

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 15 QC Batch ID: WG1290910-3 WG1290910-4 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)									
Zinc, Total	46.4	43.8	88.3	96	83.8	90	75-125	5	20

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19
Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 17 QC Batch ID: WG1290935-3 QC Sample: L1944955-01 Client ID: MS Sample										
Aluminum, Total	ND	2	2.16	108		-	-	75-125	-	20
Antimony, Total	0.0054J	0.5	0.4167	83		-	-	75-125	-	20
Arsenic, Total	0.0039J	0.12	0.1227	102		-	-	75-125	-	20
Barium, Total	0.0208	2	2.116	105		-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05174	103		-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.05520	108		-	-	75-125	-	20
Calcium, Total	19.3	10	30.4	111		-	-	75-125	-	20
Chromium, Total	ND	0.2	0.2000	100		-	-	75-125	-	20
Cobalt, Total	ND	0.5	0.4985	100		-	-	75-125	-	20
Copper, Total	ND	0.25	0.2415	97		-	-	75-125	-	20
Iron, Total	0.292J	1	1.37	**137**	Q	-	-	75-125	-	20
Lead, Total	ND	0.51	0.5429	106		-	-	75-125	-	20
Magnesium, Total	2.45	10	12.5	100		-	-	75-125	-	20
Manganese, Total	0.3618	0.5	0.8853	105		-	-	75-125	-	20
Nickel, Total	ND	0.5	0.4988	100		-	-	75-125	-	20
Potassium, Total	7.23	10	17.8	106		-	-	75-125	-	20
Selenium, Total	ND	0.12	0.129	108		-	-	75-125	-	20
Silver, Total	ND	0.05	0.05000	100		-	-	75-125	-	20
Sodium, Total	26.0	10	35.3	93		-	-	75-125	-	20
Thallium, Total	0.0026J	0.12	0.1257	105		-	-	75-125	-	20
Vanadium, Total	ND	0.5	0.5066	101		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 17 QC Batch ID: WG1290935-3 QC Sample: L1944955-01 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.5376	108	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 15 QC Batch ID: WG1290938-3 WG1290938-4 QC Sample: L1944980-03 Client ID: MS Sample									
Mercury, Total	0.149	0.199	0.329	90	0.287	82	80-120	14	20
Total Metals - Mansfield Lab Associated sample(s): 17 QC Batch ID: WG1290948-3 QC Sample: L1945299-01 Client ID: MS Sample									
Mercury, Total	ND	0.0025	0.00240	96	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 17 QC Batch ID: WG1290948-4 QC Sample: L1945299-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-01	Date Collected:	09/26/19 11:40
Client ID:	IRM-06 (8-8.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	70.0		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name: WEBER KNAPP

Project Number: 5635$-19

Lab Number: L1944926

Report Date: 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-02
Client ID: IRM-06 (10-10.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/26/19 11:48
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.8		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-03	Date Collected:	09/26/19 11:52
Client ID:	IRM-06 (14-15)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.4		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-04
Client ID: IRM-07 (8-8.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/26/19 12:33
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.7		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name: WEBER KNAPP

Project Number: 5635$-19

Lab Number: L1944926

Report Date: 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-05

Client ID: IRM-07 (9-9.5)

Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/26/19 12:38

Date Received: 09/27/19

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.1		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-06	Date Collected:	09/26/19 13:33
Client ID:	IRM-01 (8.5-9)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.2		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name: WEBER KNAPP | **Lab Number:** L1944926
Project Number: 5635$-19 | **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-07
Client ID: IRM-02 (9.5-10)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/26/19 13:51
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.6		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name: WEBER KNAPP
Lab Number: L1944926
Project Number: 5635$-19
Report Date: 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-08
Date Collected: 09/26/19 14:52
Client ID: IRM-03 (8-8.5)
Date Received: 09/27/19
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77.0		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-09	Date Collected:	09/26/19 14:58
Client ID:	IRM-03 (12-12.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.3		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name: WEBER KNAPP | **Lab Number:** L1944926
Project Number: 5635$-19 | **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-10 | Date Collected: 09/26/19 15:31
Client ID: IRM-08 (8-8.5) | Date Received: 09/27/19
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY | Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.5		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name: WEBER KNAPP | **Lab Number:** L1944926
Project Number: 5635$-19 | **Report Date:** 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-11
Client ID: IRM-08 (10-10.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/26/19 15:37
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.3		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-12	Date Collected:	09/26/19 15:41
Client ID:	IRM-08 (14.2-14.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.5		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-13	Date Collected:	09/26/19 16:11
Client ID:	IRM-04 (12-12.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-14
Client ID: IRM-05 (12-12.5)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/26/19 16:41
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.1		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-15
Client ID: IRM-09 (10-12)
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY

Date Collected: 09/27/19 08:30
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.6		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	09/30/19 06:20	09/30/19 13:09	1,9010C/9012B	LH

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

SAMPLE RESULTS

Lab ID:	L1944926-16	Date Collected:	09/27/19 11:23
Client ID:	IRM-11 (11-11.5)	Date Received:	09/27/19
Sample Location:	441 CHANDLER ST, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.4		%	0.100	NA	1	-	09/28/19 12:32	121,2540G	RI

Project Name: WEBER KNAPP
Lab Number: L1944926
Project Number: 5635$-19
Report Date: 10/16/19

SAMPLE RESULTS

Lab ID: L1944926-17
Client ID: EB-092719
Sample Location: 441 CHANDLER ST, JAMESTOWN, NY
Date Collected: 09/27/19 11:40
Date Received: 09/27/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	09/30/19 12:30	09/30/19 16:29	1,9010C/9012B	LH

Project Name: WEBER KNAPP **Lab Number:** L1944926
Project Number: 5635$-19 **Report Date:** 10/16/19

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 15 Batch: WG1290006-1										
Cyanide, Total	ND		mg/kg	0.96	0.20	1	09/30/19 06:20	09/30/19 12:59	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 17 Batch: WG1290175-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	09/30/19 12:30	09/30/19 15:48	1,9010C/9012B	LH

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 15 Batch: WG1290006-2 WG1290006-3								
Cyanide, Total	**73**	Q	**61**	Q	80-120	18		35
General Chemistry - Westborough Lab Associated sample(s): 17 Batch: WG1290175-2 WG1290175-3								
Cyanide, Total	93		99		85-115	6		20

Matrix Spike Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 15 QC Batch ID: WG1290006-4 WG1290006-5 QC Sample: L1944926-15 Client ID: IRM-09 (10-12)												
Cyanide, Total	ND	11	10	92		9.1	88		75-125	9		35
General Chemistry - Westborough Lab Associated sample(s): 17 QC Batch ID: WG1290175-4 WG1290175-5 QC Sample: L1944811-01 Client ID: MS Sample												
Cyanide, Total	6.45	0.2	0.194	94		0.187	90		80-120	4		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-16 QC Batch ID: WG1289804-1 QC Sample: L1944830-01 Client ID: DUP Sample						
Solids, Total	90.2	89.2	%	1		20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1944926-01A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-01B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-01C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-01D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-01E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-01T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-01U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-02A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-02B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-02C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-02D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-02E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-02T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-02U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-03A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-03B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-03C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-03D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-03E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-03T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-03U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-04A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)

*Values in parentheses indicate holding time in days

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1944926-04B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-04C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-04D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-04E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-04T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-04U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-05A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-05B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-05C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-05D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-05E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-05T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-05U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-06A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-06B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-06C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-06D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-06E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-06T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-06U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-07A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-07B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-07C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-07D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-07E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-07T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-07U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-08A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1944926-08B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-08C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-08D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-08E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-08T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-08U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-09A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-09B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-09C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-09D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-09E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-09T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-09U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-10A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-10B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-10C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-10D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-10E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-10T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-10U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-11A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-11B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-11C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-11D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-11E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-11T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-11U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-12A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)

*Values in parentheses indicate holding time in days

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1944926-12B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-12C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-12D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-12E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-12T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-12U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-13A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-13B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-13C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-13D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-13E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-13T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-13U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-14A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-14B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-14C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-14D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-14E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-14T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-14U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-14X	Vial MeOH preserved split	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-15A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-15A1	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14),ARCHIVE()
L1944926-15A2	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-15B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-15B1	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-15B2	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-15C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1944926-15C1	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-15C2	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-15D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-15E	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-15F	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-15G	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-15H	Metals Only-Glass 60mL/2oz unpreserved	B	NA		2.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),TL-TI(180),NI-TI(180),SE-TI(180),SB-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MG-TI(180),HG-T(28),MN-TI(180),CD-TI(180),NA-TI(180),CA-TI(180),K-TI(180)
L1944926-15I	Glass 120ml/4oz unpreserved	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-15J	Plastic 8oz unpreserved	B	NA		2.7	Y	Absent		A2-NY-537-ISOTOPE(28)
L1944926-15K	Glass 250ml/8oz unpreserved	B	NA		2.7	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8082(14)
L1944926-15T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-15U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-16A	Vial MeOH preserved	B	NA		2.7	Y	Absent		NYTCL-8260HLW-R2(14)
L1944926-16B	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-16C	Vial water preserved	B	NA		2.7	Y	Absent	27-SEP-19 17:10	NYTCL-8260HLW-R2(14)
L1944926-16D	Plastic 2oz unpreserved for TS	B	NA		2.7	Y	Absent		TS(7)
L1944926-16E	Vial Large Septa unpreserved (4oz)	B	NA		2.7	Y	Absent		TCLP-EXT-ZHE(14)
L1944926-16T	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-16U	Vial unpreserved Extracts	B	NA		2.7	Y	Absent		TCLP-VOA(14)
L1944926-17A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1944926-17B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1944926-17C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: WEBER KNAPP
Project Number: 5635$-19

Lab Number: L1944926
Report Date: 10/16/19

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1944926-17D	Plastic 250ml HNO3 preserved	A	<2	<2	3.1	Y	Absent		SE-6020T(180),TL-6020T(180),BA-6020T(180),FE-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),V-6020T(180),SB-6020T(180),AS-6020T(180),CD-6020T(180),AG-6020T(180),HG-T(28),MG-6020T(180),AL-6020T(180),CO-6020T(180)
L1944926-17E	Plastic 250ml NaOH preserved	A	>12	>12	3.1	Y	Absent		TCN-9010(14)
L1944926-17F	Amber 120ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8082-LVI(7)
L1944926-17G	Amber 120ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8082-LVI(7)
L1944926-17H	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1944926-17I	Amber 250ml unpreserved	A	7	7	3.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1944926-17J	Plastic 250ml Trizma preserved	A	NA		3.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1944926-17K	Plastic 250ml Trizma preserved	A	NA		3.1	Y	Absent		A2-NY-537-ISOTOPE(14)
L1944926-18A	Plastic 250ml Trizma preserved	A	NA		3.1	Y	Absent		HOLD-537(14)

Container Comments

L1944926-15A1   no methanol in vial

*Values in parentheses indicate holding time in days

Project Name:	WEBER KNAPP	**Lab Number:**	L1944926
Project Number:	5635$-19	**Report Date:**	10/16/19

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

122 Determination of Selected Perfluorintated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab: 9/28/19

ALPHA Job #: L1944926

Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193
Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

Project Information
Project Name: Weber Knapp
Project Location: 441 Chandler St, Jamestown, NY
Project # 56035 S-19
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Client Information
Client: Day Environmental
Address: 1563 Lyell Ave
Rochester, NY 14606
Phone: 585-454-0210
Fax:
Email: rkampff@daymail.net

Turn-Around Time
Standard ☐ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Billing Information
☒ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs 8260	VOCs TCLP	Sample Specific Comments	Total Bottle
44926-01	1RM-06 (8-8.5)	9/26/19	11:40	Soil	RLK	X	X		
02	1RM-06 (10-10.5)	9/26/19	11:48	Soil	RLK	X	X		
03	1RM-06 (14-15)		11:52			X	X		
04	1RM-07 (8-8.5)		1233			X	X		
05	1RM-07 (9-9.5)		12:38			X	X		
06	1RM-01 (8.5-9)		1333			X	X		
07	1RM-02 (9.5-10)		1351			X	X		
08	1RM-03 (8-8.5)		1452			X	X		
09	1RM-03 (12-12.5)		1458			X	X		
10	1RM-08 (8-8.5)		1531			X	X		

		TCL VOCs 8260	VOCs TCLP
Container Type		V	A
Preservative		F	A

Preservative Code: A = None, B = HCl, C = HNO_3, D = H_2SO_4, E = NaOH, F = MeOH, G = $NaHSO_4$, H = $Na_2S_2O_3$, K/E = Zn Ac/NaOH, O = Other

Container Code: P = Plastic, A = Amber Glass, V = Vial, G = Glass, B = Bacteria Cup, C = Cube, O = Other, E = Encore, D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	9/27/2019 1400	[signature]	9/27/19 1405
[signature]	9/27/19 1710	[signature]	9/28/19 0025

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA

Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193

Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd in Lab: 9/28/19

ALPHA Job #: L1944926

Project Information
Project Name: Weber Knapp
Project Location: 441 Chandler St, Jamestown, NY
Project #: 56355-19
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Turn-Around Time
Standard ☐ Due Date:
Rush (only if pre approved) ☐ # of Days:

Client Information
Client: Day Environmental Inc
Address: 1563 Lyell Ave, Rochester, NY 14606
Phone: 585-454-0210
Fax:
Email: rkampff@daymail.net

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Billing Information
☒ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility: ☐ NJ ☐ NY ☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration: ☐ Done ☐ Lab to do
Preservation: ☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs 8260	VOCs TCLP	TCL SVOCs 8270	TAL Metals	Cyanide	PCBs 8082	PFAS 537m	Sample Specific Comments	Total Bottles
44926-11	1RM-08 (10-10.5)	9/26/19	1537	Soil	RLK	X	X							
12	1RM-08 (14.2-14.5)	↓	1541	↓	↓	X	X							
13	1RM-04 (12-12.5)	↓	1611	↓	↓	X	X							
14	1RM-05 (12-12.5)	↓	1641	↓	↓	X	X							
15	1RM-09 (10-12)	9/27/19	830	Soil	RLK	X	X	X	X	X	X	X	MS/MSD on VOCs 8270	
16	1RM-11 (11-11.5)	9/27/19	11:23	Soil	RLK	X	X							
17	EB-092719	9/27/19	1140	DI	RLK	X		X	X	X	X	X		

	TCL VOCs 8260	VOCs TCLP	TCL SVOCs 8270	TAL Metals	Cyanide	PCBs 8082	PFAS 537m
Container Type	V	G	G	G	G	G	P
Preservative	F	A	A	A	A	A	A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	9/27/2019 1400	[signature]	9/27/19 1805
[signature]	9/27/19 1710	[signature]	9/28/19 02:25

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Alpha Analytical, Inc.
Facility: Service Centers
Department: Quality Assurance
Title: Freezer Log for Method 5035A samples

ID: 15447
Revision: 6
Published Date: 10/23/2017 9:14:23 AM
Page 1 of 1

INTO THE FREEZER					OUT OF THE FREEZER		
DATE	TIME	INITIALS	CLIENT NAME	SAMPLE IDs	DATE	TIME	INITIALS
9/27/19	1710	NSPO	Dey Environmental	1RM-06 (8-8.5)	9/28	02:40	RM
				1RM-06 (10-10.5)			
				1RM-06 (14-15)			
				1RM-07 (8-8.5)			
				1RM-07 (9-9.5)			
				1RM-01 (8.5-9)			
				1RM-02 (9.5-10)			
				1RM-03 (8-8.5)			
				1RM-03 (12-12.5)			
				1RM-08 (8-8.5)			
				1RM-08 (10-10.5)			
				1RM-08 (14.7-14.5)			
				1RM-04 (12-12.5)			
				1RM-05 (12-12.5)			
				1RM-09 (10-12)			
				1RM-11 (11-11.5)			

Document Type: Form

Pre-Qualtrax Document ID: N/A

Serial_No:10161910:55

ANALYTICAL REPORT

Lab Number:	L1948027
Client:	Day Environmental, Inc. 1563 Lyell Avenue Rochester, NY 14606
ATTN:	Ray Kampff
Phone:	(585) 454-0210
Project Name:	WEBER-KNAPP
Project Number:	5635S-19
Report Date:	10/21/19

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1948027
Report Date: 10/21/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1948027-01	IRM-05	WATER	441 CHANDLER STREET	10/11/19 12:47	10/14/19
L1948027-02	IRM-10	WATER	441 CHANDLER STREET	10/11/19 12:20	10/14/19

Project Name:	WEBER-KNAPP	**Lab Number:**	L1948027
Project Number:	5635S-19	**Report Date:**	10/21/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	WEBER-KNAPP	**Lab Number:**	L1948027
Project Number:	5635S-19	**Report Date:**	10/21/19

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 10/21/19

ORGANICS

VOLATILES

Project Name: WEBER-KNAPP
Lab Number: L1948027
Project Number: 5635S-19
Report Date: 10/21/19

SAMPLE RESULTS

Lab ID: L1948027-01
Date Collected: 10/11/19 12:47
Client ID: IRM-05
Date Received: 10/14/19
Sample Location: 441 CHANDLER STREET
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/19/19 16:40
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	13		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.28	J	ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	29		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name:	WEBER-KNAPP	**Lab Number:**	L1948027
Project Number:	5635S-19	**Report Date:**	10/21/19

SAMPLE RESULTS

Lab ID:	L1948027-01	Date Collected:	10/11/19 12:47
Client ID:	IRM-05	Date Received:	10/14/19
Sample Location:	441 CHANDLER STREET	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	58		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	7.3		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	2.9		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	101		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1948027

Project Number: 5635S-19 **Report Date:** 10/21/19

SAMPLE RESULTS

Lab ID: L1948027-02
Client ID: IRM-10
Sample Location: 441 CHANDLER STREET

Date Collected: 10/11/19 12:20
Date Received: 10/14/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/19/19 17:12
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	0.46	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	5.8		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: WEBER-KNAPP **Lab Number:** L1948027
Project Number: 5635S-19 **Report Date:** 10/21/19

SAMPLE RESULTS

Lab ID:	L1948027-02	Date Collected:	10/11/19 12:20
Client ID:	IRM-10	Date Received:	10/14/19
Sample Location:	441 CHANDLER STREET	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	1.2	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	6.0		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	1.6	J	ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	102		70-130

Project Name: WEBER-KNAPP　　**Lab Number:** L1948027
Project Number: 5635S-19　　**Report Date:** 10/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/19 09:36
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1298591-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1948027
Report Date: 10/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/19 09:36
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1298591-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: WEBER-KNAPP **Lab Number:** L1948027
Project Number: 5635S-19 **Report Date:** 10/21/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/19/19 09:36
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1298591-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	86		70-130
Dibromofluoromethane	107		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1948027
Report Date: 10/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1298591-3 WG1298591-4								
Methylene chloride	110		100		70-130	10		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	94		94		70-130	0		20
Carbon tetrachloride	100		98		63-132	2		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	110		110		63-130	0		20
1,1,2-Trichloroethane	94		100		70-130	6		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	96		94		62-150	2		20
1,2-Dichloroethane	97		98		70-130	1		20
1,1,1-Trichloroethane	99		98		67-130	1		20
Bromodichloromethane	100		97		67-130	3		20
trans-1,3-Dichloropropene	92		95		70-130	3		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	100		110		54-136	10		20
1,1,2,2-Tetrachloroethane	81		95		67-130	16		20
Benzene	100		100		70-130	0		20
Toluene	96		97		70-130	1		20
Ethylbenzene	97		96		70-130	1		20
Chloromethane	97		93		64-130	4		20
Bromomethane	130		110		39-139	17		20
Vinyl chloride	96		92		55-140	4		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19
Lab Number: L1948027
Report Date: 10/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1298591-3 WG1298591-4								
Chloroethane	94		93		55-138	1		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	110		100		70-130	10		20
1,2-Dichlorobenzene	98		100		70-130	2		20
1,3-Dichlorobenzene	97		100		70-130	3		20
1,4-Dichlorobenzene	96		100		70-130	4		20
Methyl tert butyl ether	100		100		63-130	0		20
p/m-Xylene	110		105		70-130	5		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Styrene	100		105		70-130	5		20
Dichlorodifluoromethane	87		84		36-147	4		20
Acetone	130		120		58-148	8		20
Carbon disulfide	87		85		51-130	2		20
2-Butanone	120		120		63-138	0		20
4-Methyl-2-pentanone	100		110		59-130	10		20
2-Hexanone	110		110		57-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
n-Butylbenzene	85		83		53-136	2		20
sec-Butylbenzene	85		86		70-130	1		20
tert-Butylbenzene	87		92		70-130	6		20
1,2-Dibromo-3-chloropropane	95		110		41-144	15		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1948027
Report Date: 10/21/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1298591-3 WG1298591-4								
Isopropylbenzene	81		87		70-130	7		20
p-Isopropyltoluene	90		90		70-130	0		20
Naphthalene	110		110		70-130	0		20
n-Propylbenzene	83		87		69-130	5		20
1,2,4-Trichlorobenzene	110		110		70-130	0		20
1,3,5-Trimethylbenzene	87		90		64-130	3		20
1,2,4-Trimethylbenzene	90		90		70-130	0		20
Methyl Acetate	120		120		70-130	0		20
Cyclohexane	97		97		70-130	0		20
Freon-113	98		97		70-130	1		20
Methyl cyclohexane	94		91		70-130	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		90		70-130
Toluene-d8	92		96		70-130
4-Bromofluorobenzene	81		86		70-130
Dibromofluoromethane	103		104		70-130

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1948027-01A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1948027-01B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1948027-01C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1948027-02A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1948027-02B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1948027-02C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

ALPHA

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 15 Oct 19

ALPHA Job #: L1948027

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Project Information

Project Name: Weber-Knapp
Project Location: 441 Chandler Street
Project #: 5635-19
(Use Project name as Project #) ☒
Project Manager: Ray Kampff
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Client Information

Client: Day Environmental Inc
Address:
Phone:
Fax:
Email: rKampff@dayenvironmental.net

Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Billing Information

☒ Same as Client Info
PO #

Regulatory Requirement

☒ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☒ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS: TCL VOCs

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs	Sample Specific Comments	Total Bottles
48027-01	IRM-05	10.11.2019	12:47	GW	RLK	X		3
48027-02	IRM-10	10.11.2019	12:20	GW	RLK	X		3

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

	TCL VOCs
Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
R. Kampff	10/14/2019 15:10	[signature] AAL	10/14/19 15:10
[signature]	10/14/19 15:10	[signature]	10/15/19 00:50

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1950289
Client:	Day Environmental, Inc. 1563 Lyell Avenue Rochester, NY 14606
ATTN:	Ray Kampff
Phone:	(585) 454-0210
Project Name:	WEBER-KNAPP
Project Number:	5635S-19
Report Date:	10/31/19

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1950289-01	1RM-12 (7.5)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 10:45	10/24/19
L1950289-02	1RM-13 (11.2)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 11:10	10/24/19
L1950289-03	1RM-13 (11)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 11:15	10/24/19
L1950289-04	1RM-14 (2)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 11:32	10/24/19
L1950289-05	1RM-16 (7.5)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 12:10	10/24/19
L1950289-06	1RM-16 (9.5)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 12:12	10/24/19
L1950289-07	1RM-17 (11.5)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 13:13	10/24/19
L1950289-08	1RM-19 (7.5)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 13:56	10/24/19
L1950289-09	1RM-19 (11.5)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 13:59	10/24/19
L1950289-10	1RM-20 (0.7)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 14:27	10/24/19
L1950289-11	1RM-20 (6.5)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 14:30	10/24/19
L1950289-12	1RM-20 (11)	SOIL	441 CHANDLER STREET, JAMESTOWN, NY	10/24/19 14:32	10/24/19

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L1950289-03: The analysis of TCLP Volatiles was not received in the recommended container. The analysis was performed at the client's request.

Volatile Organics

L1950289-01: The surrogate recovery is outside the acceptance criteria for 4-bromofluorobenzene (141%); however, the sample was not re-analyzed due to coelution with an obvious interference. A copy of the chromatogram is included as an attachment to this report.

L1950289-09: The sample was received with the appropriate container (vials) for the Volatile Organics by EPA Method 5035/8260 analysis; however, it could not be used for analysis. With the client's authorization, the sample aliquot utilized for the Volatile Organics analysis was taken from an unpreserved container (jar) and preserved appropriately. Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 10/31/19

ORGANICS

VOLATILES

Project Name: WEBER-KNAPP | **Lab Number:** L1950289

Project Number: 5635S-19 | **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-01
Client ID: 1RM-12 (7.5)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY

Date Collected: 10/24/19 10:45
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/31/19 13:23
Analyst: NLK
Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.8	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.96	0.14	1
Chloroform	ND		ug/kg	1.4	0.14	1
Carbon tetrachloride	ND		ug/kg	0.96	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.96	0.12	1
Dibromochloromethane	ND		ug/kg	0.96	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.96	0.26	1
Tetrachloroethene	ND		ug/kg	0.48	0.19	1
Chlorobenzene	ND		ug/kg	0.48	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.8	0.67	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.48	0.16	1
Bromodichloromethane	ND		ug/kg	0.48	0.10	1
trans-1,3-Dichloropropene	ND		ug/kg	0.96	0.26	1
cis-1,3-Dichloropropene	ND		ug/kg	0.48	0.15	1
Bromoform	ND		ug/kg	3.8	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.48	0.16	1
Benzene	ND		ug/kg	0.48	0.16	1
Toluene	0.83	J	ug/kg	0.96	0.52	1
Ethylbenzene	0.43	J	ug/kg	0.96	0.14	1
Chloromethane	ND		ug/kg	3.8	0.90	1
Bromomethane	ND		ug/kg	1.9	0.56	1
Vinyl chloride	0.47	J	ug/kg	0.96	0.32	1
Chloroethane	ND		ug/kg	1.9	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.13	1
Trichloroethene	6.6		ug/kg	0.48	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	1.9	0.14	1

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-01	Date Collected:	10/24/19 10:45
Client ID:	1RM-12 (7.5)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	1.9	0.14	1
1,4-Dichlorobenzene	0.19	J	ug/kg	1.9	0.16	1
Methyl tert butyl ether	ND		ug/kg	1.9	0.19	1
p/m-Xylene	0.86	J	ug/kg	1.9	0.54	1
o-Xylene	0.89	J	ug/kg	0.96	0.28	1
cis-1,2-Dichloroethene	1.3		ug/kg	0.96	0.17	1
Styrene	ND		ug/kg	0.96	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.6	0.88	1
Acetone	21		ug/kg	9.6	4.6	1
Carbon disulfide	ND		ug/kg	9.6	4.4	1
2-Butanone	ND		ug/kg	9.6	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	1.2	1
2-Hexanone	ND		ug/kg	9.6	1.1	1
Bromochloromethane	ND		ug/kg	1.9	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.96	0.27	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.96	1
Isopropylbenzene	0.55	J	ug/kg	0.96	0.10	1
1,2,3-Trichlorobenzene	ND		ug/kg	1.9	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.9	0.26	1
Methyl Acetate	4.0		ug/kg	3.8	0.92	1
Cyclohexane	ND		ug/kg	9.6	0.52	1
1,4-Dioxane	ND		ug/kg	77	34.	1
Freon-113	ND		ug/kg	3.8	0.67	1
Methyl cyclohexane	ND		ug/kg	3.8	0.58	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	**141**	Q	70-130
Dibromofluoromethane	99		70-130

Project Name: WEBER-KNAPP | **Lab Number:** L1950289

Project Number: 5635S-19 | **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-02 D | Date Collected: 10/24/19 11:10
Client ID: 1RM-13 (11.2) | Date Received: 10/24/19
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY | Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/30/19 21:43
Analyst: PK
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	7900	3600	25
1,1-Dichloroethane	ND		ug/kg	1600	230	25
Chloroform	220	J	ug/kg	2400	220	25
Carbon tetrachloride	ND		ug/kg	1600	360	25
1,2-Dichloropropane	ND		ug/kg	1600	200	25
Dibromochloromethane	ND		ug/kg	1600	220	25
1,1,2-Trichloroethane	ND		ug/kg	1600	420	25
Tetrachloroethene	ND		ug/kg	790	310	25
Chlorobenzene	ND		ug/kg	790	200	25
Trichlorofluoromethane	ND		ug/kg	6300	1100	25
1,2-Dichloroethane	ND		ug/kg	1600	410	25
1,1,1-Trichloroethane	ND		ug/kg	790	260	25
Bromodichloromethane	ND		ug/kg	790	170	25
trans-1,3-Dichloropropene	ND		ug/kg	1600	430	25
cis-1,3-Dichloropropene	ND		ug/kg	790	250	25
Bromoform	ND		ug/kg	6300	390	25
1,1,2,2-Tetrachloroethane	ND		ug/kg	790	260	25
Benzene	ND		ug/kg	790	260	25
Toluene	ND		ug/kg	1600	860	25
Ethylbenzene	ND		ug/kg	1600	220	25
Chloromethane	ND		ug/kg	6300	1500	25
Bromomethane	ND		ug/kg	3200	920	25
Vinyl chloride	ND		ug/kg	1600	530	25
Chloroethane	ND		ug/kg	3200	720	25
1,1-Dichloroethene	ND		ug/kg	1600	380	25
trans-1,2-Dichloroethene	ND		ug/kg	2400	220	25
Trichloroethene	330000		ug/kg	790	220	25
1,2-Dichlorobenzene	ND		ug/kg	3200	230	25

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-02 D	Date Collected:	10/24/19 11:10
Client ID:	1RM-13 (11.2)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	3200	230	25
1,4-Dichlorobenzene	ND		ug/kg	3200	270	25
Methyl tert butyl ether	ND		ug/kg	3200	320	25
p/m-Xylene	ND		ug/kg	3200	890	25
o-Xylene	ND		ug/kg	1600	460	25
cis-1,2-Dichloroethene	4900		ug/kg	1600	280	25
Styrene	ND		ug/kg	1600	310	25
Dichlorodifluoromethane	ND		ug/kg	16000	1400	25
Acetone	ND		ug/kg	16000	7600	25
Carbon disulfide	ND		ug/kg	16000	7200	25
2-Butanone	ND		ug/kg	16000	3500	25
4-Methyl-2-pentanone	ND		ug/kg	16000	2000	25
2-Hexanone	ND		ug/kg	16000	1900	25
Bromochloromethane	ND		ug/kg	3200	320	25
1,2-Dibromoethane	ND		ug/kg	1600	440	25
1,2-Dibromo-3-chloropropane	ND		ug/kg	4800	1600	25
Isopropylbenzene	ND		ug/kg	1600	170	25
1,2,3-Trichlorobenzene	ND		ug/kg	3200	510	25
1,2,4-Trichlorobenzene	ND		ug/kg	3200	430	25
Methyl Acetate	ND		ug/kg	6300	1500	25
Cyclohexane	ND		ug/kg	16000	860	25
1,4-Dioxane	ND		ug/kg	130000	56000	25
Freon-113	ND		ug/kg	6300	1100	25
Methyl cyclohexane	2700	J	ug/kg	6300	960	25

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	81		70-130
Dibromofluoromethane	103		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-03
Client ID: 1RM-13 (11)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY

Date Collected: 10/24/19 11:15
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/30/19 11:08
Analyst: MM
Percent Solids: 88%
TCLP/SPLP Ext. Date: 10/29/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	15		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	9.8	J	ug/l	10	0.71	10
1,1-Dichloroethene	8.7		ug/l	5.0	1.7	10
Trichloroethene	37000	E	ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	87		70-130
dibromofluoromethane	106		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-03 D	Date Collected:	10/24/19 11:15
Client ID:	1RM-13 (11)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/31/19 06:53
Analyst: MM
Percent Solids: 88%
TCLP/SPLP Ext. Date: 10/29/19 13:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Trichloroethene	98000		ug/l	1000	350	2000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	106		70-130
dibromofluoromethane	109		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-04
Client ID: 1RM-14 (2)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY

Date Collected: 10/24/19 11:32
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/30/19 14:36
Analyst: KJD
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	320	150	1
1,1-Dichloroethane	ND		ug/kg	64	9.3	1
Chloroform	11	J	ug/kg	97	9.0	1
Carbon tetrachloride	ND		ug/kg	64	15.	1
1,2-Dichloropropane	ND		ug/kg	64	8.0	1
Dibromochloromethane	ND		ug/kg	64	9.0	1
1,1,2-Trichloroethane	ND		ug/kg	64	17.	1
Tetrachloroethene	ND		ug/kg	32	13.	1
Chlorobenzene	ND		ug/kg	32	8.2	1
Trichlorofluoromethane	ND		ug/kg	260	45.	1
1,2-Dichloroethane	ND		ug/kg	64	16.	1
1,1,1-Trichloroethane	ND		ug/kg	32	11.	1
Bromodichloromethane	ND		ug/kg	32	7.0	1
trans-1,3-Dichloropropene	ND		ug/kg	64	18.	1
cis-1,3-Dichloropropene	ND		ug/kg	32	10.	1
Bromoform	ND		ug/kg	260	16.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	32	11.	1
Benzene	ND		ug/kg	32	11.	1
Toluene	ND		ug/kg	64	35.	1
Ethylbenzene	ND		ug/kg	64	9.1	1
Chloromethane	ND		ug/kg	260	60.	1
Bromomethane	88	J	ug/kg	130	37.	1
Vinyl chloride	ND		ug/kg	64	22.	1
Chloroethane	ND		ug/kg	130	29.	1
1,1-Dichloroethene	ND		ug/kg	64	15.	1
trans-1,2-Dichloroethene	ND		ug/kg	97	8.8	1
Trichloroethene	11000		ug/kg	32	8.8	1
1,2-Dichlorobenzene	ND		ug/kg	130	9.3	1

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-04	Date Collected:	10/24/19 11:32
Client ID:	1RM-14 (2)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	130	9.5	1
1,4-Dichlorobenzene	ND		ug/kg	130	11.	1
Methyl tert butyl ether	ND		ug/kg	130	13.	1
p/m-Xylene	ND		ug/kg	130	36.	1
o-Xylene	ND		ug/kg	64	19.	1
cis-1,2-Dichloroethene	230		ug/kg	64	11.	1
Styrene	ND		ug/kg	64	13.	1
Dichlorodifluoromethane	ND		ug/kg	640	59.	1
Acetone	ND		ug/kg	640	310	1
Carbon disulfide	ND		ug/kg	640	290	1
2-Butanone	ND		ug/kg	640	140	1
4-Methyl-2-pentanone	ND		ug/kg	640	82.	1
2-Hexanone	ND		ug/kg	640	76.	1
Bromochloromethane	ND		ug/kg	130	13.	1
1,2-Dibromoethane	ND		ug/kg	64	18.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	190	64.	1
Isopropylbenzene	ND		ug/kg	64	7.0	1
1,2,3-Trichlorobenzene	ND		ug/kg	130	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	130	18.	1
Methyl Acetate	ND		ug/kg	260	61.	1
Cyclohexane	ND		ug/kg	640	35.	1
1,4-Dioxane	ND		ug/kg	5200	2300	1
Freon-113	ND		ug/kg	260	45.	1
Methyl cyclohexane	ND		ug/kg	260	39.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	96		70-130

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-05	Date Collected:	10/24/19 12:10
Client ID:	1RM-16 (7.5)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/30/19 19:27
Analyst: NLK
Percent Solids: 74%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	0.26	J	ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.78	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Bromodichloromethane	ND		ug/kg	0.56	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.56	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.56	0.19	1
Benzene	ND		ug/kg	0.56	0.19	1
Toluene	0.69	J	ug/kg	1.1	0.61	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.2	0.66	1
Vinyl chloride	1.0	J	ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.2	0.51	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1
Trichloroethene	70		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-05	Date Collected:	10/24/19 12:10
Client ID:	1RM-16 (7.5)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.23	1
p/m-Xylene	ND		ug/kg	2.2	0.63	1
o-Xylene	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	1.4		ug/kg	1.1	0.20	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	130		ug/kg	11	5.4	1
Carbon disulfide	ND		ug/kg	11	5.1	1
2-Butanone	24		ug/kg	11	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.32	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.31	1
Methyl Acetate	7.6		ug/kg	4.5	1.1	1
Cyclohexane	ND		ug/kg	11	0.61	1
1,4-Dioxane	ND		ug/kg	90	40.	1
Freon-113	ND		ug/kg	4.5	0.78	1
Methyl cyclohexane	ND		ug/kg	4.5	0.68	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	88		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-06 D
Client ID: 1RM-16 (9.5)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY

Date Collected: 10/24/19 12:12
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/30/19 12:10
Analyst: KJD
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	330000	150000	1000
1,1-Dichloroethane	ND		ug/kg	66000	9600	1000
Chloroform	11000	J	ug/kg	99000	9200	1000
Carbon tetrachloride	ND		ug/kg	66000	15000	1000
1,2-Dichloropropane	ND		ug/kg	66000	8200	1000
Dibromochloromethane	ND		ug/kg	66000	9200	1000
1,1,2-Trichloroethane	ND		ug/kg	66000	18000	1000
Tetrachloroethene	ND		ug/kg	33000	13000	1000
Chlorobenzene	ND		ug/kg	33000	8400	1000
Trichlorofluoromethane	ND		ug/kg	260000	46000	1000
1,2-Dichloroethane	ND		ug/kg	66000	17000	1000
1,1,1-Trichloroethane	ND		ug/kg	33000	11000	1000
Bromodichloromethane	ND		ug/kg	33000	7200	1000
trans-1,3-Dichloropropene	ND		ug/kg	66000	18000	1000
cis-1,3-Dichloropropene	ND		ug/kg	33000	10000	1000
Bromoform	ND		ug/kg	260000	16000	1000
1,1,2,2-Tetrachloroethane	ND		ug/kg	33000	11000	1000
Benzene	ND		ug/kg	33000	11000	1000
Toluene	ND		ug/kg	66000	36000	1000
Ethylbenzene	ND		ug/kg	66000	9300	1000
Chloromethane	ND		ug/kg	260000	61000	1000
Bromomethane	ND		ug/kg	130000	38000	1000
Vinyl chloride	ND		ug/kg	66000	22000	1000
Chloroethane	ND		ug/kg	130000	30000	1000
1,1-Dichloroethene	ND		ug/kg	66000	16000	1000
trans-1,2-Dichloroethene	ND		ug/kg	99000	9000	1000
Trichloroethene	12000000		ug/kg	33000	9000	1000
1,2-Dichlorobenzene	ND		ug/kg	130000	9500	1000

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-06 D	Date Collected:	10/24/19 12:12
Client ID:	1RM-16 (9.5)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	130000	9800	1000
1,4-Dichlorobenzene	ND		ug/kg	130000	11000	1000
Methyl tert butyl ether	ND		ug/kg	130000	13000	1000
p/m-Xylene	ND		ug/kg	130000	37000	1000
o-Xylene	ND		ug/kg	66000	19000	1000
cis-1,2-Dichloroethene	44000	J	ug/kg	66000	12000	1000
Styrene	ND		ug/kg	66000	13000	1000
Dichlorodifluoromethane	ND		ug/kg	660000	60000	1000
Acetone	ND		ug/kg	660000	320000	1000
Carbon disulfide	ND		ug/kg	660000	300000	1000
2-Butanone	ND		ug/kg	660000	150000	1000
4-Methyl-2-pentanone	ND		ug/kg	660000	84000	1000
2-Hexanone	ND		ug/kg	660000	78000	1000
Bromochloromethane	ND		ug/kg	130000	14000	1000
1,2-Dibromoethane	ND		ug/kg	66000	18000	1000
1,2-Dibromo-3-chloropropane	ND		ug/kg	200000	66000	1000
Isopropylbenzene	ND		ug/kg	66000	7200	1000
1,2,3-Trichlorobenzene	ND		ug/kg	130000	21000	1000
1,2,4-Trichlorobenzene	ND		ug/kg	130000	18000	1000
Methyl Acetate	ND		ug/kg	260000	63000	1000
Cyclohexane	ND		ug/kg	660000	36000	1000
1,4-Dioxane	ND		ug/kg	5300000	2300000	1000
Freon-113	ND		ug/kg	260000	46000	1000
Methyl cyclohexane	ND		ug/kg	260000	40000	1000

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	97		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-07	D	Date Collected:	10/24/19 13:13
Client ID:	1RM-17 (11.5)		Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY		Field Prep:	Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/30/19 12:34
Analyst: KJD
Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	40000	18000	100
1,1-Dichloroethane	ND		ug/kg	8100	1200	100
Chloroform	1200	J	ug/kg	12000	1100	100
Carbon tetrachloride	ND		ug/kg	8100	1900	100
1,2-Dichloropropane	ND		ug/kg	8100	1000	100
Dibromochloromethane	ND		ug/kg	8100	1100	100
1,1,2-Trichloroethane	ND		ug/kg	8100	2200	100
Tetrachloroethene	ND		ug/kg	4000	1600	100
Chlorobenzene	ND		ug/kg	4000	1000	100
Trichlorofluoromethane	ND		ug/kg	32000	5600	100
1,2-Dichloroethane	ND		ug/kg	8100	2100	100
1,1,1-Trichloroethane	ND		ug/kg	4000	1400	100
Bromodichloromethane	ND		ug/kg	4000	880	100
trans-1,3-Dichloropropene	ND		ug/kg	8100	2200	100
cis-1,3-Dichloropropene	ND		ug/kg	4000	1300	100
Bromoform	ND		ug/kg	32000	2000	100
1,1,2,2-Tetrachloroethane	ND		ug/kg	4000	1300	100
Benzene	ND		ug/kg	4000	1300	100
Toluene	ND		ug/kg	8100	4400	100
Ethylbenzene	ND		ug/kg	8100	1100	100
Chloromethane	ND		ug/kg	32000	7600	100
Bromomethane	ND		ug/kg	16000	4700	100
Vinyl chloride	ND		ug/kg	8100	2700	100
Chloroethane	ND		ug/kg	16000	3700	100
1,1-Dichloroethene	ND		ug/kg	8100	1900	100
trans-1,2-Dichloroethene	ND		ug/kg	12000	1100	100
Trichloroethene	1100000		ug/kg	4000	1100	100
1,2-Dichlorobenzene	ND		ug/kg	16000	1200	100

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-07 D	Date Collected:	10/24/19 13:13
Client ID:	1RM-17 (11.5)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	16000	1200	100
1,4-Dichlorobenzene	ND		ug/kg	16000	1400	100
Methyl tert butyl ether	ND		ug/kg	16000	1600	100
p/m-Xylene	ND		ug/kg	16000	4500	100
o-Xylene	ND		ug/kg	8100	2400	100
cis-1,2-Dichloroethene	28000		ug/kg	8100	1400	100
Styrene	ND		ug/kg	8100	1600	100
Dichlorodifluoromethane	ND		ug/kg	81000	7400	100
Acetone	ND		ug/kg	81000	39000	100
Carbon disulfide	ND		ug/kg	81000	37000	100
2-Butanone	ND		ug/kg	81000	18000	100
4-Methyl-2-pentanone	ND		ug/kg	81000	10000	100
2-Hexanone	ND		ug/kg	81000	9600	100
Bromochloromethane	ND		ug/kg	16000	1700	100
1,2-Dibromoethane	ND		ug/kg	8100	2300	100
1,2-Dibromo-3-chloropropane	ND		ug/kg	24000	8100	100
Isopropylbenzene	ND		ug/kg	8100	880	100
1,2,3-Trichlorobenzene	ND		ug/kg	16000	2600	100
1,2,4-Trichlorobenzene	ND		ug/kg	16000	2200	100
Methyl Acetate	ND		ug/kg	32000	7700	100
Cyclohexane	ND		ug/kg	81000	4400	100
1,4-Dioxane	ND		ug/kg	650000	280000	100
Freon-113	ND		ug/kg	32000	5600	100
Methyl cyclohexane	ND		ug/kg	32000	4900	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	97		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-08 Date Collected: 10/24/19 13:56
Client ID: 1RM-19 (7.5) Date Received: 10/24/19
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/30/19 20:06
Analyst: NLK
Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	0.99	0.14	1
Chloroform	0.21	J	ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.99	0.23	1
1,2-Dichloropropane	ND		ug/kg	0.99	0.12	1
Dibromochloromethane	ND		ug/kg	0.99	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.99	0.26	1
Tetrachloroethene	ND		ug/kg	0.50	0.19	1
Chlorobenzene	ND		ug/kg	0.50	0.12	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.69	1
1,2-Dichloroethane	ND		ug/kg	0.99	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.16	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.99	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.16	1
Benzene	ND		ug/kg	0.50	0.16	1
Toluene	1.1		ug/kg	0.99	0.54	1
Ethylbenzene	ND		ug/kg	0.99	0.14	1
Chloromethane	ND		ug/kg	4.0	0.92	1
Bromomethane	ND		ug/kg	2.0	0.58	1
Vinyl chloride	0.36	J	ug/kg	0.99	0.33	1
Chloroethane	ND		ug/kg	2.0	0.45	1
1,1-Dichloroethene	ND		ug/kg	0.99	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14	1
Trichloroethene	16		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-08 Date Collected: 10/24/19 13:56
Client ID: 1RM-19 (7.5) Date Received: 10/24/19
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	0.99	0.29	1
cis-1,2-Dichloroethene	0.36	J	ug/kg	0.99	0.17	1
Styrene	ND		ug/kg	0.99	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.9	0.91	1
Acetone	46		ug/kg	9.9	4.8	1
Carbon disulfide	ND		ug/kg	9.9	4.5	1
2-Butanone	7.2	J	ug/kg	9.9	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	9.9	1.3	1
2-Hexanone	ND		ug/kg	9.9	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.99	0.28	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	0.99	1
Isopropylbenzene	ND		ug/kg	0.99	0.11	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
Methyl Acetate	7.8		ug/kg	4.0	0.94	1
Cyclohexane	ND		ug/kg	9.9	0.54	1
1,4-Dioxane	ND		ug/kg	79	35.	1
Freon-113	ND		ug/kg	4.0	0.69	1
Methyl cyclohexane	ND		ug/kg	4.0	0.60	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	87		70-130

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-09 D	Date Collected:	10/24/19 13:59
Client ID:	1RM-19 (11.5)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Matrix:	Soil
Analytical Method:	1,8260C
Analytical Date:	10/30/19 12:59
Analyst:	KJD
Percent Solids:	86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	28000	13000	100
1,1-Dichloroethane	ND		ug/kg	5600	810	100
Chloroform	ND		ug/kg	8400	780	100
Carbon tetrachloride	ND		ug/kg	5600	1300	100
1,2-Dichloropropane	ND		ug/kg	5600	700	100
Dibromochloromethane	ND		ug/kg	5600	780	100
1,1,2-Trichloroethane	ND		ug/kg	5600	1500	100
Tetrachloroethene	ND		ug/kg	2800	1100	100
Chlorobenzene	ND		ug/kg	2800	710	100
Trichlorofluoromethane	ND		ug/kg	22000	3900	100
1,2-Dichloroethane	ND		ug/kg	5600	1400	100
1,1,1-Trichloroethane	ND		ug/kg	2800	940	100
Bromodichloromethane	ND		ug/kg	2800	610	100
trans-1,3-Dichloropropene	ND		ug/kg	5600	1500	100
cis-1,3-Dichloropropene	ND		ug/kg	2800	880	100
Bromoform	ND		ug/kg	22000	1400	100
1,1,2,2-Tetrachloroethane	ND		ug/kg	2800	930	100
Benzene	ND		ug/kg	2800	930	100
Toluene	ND		ug/kg	5600	3000	100
Ethylbenzene	ND		ug/kg	5600	790	100
Chloromethane	ND		ug/kg	22000	5200	100
Bromomethane	ND		ug/kg	11000	3200	100
Vinyl chloride	ND		ug/kg	5600	1900	100
Chloroethane	ND		ug/kg	11000	2500	100
1,1-Dichloroethene	ND		ug/kg	5600	1300	100
trans-1,2-Dichloroethene	ND		ug/kg	8400	770	100
Trichloroethene	1000000		ug/kg	2800	770	100
1,2-Dichlorobenzene	ND		ug/kg	11000	810	100

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-09 D	Date Collected:	10/24/19 13:59
Client ID:	1RM-19 (11.5)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	11000	830	100
1,4-Dichlorobenzene	ND		ug/kg	11000	960	100
Methyl tert butyl ether	ND		ug/kg	11000	1100	100
p/m-Xylene	ND		ug/kg	11000	3100	100
o-Xylene	ND		ug/kg	5600	1600	100
cis-1,2-Dichloroethene	ND		ug/kg	5600	980	100
Styrene	ND		ug/kg	5600	1100	100
Dichlorodifluoromethane	ND		ug/kg	56000	5100	100
Acetone	ND		ug/kg	56000	27000	100
Carbon disulfide	ND		ug/kg	56000	25000	100
2-Butanone	ND		ug/kg	56000	12000	100
4-Methyl-2-pentanone	ND		ug/kg	56000	7200	100
2-Hexanone	ND		ug/kg	56000	6600	100
Bromochloromethane	ND		ug/kg	11000	1100	100
1,2-Dibromoethane	ND		ug/kg	5600	1600	100
1,2-Dibromo-3-chloropropane	ND		ug/kg	17000	5600	100
Isopropylbenzene	ND		ug/kg	5600	610	100
1,2,3-Trichlorobenzene	ND		ug/kg	11000	1800	100
1,2,4-Trichlorobenzene	ND		ug/kg	11000	1500	100
Methyl Acetate	ND		ug/kg	22000	5300	100
Cyclohexane	ND		ug/kg	56000	3000	100
1,4-Dioxane	ND		ug/kg	450000	200000	100
Freon-113	ND		ug/kg	22000	3900	100
Methyl cyclohexane	ND		ug/kg	22000	3400	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	81		70-130
Dibromofluoromethane	103		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-10 D
Client ID: 1RM-20 (0.7)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY

Date Collected: 10/24/19 14:27
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/30/19 22:09
Analyst: PK
Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	540	250	2
1,1-Dichloroethane	ND		ug/kg	110	16.	2
Chloroform	16	J	ug/kg	160	15.	2
Carbon tetrachloride	ND		ug/kg	110	25.	2
1,2-Dichloropropane	ND		ug/kg	110	13.	2
Dibromochloromethane	ND		ug/kg	110	15.	2
1,1,2-Trichloroethane	ND		ug/kg	110	29.	2
Tetrachloroethene	ND		ug/kg	54	21.	2
Chlorobenzene	ND		ug/kg	54	14.	2
Trichlorofluoromethane	ND		ug/kg	430	75.	2
1,2-Dichloroethane	ND		ug/kg	110	28.	2
1,1,1-Trichloroethane	ND		ug/kg	54	18.	2
Bromodichloromethane	ND		ug/kg	54	12.	2
trans-1,3-Dichloropropene	ND		ug/kg	110	29.	2
cis-1,3-Dichloropropene	ND		ug/kg	54	17.	2
Bromoform	ND		ug/kg	430	26.	2
1,1,2,2-Tetrachloroethane	ND		ug/kg	54	18.	2
Benzene	ND		ug/kg	54	18.	2
Toluene	ND		ug/kg	110	58.	2
Ethylbenzene	ND		ug/kg	110	15.	2
Chloromethane	ND		ug/kg	430	100	2
Bromomethane	82	J	ug/kg	210	62.	2
Vinyl chloride	ND		ug/kg	110	36.	2
Chloroethane	ND		ug/kg	210	48.	2
1,1-Dichloroethene	ND		ug/kg	110	26.	2
trans-1,2-Dichloroethene	ND		ug/kg	160	15.	2
Trichloroethene	15000		ug/kg	54	15.	2
1,2-Dichlorobenzene	ND		ug/kg	210	15.	2

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-10 D	Date Collected:	10/24/19 14:27
Client ID:	1RM-20 (0.7)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	210	16.	2
1,4-Dichlorobenzene	ND		ug/kg	210	18.	2
Methyl tert butyl ether	ND		ug/kg	210	22.	2
p/m-Xylene	ND		ug/kg	210	60.	2
o-Xylene	ND		ug/kg	110	31.	2
cis-1,2-Dichloroethene	140		ug/kg	110	19.	2
Styrene	ND		ug/kg	110	21.	2
Dichlorodifluoromethane	ND		ug/kg	1100	98.	2
Acetone	ND		ug/kg	1100	520	2
Carbon disulfide	ND		ug/kg	1100	490	2
2-Butanone	ND		ug/kg	1100	240	2
4-Methyl-2-pentanone	ND		ug/kg	1100	140	2
2-Hexanone	ND		ug/kg	1100	130	2
Bromochloromethane	ND		ug/kg	210	22.	2
1,2-Dibromoethane	ND		ug/kg	110	30.	2
1,2-Dibromo-3-chloropropane	ND		ug/kg	320	110	2
Isopropylbenzene	ND		ug/kg	110	12.	2
1,2,3-Trichlorobenzene	ND		ug/kg	210	34.	2
1,2,4-Trichlorobenzene	ND		ug/kg	210	29.	2
Methyl Acetate	ND		ug/kg	430	100	2
Cyclohexane	ND		ug/kg	1100	58.	2
1,4-Dioxane	ND		ug/kg	8600	3800	2
Freon-113	ND		ug/kg	430	74.	2
Methyl cyclohexane	160	J	ug/kg	430	65.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	80		70-130
Dibromofluoromethane	103		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-11	Date Collected:	10/24/19 14:30
Client ID:	1RM-20 (6.5)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Matrix:	Soil
Analytical Method:	1,8260C
Analytical Date:	10/30/19 15:00
Analyst:	KJD
Percent Solids:	73%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	370	170	1
1,1-Dichloroethane	ND		ug/kg	74	11.	1
Chloroform	11	J	ug/kg	110	10.	1
Carbon tetrachloride	ND		ug/kg	74	17.	1
1,2-Dichloropropane	ND		ug/kg	74	9.3	1
Dibromochloromethane	ND		ug/kg	74	10.	1
1,1,2-Trichloroethane	ND		ug/kg	74	20.	1
Tetrachloroethene	ND		ug/kg	37	14.	1
Chlorobenzene	ND		ug/kg	37	9.4	1
Trichlorofluoromethane	ND		ug/kg	300	52.	1
1,2-Dichloroethane	ND		ug/kg	74	19.	1
1,1,1-Trichloroethane	ND		ug/kg	37	12.	1
Bromodichloromethane	ND		ug/kg	37	8.1	1
trans-1,3-Dichloropropene	ND		ug/kg	74	20.	1
cis-1,3-Dichloropropene	ND		ug/kg	37	12.	1
Bromoform	ND		ug/kg	300	18.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	37	12.	1
Benzene	ND		ug/kg	37	12.	1
Toluene	ND		ug/kg	74	40.	1
Ethylbenzene	ND		ug/kg	74	10.	1
Chloromethane	ND		ug/kg	300	69.	1
Bromomethane	96	J	ug/kg	150	43.	1
Vinyl chloride	ND		ug/kg	74	25.	1
Chloroethane	ND		ug/kg	150	34.	1
1,1-Dichloroethene	ND		ug/kg	74	18.	1
trans-1,2-Dichloroethene	ND		ug/kg	110	10.	1
Trichloroethene	4000		ug/kg	37	10.	1
1,2-Dichlorobenzene	ND		ug/kg	150	11.	1

Project Name: WEBER-KNAPP
Lab Number: L1950289
Project Number: 5635S-19
Report Date: 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-11
Date Collected: 10/24/19 14:30
Client ID: 1RM-20 (6.5)
Date Received: 10/24/19
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	150	11.	1
1,4-Dichlorobenzene	ND		ug/kg	150	13.	1
Methyl tert butyl ether	ND		ug/kg	150	15.	1
p/m-Xylene	ND		ug/kg	150	42.	1
o-Xylene	ND		ug/kg	74	22.	1
cis-1,2-Dichloroethene	19	J	ug/kg	74	13.	1
Styrene	ND		ug/kg	74	14.	1
Dichlorodifluoromethane	ND		ug/kg	740	68.	1
Acetone	ND		ug/kg	740	360	1
Carbon disulfide	ND		ug/kg	740	340	1
2-Butanone	ND		ug/kg	740	160	1
4-Methyl-2-pentanone	ND		ug/kg	740	95.	1
2-Hexanone	ND		ug/kg	740	88.	1
Bromochloromethane	ND		ug/kg	150	15.	1
1,2-Dibromoethane	ND		ug/kg	74	21.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	220	74.	1
Isopropylbenzene	ND		ug/kg	74	8.1	1
1,2,3-Trichlorobenzene	ND		ug/kg	150	24.	1
1,2,4-Trichlorobenzene	ND		ug/kg	150	20.	1
Methyl Acetate	ND		ug/kg	300	70.	1
Cyclohexane	ND		ug/kg	740	40.	1
1,4-Dioxane	ND		ug/kg	5900	2600	1
Freon-113	ND		ug/kg	300	51.	1
Methyl cyclohexane	ND		ug/kg	300	45.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	95		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-12 D
Client ID: 1RM-20 (11)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY

Date Collected: 10/24/19 14:32
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 10/30/19 22:35
Analyst: PK
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	430	200	2
1,1-Dichloroethane	ND		ug/kg	86	12.	2
Chloroform	14	J	ug/kg	130	12.	2
Carbon tetrachloride	ND		ug/kg	86	20.	2
1,2-Dichloropropane	ND		ug/kg	86	11.	2
Dibromochloromethane	ND		ug/kg	86	12.	2
1,1,2-Trichloroethane	ND		ug/kg	86	23.	2
Tetrachloroethene	ND		ug/kg	43	17.	2
Chlorobenzene	ND		ug/kg	43	11.	2
Trichlorofluoromethane	ND		ug/kg	340	59.	2
1,2-Dichloroethane	ND		ug/kg	86	22.	2
1,1,1-Trichloroethane	ND		ug/kg	43	14.	2
Bromodichloromethane	ND		ug/kg	43	9.3	2
trans-1,3-Dichloropropene	ND		ug/kg	86	23.	2
cis-1,3-Dichloropropene	ND		ug/kg	43	14.	2
Bromoform	ND		ug/kg	340	21.	2
1,1,2,2-Tetrachloroethane	ND		ug/kg	43	14.	2
Benzene	ND		ug/kg	43	14.	2
Toluene	ND		ug/kg	86	46.	2
Ethylbenzene	ND		ug/kg	86	12.	2
Chloromethane	ND		ug/kg	340	80.	2
Bromomethane	ND		ug/kg	170	50.	2
Vinyl chloride	470		ug/kg	86	29.	2
Chloroethane	ND		ug/kg	170	39.	2
1,1-Dichloroethene	37	J	ug/kg	86	20.	2
trans-1,2-Dichloroethene	29	J	ug/kg	130	12.	2
Trichloroethene	18000		ug/kg	43	12.	2
1,2-Dichlorobenzene	ND		ug/kg	170	12.	2

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-12 D	Date Collected:	10/24/19 14:32
Client ID:	1RM-20 (11)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	170	13.	2
1,4-Dichlorobenzene	ND		ug/kg	170	15.	2
Methyl tert butyl ether	ND		ug/kg	170	17.	2
p/m-Xylene	ND		ug/kg	170	48.	2
o-Xylene	ND		ug/kg	86	25.	2
cis-1,2-Dichloroethene	15000		ug/kg	86	15.	2
Styrene	ND		ug/kg	86	17.	2
Dichlorodifluoromethane	ND		ug/kg	860	78.	2
Acetone	ND		ug/kg	860	410	2
Carbon disulfide	ND		ug/kg	860	390	2
2-Butanone	ND		ug/kg	860	190	2
4-Methyl-2-pentanone	ND		ug/kg	860	110	2
2-Hexanone	ND		ug/kg	860	100	2
Bromochloromethane	ND		ug/kg	170	18.	2
1,2-Dibromoethane	ND		ug/kg	86	24.	2
1,2-Dibromo-3-chloropropane	ND		ug/kg	260	85.	2
Isopropylbenzene	ND		ug/kg	86	9.3	2
1,2,3-Trichlorobenzene	ND		ug/kg	170	28.	2
1,2,4-Trichlorobenzene	ND		ug/kg	170	23.	2
Methyl Acetate	ND		ug/kg	340	81.	2
Cyclohexane	ND		ug/kg	860	46.	2
1,4-Dioxane	ND		ug/kg	6800	3000	2
Freon-113	ND		ug/kg	340	59.	2
Methyl cyclohexane	150	J	ug/kg	340	52.	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	80		70-130
Dibromofluoromethane	103		70-130

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/30/19 10:03
Analyst: MM
TCLP/SPLP Extraction Date: 10/29/19 15:30

Extraction Date: 10/29/19 15:30

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 03 Batch: WG1302456-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	84		70-130
dibromofluoromethane	104		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/30/19 07:41
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04,06-07,09,11 Batch: WG1302669-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	73	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/30/19 07:41
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04,06-07,09,11 Batch: WG1302669-5					
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	ND		ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Isopropylbenzene	ND		ug/kg	50	5.4
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
Methyl Acetate	ND		ug/kg	200	48.
Cyclohexane	ND		ug/kg	500	27.
1,4-Dioxane	ND		ug/kg	4000	1800
Freon-113	ND		ug/kg	200	35.
Methyl cyclohexane	ND		ug/kg	200	30.

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/30/19 07:41
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04,06-07,09,11 Batch: WG1302669-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	98		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/31/19 04:51 Extraction Date: 10/29/19 13:50
Analyst: MM
TCLP/SPLP Extraction Date: 10/29/19 13:50

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 03 Batch: WG1302853-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	107		70-130
dibromofluoromethane	106		70-130

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/30/19 17:27
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 05,08 Batch: WG1302857-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	1.2	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/30/19 17:27
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 05,08 Batch: WG1302857-5					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/30/19 17:27
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 05,08 Batch: WG1302857-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	84		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/30/19 20:25
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,10,12 Batch: WG1302919-5					
Methylene chloride	ND		ug/kg	250	110
1,1-Dichloroethane	ND		ug/kg	50	7.2
Chloroform	ND		ug/kg	75	7.0
Carbon tetrachloride	ND		ug/kg	50	12.
1,2-Dichloropropane	ND		ug/kg	50	6.2
Dibromochloromethane	ND		ug/kg	50	7.0
1,1,2-Trichloroethane	ND		ug/kg	50	13.
Tetrachloroethene	ND		ug/kg	25	9.8
Chlorobenzene	ND		ug/kg	25	6.4
Trichlorofluoromethane	ND		ug/kg	200	35.
1,2-Dichloroethane	ND		ug/kg	50	13.
1,1,1-Trichloroethane	ND		ug/kg	25	8.4
Bromodichloromethane	ND		ug/kg	25	5.4
trans-1,3-Dichloropropene	ND		ug/kg	50	14.
cis-1,3-Dichloropropene	ND		ug/kg	25	7.9
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	8.3
Benzene	ND		ug/kg	25	8.3
Toluene	ND		ug/kg	50	27.
Ethylbenzene	ND		ug/kg	50	7.0
Chloromethane	ND		ug/kg	200	47.
Bromomethane	81	J	ug/kg	100	29.
Vinyl chloride	ND		ug/kg	50	17.
Chloroethane	ND		ug/kg	100	23.
1,1-Dichloroethene	ND		ug/kg	50	12.
trans-1,2-Dichloroethene	ND		ug/kg	75	6.8
Trichloroethene	ND		ug/kg	25	6.8
1,2-Dichlorobenzene	ND		ug/kg	100	7.2
1,3-Dichlorobenzene	ND		ug/kg	100	7.4

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/30/19 20:25
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,10,12 Batch: WG1302919-5					
1,4-Dichlorobenzene	ND		ug/kg	100	8.6
Methyl tert butyl ether	10	J	ug/kg	100	10.
p/m-Xylene	ND		ug/kg	100	28.
o-Xylene	ND		ug/kg	50	14.
cis-1,2-Dichloroethene	ND		ug/kg	50	8.8
Styrene	ND		ug/kg	50	9.8
Dichlorodifluoromethane	ND		ug/kg	500	46.
Acetone	ND		ug/kg	500	240
Carbon disulfide	ND		ug/kg	500	230
2-Butanone	ND		ug/kg	500	110
4-Methyl-2-pentanone	ND		ug/kg	500	64.
2-Hexanone	ND		ug/kg	500	59.
Bromochloromethane	ND		ug/kg	100	10.
1,2-Dibromoethane	ND		ug/kg	50	14.
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	50.
Isopropylbenzene	ND		ug/kg	50	5.4
1,2,3-Trichlorobenzene	ND		ug/kg	100	16.
1,2,4-Trichlorobenzene	ND		ug/kg	100	14.
Methyl Acetate	ND		ug/kg	200	48.
Cyclohexane	ND		ug/kg	500	27.
1,4-Dioxane	ND		ug/kg	4000	1800
Freon-113	ND		ug/kg	200	35.
Methyl cyclohexane	ND		ug/kg	200	30.

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/30/19 20:25
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,10,12 Batch: WG1302919-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	81		70-130
Dibromofluoromethane	102		70-130

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/31/19 08:42
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1302922-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	0.16	J	ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	0.66	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/31/19 08:42
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1302922-5					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/31/19 08:42
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1302922-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19
Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 03 Batch: WG1302456-3 WG1302456-4								
Chloroform	96		94		70-130	2		20
Carbon tetrachloride	100		100		63-132	0		20
Tetrachloroethene	120		110		70-130	9		20
Chlorobenzene	100		99		75-130	1		25
1,2-Dichloroethane	93		91		70-130	2		20
Benzene	100		100		70-130	0		25
Vinyl chloride	97		93		55-140	4		20
1,1-Dichloroethene	110		100		61-145	10		25
Trichloroethene	110		110		70-130	0		25
1,4-Dichlorobenzene	100		110		70-130	10		20
2-Butanone	110		110		63-138	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	85		84		70-130
Toluene-d8	90		91		70-130
4-Bromofluorobenzene	78		86		70-130
dibromofluoromethane	105		105		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04,06-07,09,11 Batch: WG1302669-3 WG1302669-4								
Methylene chloride	94		78		70-130	19		30
1,1-Dichloroethane	112		91		70-130	21		30
Chloroform	119		97		70-130	20		30
Carbon tetrachloride	124		101		70-130	20		30
1,2-Dichloropropane	116		95		70-130	20		30
Dibromochloromethane	113		104		70-130	8		30
1,1,2-Trichloroethane	102		92		70-130	10		30
Tetrachloroethene	118		105		70-130	12		30
Chlorobenzene	109		102		70-130	7		30
Trichlorofluoromethane	93		85		70-139	9		30
1,2-Dichloroethane	116		99		70-130	16		30
1,1,1-Trichloroethane	118		100		70-130	17		30
Bromodichloromethane	125		104		70-130	18		30
trans-1,3-Dichloropropene	110		96		70-130	14		30
cis-1,3-Dichloropropene	116		101		70-130	14		30
Bromoform	107		104		70-130	3		30
1,1,2,2-Tetrachloroethane	99		95		70-130	4		30
Benzene	110		92		70-130	18		30
Toluene	101		90		70-130	12		30
Ethylbenzene	112		103		70-130	8		30
Chloromethane	55		**50**	Q	52-130	10		30
Bromomethane	81		71		57-147	13		30
Vinyl chloride	**60**	Q	**55**	Q	67-130	9		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04,06-07,09,11 Batch: WG1302669-3 WG1302669-4								
Chloroethane	74		67		50-151	10		30
1,1-Dichloroethene	96		81		65-135	17		30
trans-1,2-Dichloroethene	108		87		70-130	22		30
Trichloroethene	120		100		70-130	18		30
1,2-Dichlorobenzene	108		100		70-130	8		30
1,3-Dichlorobenzene	114		103		70-130	10		30
1,4-Dichlorobenzene	112		102		70-130	9		30
Methyl tert butyl ether	111		92		66-130	19		30
p/m-Xylene	104		105		70-130	1		30
o-Xylene	110		105		70-130	5		30
cis-1,2-Dichloroethene	109		91		70-130	18		30
Styrene	115		108		70-130	6		30
Dichlorodifluoromethane	**25**	Q	**23**	Q	30-146	8		30
Acetone	135		117		54-140	14		30
Carbon disulfide	80		67		59-130	18		30
2-Butanone	120		104		70-130	14		30
4-Methyl-2-pentanone	103		94		70-130	9		30
2-Hexanone	110		112		70-130	2		30
Bromochloromethane	114		96		70-130	17		30
1,2-Dibromoethane	107		101		70-130	6		30
1,2-Dibromo-3-chloropropane	97		99		68-130	2		30
Isopropylbenzene	109		100		70-130	9		30
1,2,3-Trichlorobenzene	112		106		70-130	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04,06-07,09,11 Batch: WG1302669-3 WG1302669-4								
1,2,4-Trichlorobenzene	120		111		70-130	8		30
Methyl Acetate	137		115		51-146	17		30
Cyclohexane	114		90		59-142	24		30
1,4-Dioxane	110		100		65-136	10		30
Freon-113	104		87		50-139	18		30
Methyl cyclohexane	112		93		70-130	19		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		100		70-130
Toluene-d8	97		90		70-130
4-Bromofluorobenzene	94		94		70-130
Dibromofluoromethane	109		98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 03 Batch: WG1302853-3 WG1302853-4								
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	120		120		63-132	0		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	93		94		75-130	1		25
1,2-Dichloroethane	120		120		70-130	0		20
Benzene	100		100		70-130	0		25
Vinyl chloride	110		100		55-140	10		20
1,1-Dichloroethene	100		100		61-145	0		25
Trichloroethene	100		100		70-130	0		25
1,4-Dichlorobenzene	89		93		70-130	4		20
2-Butanone	120		120		63-138	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	118		117		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	98		100		70-130
dibromofluoromethane	103		103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19
Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,08 Batch: WG1302857-3 WG1302857-4								
Methylene chloride	89		92		70-130	3		30
1,1-Dichloroethane	94		97		70-130	3		30
Chloroform	86		90		70-130	5		30
Carbon tetrachloride	88		92		70-130	4		30
1,2-Dichloropropane	96		98		70-130	2		30
Dibromochloromethane	88		91		70-130	3		30
1,1,2-Trichloroethane	94		95		70-130	1		30
Tetrachloroethene	81		83		70-130	2		30
Chlorobenzene	87		89		70-130	2		30
Trichlorofluoromethane	87		91		70-139	4		30
1,2-Dichloroethane	88		91		70-130	3		30
1,1,1-Trichloroethane	88		92		70-130	4		30
Bromodichloromethane	86		89		70-130	3		30
trans-1,3-Dichloropropene	84		87		70-130	4		30
cis-1,3-Dichloropropene	80		82		70-130	2		30
Bromoform	86		89		70-130	3		30
1,1,2,2-Tetrachloroethane	97		99		70-130	2		30
Benzene	88		91		70-130	3		30
Toluene	92		94		70-130	2		30
Ethylbenzene	95		97		70-130	2		30
Chloromethane	93		96		52-130	3		30
Bromomethane	94		98		57-147	4		30
Vinyl chloride	82		84		67-130	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP

Project Number: 5635S-19

Lab Number: L1950289

Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,08 Batch: WG1302857-3 WG1302857-4								
Chloroethane	97		101		50-151	4		30
1,1-Dichloroethene	89		93		65-135	4		30
trans-1,2-Dichloroethene	88		92		70-130	4		30
Trichloroethene	90		92		70-130	2		30
1,2-Dichlorobenzene	91		93		70-130	2		30
1,3-Dichlorobenzene	93		96		70-130	3		30
1,4-Dichlorobenzene	92		94		70-130	2		30
Methyl tert butyl ether	94		96		66-130	2		30
p/m-Xylene	92		95		70-130	3		30
o-Xylene	92		94		70-130	2		30
cis-1,2-Dichloroethene	86		89		70-130	3		30
Styrene	97		99		70-130	2		30
Dichlorodifluoromethane	74		75		30-146	1		30
Acetone	111		108		54-140	3		30
Carbon disulfide	84		87		59-130	4		30
2-Butanone	113		112		70-130	1		30
4-Methyl-2-pentanone	114		114		70-130	0		30
2-Hexanone	117		118		70-130	1		30
Bromochloromethane	83		85		70-130	2		30
1,2-Dibromoethane	89		90		70-130	1		30
1,2-Dibromo-3-chloropropane	94		96		68-130	2		30
Isopropylbenzene	99		102		70-130	3		30
1,2,3-Trichlorobenzene	89		91		70-130	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19
Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 05,08 Batch: WG1302857-3 WG1302857-4								
1,2,4-Trichlorobenzene	93		94		70-130	1		30
Methyl Acetate	123		123		51-146	0		30
Cyclohexane	107		110		59-142	3		30
1,4-Dioxane	121		117		65-136	3		30
Freon-113	91		94		50-139	3		30
Methyl cyclohexane	94		97		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		98		70-130
Toluene-d8	96		97		70-130
4-Bromofluorobenzene	102		103		70-130
Dibromofluoromethane	84		86		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,10,12 Batch: WG1302919-3 WG1302919-4								
Methylene chloride	101		101		70-130	0		30
1,1-Dichloroethane	101		101		70-130	0		30
Chloroform	104		108		70-130	4		30
Carbon tetrachloride	113		112		70-130	1		30
1,2-Dichloropropane	100		100		70-130	0		30
Dibromochloromethane	103		104		70-130	1		30
1,1,2-Trichloroethane	98		99		70-130	1		30
Tetrachloroethene	106		104		70-130	2		30
Chlorobenzene	95		96		70-130	1		30
Trichlorofluoromethane	**190**	Q	**190**	Q	70-139	0		30
1,2-Dichloroethane	104		105		70-130	1		30
1,1,1-Trichloroethane	106		106		70-130	0		30
Bromodichloromethane	101		104		70-130	3		30
trans-1,3-Dichloropropene	96		97		70-130	1		30
cis-1,3-Dichloropropene	102		102		70-130	0		30
Bromoform	100		100		70-130	0		30
1,1,2,2-Tetrachloroethane	84		86		70-130	2		30
Benzene	99		98		70-130	1		30
Toluene	94		92		70-130	2		30
Ethylbenzene	97		97		70-130	0		30
Chloromethane	99		98		52-130	1		30
Bromomethane	**158**	Q	**155**	Q	57-147	2		30
Vinyl chloride	127		126		67-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19
Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,10,12 Batch: WG1302919-3 WG1302919-4								
Chloroethane	**158**	Q	**161**	Q	50-151	2		30
1,1-Dichloroethene	107		104		65-135	3		30
trans-1,2-Dichloroethene	105		105		70-130	0		30
Trichloroethene	104		103		70-130	1		30
1,2-Dichlorobenzene	99		99		70-130	0		30
1,3-Dichlorobenzene	100		100		70-130	0		30
1,4-Dichlorobenzene	99		98		70-130	1		30
Methyl tert butyl ether	102		105		66-130	3		30
p/m-Xylene	98		97		70-130	1		30
o-Xylene	96		96		70-130	0		30
cis-1,2-Dichloroethene	105		104		70-130	1		30
Styrene	98		98		70-130	0		30
Dichlorodifluoromethane	119		120		30-146	1		30
Acetone	102		105		54-140	3		30
Carbon disulfide	100		99		59-130	1		30
2-Butanone	103		108		70-130	5		30
4-Methyl-2-pentanone	81		85		70-130	5		30
2-Hexanone	78		81		70-130	4		30
Bromochloromethane	114		114		70-130	0		30
1,2-Dibromoethane	98		99		70-130	1		30
1,2-Dibromo-3-chloropropane	92		96		68-130	4		30
Isopropylbenzene	89		88		70-130	1		30
1,2,3-Trichlorobenzene	105		105		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19
Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,10,12 Batch: WG1302919-3 WG1302919-4								
1,2,4-Trichlorobenzene	106		106		70-130	0		30
Methyl Acetate	100		101		51-146	1		30
Cyclohexane	96		96		59-142	0		30
1,4-Dioxane	101		97		65-136	4		30
Freon-113	114		113		50-139	1		30
Methyl cyclohexane	103		102		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	96		98		70-130
Toluene-d8	88		88		70-130
4-Bromofluorobenzene	80		81		70-130
Dibromofluoromethane	104		104		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1302922-3 WG1302922-4								
Methylene chloride	91		91		70-130	0		30
1,1-Dichloroethane	90		89		70-130	1		30
Chloroform	85		84		70-130	1		30
Carbon tetrachloride	84		81		70-130	4		30
1,2-Dichloropropane	95		95		70-130	0		30
Dibromochloromethane	92		91		70-130	1		30
1,1,2-Trichloroethane	95		95		70-130	0		30
Tetrachloroethene	90		88		70-130	2		30
Chlorobenzene	91		90		70-130	1		30
Trichlorofluoromethane	80		78		70-139	3		30
1,2-Dichloroethane	80		81		70-130	1		30
1,1,1-Trichloroethane	84		83		70-130	1		30
Bromodichloromethane	88		87		70-130	1		30
trans-1,3-Dichloropropene	93		93		70-130	0		30
cis-1,3-Dichloropropene	94		91		70-130	3		30
Bromoform	94		95		70-130	1		30
1,1,2,2-Tetrachloroethane	97		99		70-130	2		30
Benzene	91		90		70-130	1		30
Toluene	93		92		70-130	1		30
Ethylbenzene	90		89		70-130	1		30
Chloromethane	66		66		52-130	0		30
Bromomethane	74		73		57-147	1		30
Vinyl chloride	80		78		67-130	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP **Lab Number:** L1950289

Project Number: 5635S-19 **Report Date:** 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1302922-3 WG1302922-4								
Chloroethane	74		73		50-151	1		30
1,1-Dichloroethene	89		88		65-135	1		30
trans-1,2-Dichloroethene	92		91		70-130	1		30
Trichloroethene	89		87		70-130	2		30
1,2-Dichlorobenzene	95		95		70-130	0		30
1,3-Dichlorobenzene	95		95		70-130	0		30
1,4-Dichlorobenzene	93		92		70-130	1		30
Methyl tert butyl ether	92		93		66-130	1		30
p/m-Xylene	92		90		70-130	2		30
o-Xylene	91		90		70-130	1		30
cis-1,2-Dichloroethene	93		92		70-130	1		30
Styrene	92		91		70-130	1		30
Dichlorodifluoromethane	53		52		30-146	2		30
Acetone	78		78		54-140	0		30
Carbon disulfide	87		84		59-130	4		30
2-Butanone	71		76		70-130	7		30
4-Methyl-2-pentanone	93		96		70-130	3		30
2-Hexanone	77		77		70-130	0		30
Bromochloromethane	95		93		70-130	2		30
1,2-Dibromoethane	96		96		70-130	0		30
1,2-Dibromo-3-chloropropane	91		94		68-130	3		30
Isopropylbenzene	95		94		70-130	1		30
1,2,3-Trichlorobenzene	94		94		70-130	0		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19
Lab Number: L1950289
Report Date: 10/31/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1302922-3 WG1302922-4								
1,2,4-Trichlorobenzene	96		96		70-130	0		30
Methyl Acetate	95		94		51-146	1		30
Cyclohexane	95		94		59-142	1		30
1,4-Dioxane	104		106		65-136	2		30
Freon-113	92		92		50-139	0		30
Methyl cyclohexane	98		98		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		88		70-130
Toluene-d8	103		103		70-130
4-Bromofluorobenzene	107		107		70-130
Dibromofluoromethane	101		100		70-130

INORGANICS
&
MISCELLANEOUS

Project Name: WEBER-KNAPP | **Lab Number:** L1950289
Project Number: 5635S-19 | **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-01	Date Collected:	10/24/19 10:45
Client ID:	1RM-12 (7.5)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.6		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-02 Date Collected: 10/24/19 11:10
Client ID: 1RM-13 (11.2) Date Received: 10/24/19
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.9		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-03
Client ID: 1RM-13 (11)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY

Date Collected: 10/24/19 11:15
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.8		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-04	Date Collected:	10/24/19 11:32
Client ID:	1RM-14 (2)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.5		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name: WEBER-KNAPP | **Lab Number:** L1950289
Project Number: 5635S-19 | **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-05
Client ID: 1RM-16 (7.5)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY
Date Collected: 10/24/19 12:10
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	74.4		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name: WEBER-KNAPP | **Lab Number:** L1950289
Project Number: 5635S-19 | **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-06
Client ID: 1RM-16 (9.5)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY
Date Collected: 10/24/19 12:12
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.5		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name:	WEBER-KNAPP	**Lab Number:**	L1950289
Project Number:	5635S-19	**Report Date:**	10/31/19

SAMPLE RESULTS

Lab ID:	L1950289-07	Date Collected:	10/24/19 13:13
Client ID:	1RM-17 (11.5)	Date Received:	10/24/19
Sample Location:	441 CHANDLER STREET, JAMESTOWN, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.2		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-08
Client ID: 1RM-19 (7.5)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY

Date Collected: 10/24/19 13:56
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	79.7		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-09
Client ID: 1RM-19 (11.5)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY

Date Collected: 10/24/19 13:59
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.9		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-10
Client ID: 1RM-20 (0.7)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY
Date Collected: 10/24/19 14:27
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.2		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-11
Client ID: 1RM-20 (6.5)
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY
Date Collected: 10/24/19 14:30
Date Received: 10/24/19
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	72.8		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Project Name: WEBER-KNAPP **Lab Number:** L1950289
Project Number: 5635S-19 **Report Date:** 10/31/19

SAMPLE RESULTS

Lab ID: L1950289-12 Date Collected: 10/24/19 14:32
Client ID: 1RM-20 (11) Date Received: 10/24/19
Sample Location: 441 CHANDLER STREET, JAMESTOWN, NY Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.7		%	0.100	NA	1	-	10/25/19 12:53	121,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: WEBER-KNAPP
Project Number: 5635S-19

Lab Number: L1950289
Report Date: 10/31/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-12 QC Batch ID: WG1300638-1 QC Sample: L1950404-01 Client ID: DUP Sample						
Solids, Total	85.1	85.7	%	1		20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1950289-01A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1950289-01B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-01C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-01D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-02A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1950289-02B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-02C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-02D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-03A	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-03B	Glass 250ml/8oz unpreserved	A	NA		4.6	Y	Absent		TCLP-EXT-ZHE(14)
L1950289-03S	Vial unpreserved Extracts	A	NA		4.6	Y	Absent		TCLP-VOA(14)
L1950289-03T	Vial unpreserved Extracts	A	NA		4.6	Y	Absent		TCLP-VOA(14)
L1950289-04A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1950289-04B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-04C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-04D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-05A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1950289-05B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-05C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-05D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-06A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1950289-06B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-06C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1950289-06D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-07A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1950289-07B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-07C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-07D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-08A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1950289-08B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-08C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-08D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-09A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1950289-09A1	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L1950289-09B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260-R2(14)
L1950289-09C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260-R2(14)
L1950289-09D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-10A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1950289-10B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-10C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-10D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-11A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1950289-11B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-11C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-11D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)
L1950289-12A	Vial MeOH preserved	A	NA		4.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1950289-12B	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-12C	Vial water preserved	A	NA		4.6	Y	Absent	25-OCT-19 09:37	NYTCL-8260HLW-R2(14)
L1950289-12D	Plastic 2oz unpreserved for TS	A	NA		4.6	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 2

Date Rec'd in Lab: 10/25/19

ALPHA Job #: L1950289

Project Information
Project Name: Weber Knapp
Project Location: 441 Chandler St, Jamestown, NY
Project #: 5635S-19
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Client Information
Client: Day Environmental, Inc.
Address: 1563 Lyell Ave, Rochester, NY 14606
Phone: 585-454-0210
Fax:
Email: rkampff@daymail.net

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility: ☐ NJ ☐ NY ☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration: ☐ Done ☐ Lab to do
Preservation: ☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOC's 8260	TCLP VOCs	Sample Specific Comments	Total Bottles
50289-01	IRM-12 (7.5)	10.24.19	10:45	Soil	RLK	X			
-02	IRM-13 (11.5)	10 24 19	11 10	Soil	RLK	X			
-03	IRm-13 (11)	102419	1115	Soil	RLK	~~X~~	X	not 8260 - Hmm	
-04	IRm-14 (2)	102419	11 32	Soil	RLK	X			
-05	IRM-16 (7.5)	10.24.19	1210	Soil	RLK	X			
-06	IRm-16 (9.5)	102419	1212	Soil	RLK	X			
-07	IRm-17 (11.5)	10 24 19	1313	Soil	RLK	X			
-08	IRM-19 (7.5)	1024 19	1356	Soil	RLK	X			
-09	IRm-19 (11.5)	102419	1359	Soil	RLK	X			
-10	IRm-20 (0-1)	1024 19	1427	Soil	RLK	X			
					Container Type	V	A		
					Preservative	F	A		

Preservative Code: A = None, B = HCl, C = HNO_3, D = H_2SO_4, E = NaOH, F = MeOH, G = $NaHSO_4$, H = $Na_2S_2O_3$, K/E = Zn Ac/NaOH, O = Other

Container Code: P = Plastic, A = Amber Glass, V = Vial, G = Glass, B = Bacteria Cup, C = Cube, O = Other, E = Encore, D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Heather McLennan	10.24.19 /1510	Jim Al AAL	10/24/19 1510
Jim Al AAL	10/24/19 17:05	[illegible signature]	10/25/19 01:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

NEW YORK CHAIN OF CUSTODY

ALPHA

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 2 of 2

Date Rec'd in Lab: 10/25/19

ALPHA Job #: L1950289

Project Information

Project Name: Weber Knapp
Project Location: 441 Chandler St, Jamestown, NY
Project #: 56355-19
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Client Information

Client: Day Environmental, Inc
Address: 1563 Lyell Ave
Rochester, NY 14606
Phone: 585-454-0210
Fax:
Email: rkampff@dayenvironmental.net

Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☒ EQuIS (4 File)
☐ Other

Billing Information

☒ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: TCL VOCs 8260							Sample Specific Comments	Total Bottles
50289-11	1RM-20 (6.5)	10.24.19	1430	Soil	RLK	X								
-12	1RM-20 (11)	10.24.19	1432	Soil	RLK	X								

HMM

Container Type	V	
Preservative	F	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Heather McLennan	10-24-19 / 1510	HMAL AAL	10/24/19 15:10
HMAL AAL	10/24/19 17:05	[illegible]	10/25/19 01:45

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

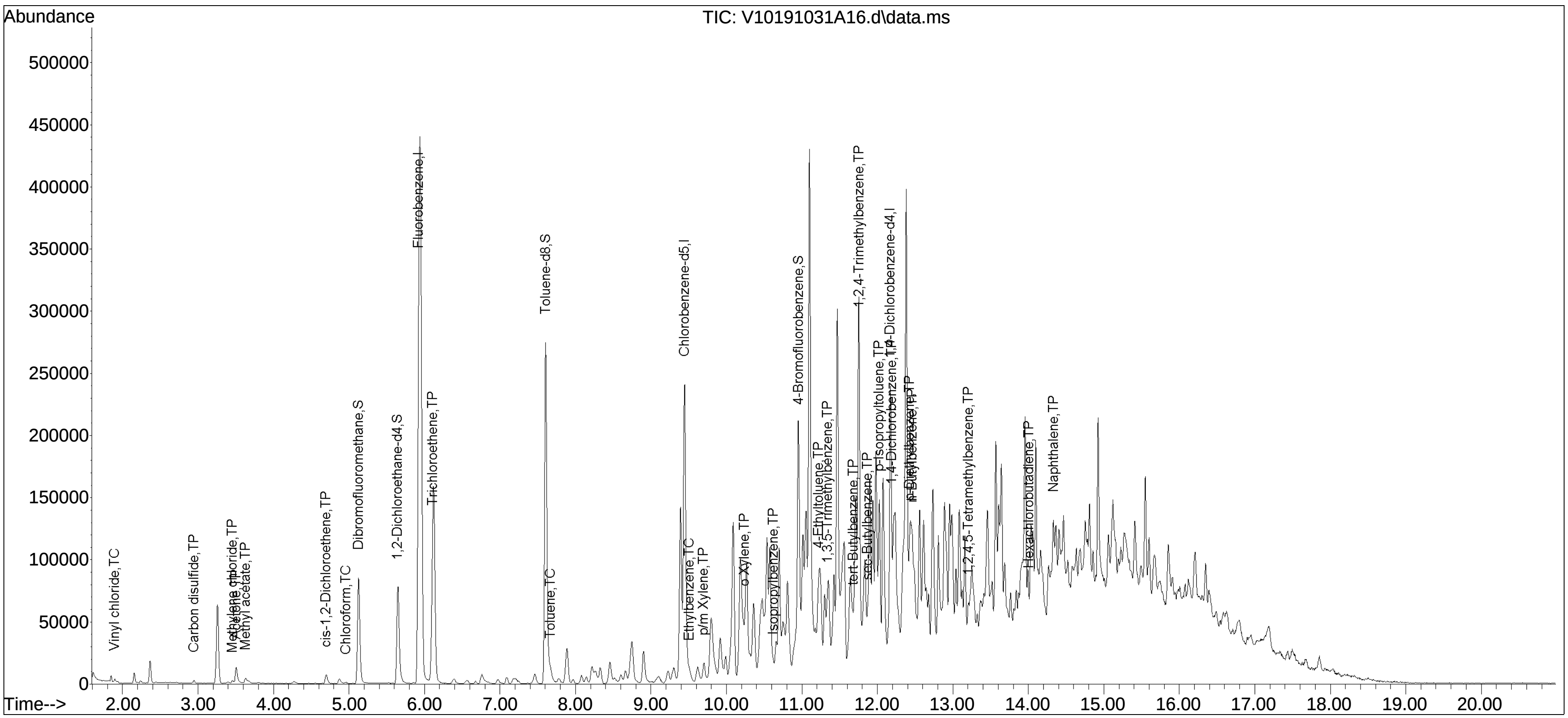
Form No: 01-25 HC (rev. 30-Sept-2013)

Quantitation Report (QT Reviewed)

Data Path : I:\VOLATILES\VOA110\2019\191031A\
Data File : V10191031A16.d
Acq On : 31 Oct 2019 1:23 pm
Operator : VOA110:NLK
Sample : l1950289-01,31,6.43,5,,b
Misc : WG1302922,ICAL16143
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 31 14:41:15 2019
Quant Method : I:\VOLATILES\VOA110\2019\191031A\V110_190918A_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Thu Sep 19 09:07:10 2019
Response via : Initial Calibration

Sub List : 8260-CurveSoil - Megamix plus Diox1A\V10191031A02.d•



V110_190918A_8260.m Thu Oct 31 14:42:05 2019 Page: 4

APPENDIX E

Contained-In Demonstration Letter and NYSDEC Response

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

November 19, 2019

Mr. Henry Wilkie
Assistant Engineer
NYSDEC Division of Materials Management
625 Broadway
Albany, NY 12233

RE: NYSDEC Site C907048
441 Chandler Street
Jamestown, New York 14701

Dear Mr. Wilkie:

Day Environmental, Inc. (DAY) prepared this letter on the behalf of Weber-Knapp Company pursuant to obtaining approval of a "contained in" demonstration from the New York State Department of Environmental Conservation (NYSDEC) for disposal of waste generated at 441 Chandler Street, Jamestown, New York (Site). The purpose of this letter is to notify NYSDEC of origins of the generated waste, the current waste characterization analytical laboratory data associated with the waste material, and the proposed disposal of the waste material. Refer to Figure 1 for a project locus map.

Background and Origins of Waste Material

Weber-Knapp Co has occupied the Site and currently conducts manufacturing operations (i.e., sheet metal cutting/stamping, welding, metal turning, and powder coat finishing), warehousing, and office operations in the building. 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.

An Environmental Evaluation was conducted at the Site in 2018, which included the sampling and testing of various media. Based on the results of the Environmental Evaluation, TCE and associated degradation products appear to be the main contaminants of concern at the Site.

The Site has entered into the Brownfield Cleanup Program (BCP) at the investigative stage (BCP Site No. C907048). The NYSDEC has reviewed, and provided comments on the Draft Remedial Investigation/Remedial Alternatives Analysis Work Plan, and Draft Interim Remedial Measures (IRM) Work Plan submitted for the Site. To date, remedial measures have not been conducted at the property.

The proposed IRM consists of excavation, removal and disposal of TCE impacted soil that is located below the facility's concrete floor slab, in the vicinity of the former vapor degreaser. Between September and October 2019, supplemental studies were completed to further delineate the areal and vertical extent of the soil removal area. This work included the advancement of twenty direct-push test borings (i.e., designated IRM-01 through IRM-20) in the locations depicted on Figure 2. With the exception of test borings IRM-12, IRM-14, IRM-15 and IRM-18, which were advanced to approximately 8 ft. below the top of the concrete floor, the remaining test borings were advanced to equipment refusal [i.e., between about 10.2 ft. (i.e., IRM-01) and 18.5 ft. (i.e., IRM-06) below the top of the concrete floor]. Samples collected during the advancement of the test borings were observed for field evidence of potential contamination (e.g., staining, unusual odors, etc.) and screened with a photoionization detector (PID). Logs describing the subsurface conditions encountered during the advancement of the test borings were prepared, and are available upon request.

A total of 26 soil samples were collected from the test borings and submitted to Alpha Analytical in Buffalo, New York (Alpha) for testing of NYSEC Target List (TCL) Volatile Organic Compound (VOCs). Seventeen of these samples were also tested for VOCs following extraction by the Toxicity Characteristic Leaching Procedure (TCLP). In addition, one soil sample that exhibited field evidence of potential contamination [i.e., IRM-09 (10-12')] was submitted for testing of the following parameters:

- Polychlorinated biphenyls (PCBs);
- TCL List Semi-Volatile Organic Compound (SVOCs);
- Target Analyte List (TAL) Metals;
- Cyanide; and
- Per and Polyfluoroalkyl Substances (PFAS).

Alpha is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory (ELAP ID #11148).

Copies of the reports provided by Alpha are included in Attachment A.

Analytical Laboratory Results

As shown in the Alpha laboratory report L1944926 (refer to Attachment A) the concentrations of PCBs, SVOCs, TAL Metals, cyanide and PFAS were not detected at concentrations greater than the laboratory detection limits.

Table 1 provides a comparison of the results of the TCL VOCs testing completed by Alpha to the "Contained-In" Action Levels as referenced in NYSDEC Technical and Administrative Guidance Memorandum 3028, Contained-In Criteria, dated November 1992 (TAGM 3028) and a comparison of the TCLP VOCs testing to the Maximum Concentration of Contaminants for the Toxicity Characteristic (MCCTC) as referenced in Table 1 of 40 CFR § 261.24.

[Note: The results of VOC testing for soil samples collected from the vicinity of the proposed IRM removal area during previous studies (i.e., designated MW-A, TB-01, TB-02, TB-05 and TB-22) are also presented on Table 1 and depicted on Figure 2. The work completed and the analytical laboratory reports prepared as part of these studies are summarized in the report titled, *Environmental Evaluation, 415 and 441 Chandler Street, Jamestown, New York, NYSDEC Spill File No. 1808886,* dated February 8, 2019, prepared by DAY. A copy of the report was included with the BCP application, and is available upon request.]

As shown on Table 1, concentrations of TCE and/or vinyl chloride exceeding their respective “Contained-In” Action Levels, were detected in twelve soil samples collected from the proposed IRM removal area. With the exception of the soil samples IRM-16 (9.5’) and IRM-06 (10-10.5’), each of the soil samples containing concentrations of TCE and/or vinyl chloride exceeding their respective “Contained-In” Action Levels were collected from depths between about 11 ft. and 13 ft. below the top of the concrete floor. Further, with the exception of the soil samples IRM-16 (9.5’) and, IRM-17 (11.5’) MW-A (11’) each of the soil samples containing concentrations of TCE and/or vinyl chloride exceeding their respective “Contained-In” Action Levels were collected from a soil unit described as gray, silty sand to sandy silt, little clay, little gravel (i.e., gray glacial till). [Note: the soil samples IRM-16 (9.5’), IRM-17 (11.5’) and MW-A (11’) were collected from the bottom of the soil unit that is located directly above the gray glacial till (if present) at each location.]

As shown on Table 1, seventeen soil samples were tested for TCLP VOCs. Three soil samples that were tested for TCLP VOCs [i.e., IRM-03 (12-12.5'), IRM-06 (10-10.5'), and IRM-13 (11’)] contained concentrations of TCE that exceed the Maximum Concentration of Contaminants for the Toxicity Characteristic (MCCTC) for TCE of 0.5 mg/kg. These soil samples also contained concentrations of TCE exceeding their respective “Contained-In” Action Levels (or in the case of IRM-13 (11’), the soil sample IRM-13 (11.2’) contained a concentration of TCE exceeding its respective “Contained-In” Action Level). The remaining fourteen soil samples that were tested for TCLP VOCs did not contain concentrations of VOCs exceeding their respective MCCTC.

Proposed Disposal of Wastes

DAY proposes to excavate, containerize and dispose of approximately 100 cubic yards of soil from the proposed IRM removal area at the Site, in the approximate location depicted on Figure 2. The proposed excavation will commence directly below the concrete floor (following its removal) and extend to a depth of approximately 13 ft. below the top of the concrete floor. The concrete and material excavated from below the concrete to depths up to approximately 11 ft. (9 ft. in the vicinity of IRM-16) will be placed in roll-off containers, sampled for the disposal parameters required by the disposal facility, and subsequently disposed of as non-hazardous waste. Material excavated from depths starting at approximately 11 ft. (9 ft. in the vicinity of IRM-16) and/or at the top of the gray glacial till unit (if encountered at a depth above 11 ft.), and extending to the bottom of the excavation, will be placed in roll-off containers and disposed of off-site as Hazardous Waste (i.e., Waste Code F001). [Note: a DAY representative will observe and screen excavated materials using a photoionization detector (PID). Material excavated from depths up to approximately 11 ft. (9 ft. in the vicinity of IRM-16) that contains evidence of free product and/or PID readings above 500 ppm will be placed in the roll-off container designated for Hazardous Waste.]

Upon NYSDEC approval of the “contained in” demonstration, DAY will coordinate with the disposal facility for the disposal of the roll-off containers as non-hazardous/hazardous waste manifest generation, container transport and disposal.

If there are questions, please do not hesitate to call.

Very truly yours,
Day Environmental, Inc.

Charles Hampton
Project Manager

Raymond L. Kampff
Principal

<u>Figures</u>
Figure 1 – Project Locus Map
Figure 2 – Proposed IRM Soil Removal Area

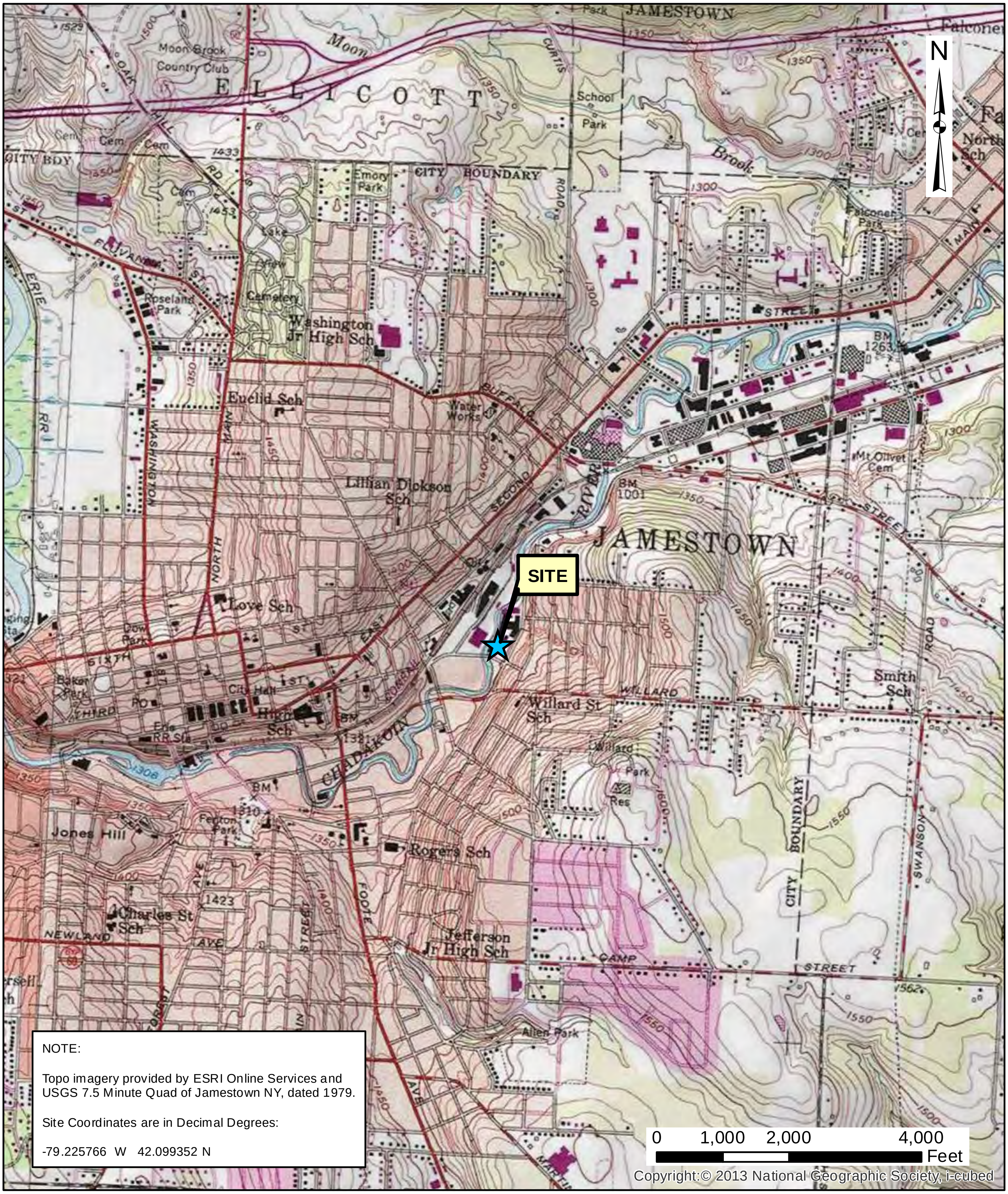
<u>Tables</u>
Table 1 – Volatile Organic Compounds (VOCs) in mg/kg or parts per million

<u>Attachments</u>
Attachment A – Analytical Laboratory Data Packages

CC:
Damianos Skaros, NYSDEC Region 8
Mr. Donald Pangborn, Weber-Knapp Co.

CAH1322/5635S-19

Figures



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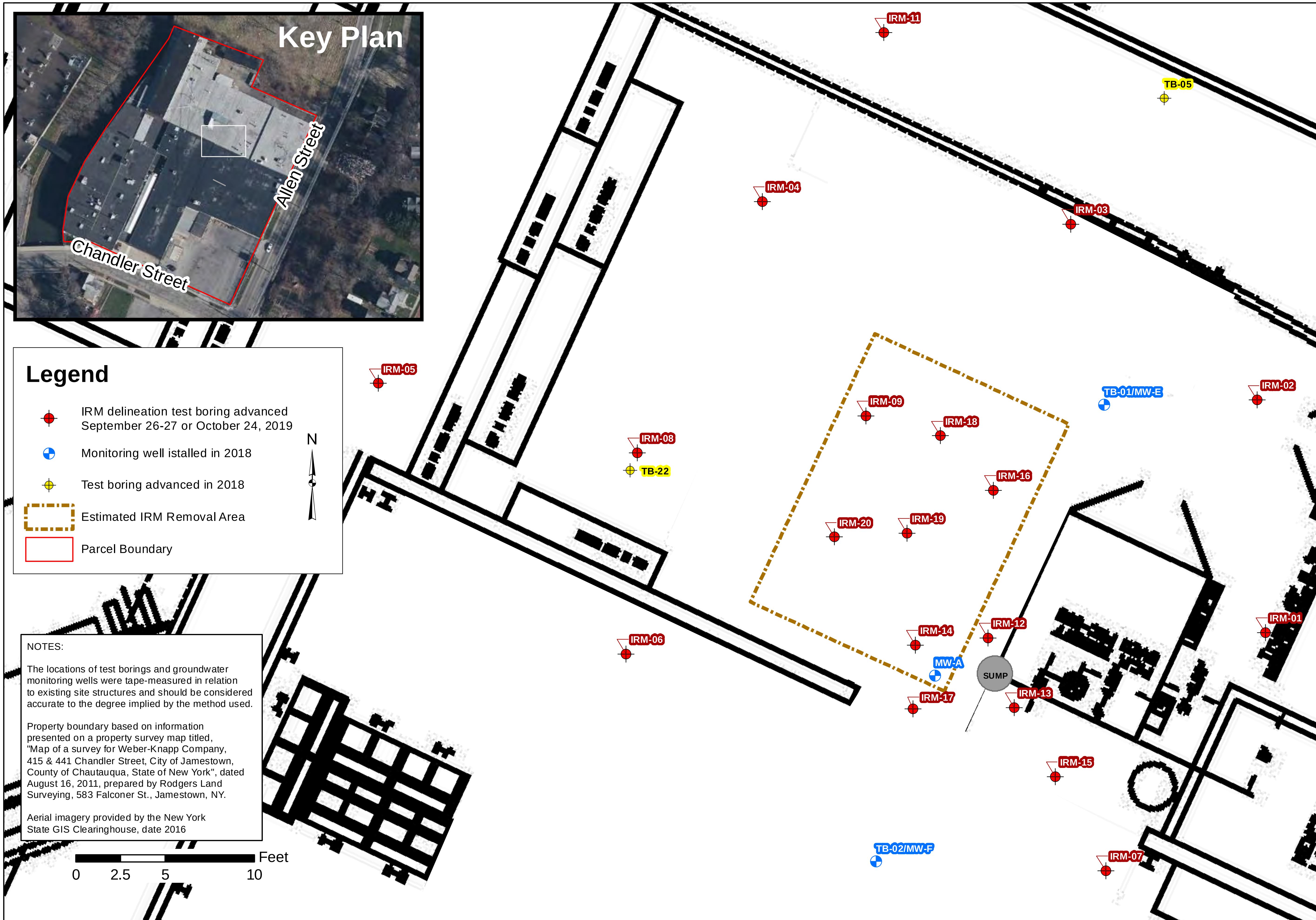
Last Date Saved: 08 Nov 2019

Date 11-08-2019 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 NYSDEC SITE ID C907048 Drawing Title Project Locus Map	Project No. 5529S-19 FIGURE 1



Legend

- IRM delineation test boring advanced September 26-27 or October 24, 2019
- Monitoring well istalled in 2018
- Test boring advanced in 2018
- Estimated IRM Removal Area
- Parcel Boundary

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

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DATE	11-2019
PROJECT MANAGER	CAH
DATE DRAWN	11-2019
DRAWN BY	CAH/CPS
DATE ISSUED	11-06-2019
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

INTERIM REMEDIAL MEASURES WORK PLAN

Drawing Title
Proposed IRM Soil Removal Area

Project No.
5635S-19

FIGURE 2

Tables

TABLE 1
441 CHANDLER STREET
JAMESTOWN, NEW YORK
NYSDEC BCP SITE C907048

SUMMARY OF DETECTED VOLATILE ORGANIC COMPOUNDS (VOC) - SOIL SAMPLES

Compound	Contained-In Action Level(1)	Sample Designation and Date															
		IRM-01 (8.5-9')	IRM-02 (9.5-10')	IRM-03 (8-8.5')	IRM-03 (12-12.5')	IRM-04 (12-12.5')	IRM-05 (12-12.5')	IRM-06 (8-8.5')	IRM-06 (10-10.5')	IRM-06 (14-15')	IRM-07 (8-8.5')	IRM-07 (9-9.5')	IRM-08 (8-8.5')	IRM-08 (10-10.5')	IRM-08 (14.2-14.5')	IRM-09 (10-12')	IRM-11 (11-11.5')
		9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/26/2019	9/27/2019	9/27/2019
1,1-Dichloroethene	1.10	ND (0.046)	ND (0.0016)	ND (0.005)	ND (11)	ND (0.00091)	ND (0.062)	ND (0.098)	ND (0.47)	ND (0.058)	ND (0.120)	ND (0.082)	ND (0.00095)	ND (0.054)	ND (0.00098)	ND (0.065)	ND (0.00092)
trans-1,2-Dichloroethene	1,600	ND (0.069)	ND (0.0024)	ND (0.130)	ND (16)	ND (0.0014)	ND (0.093)	ND (0.15)	ND (0.71)	ND (0.087)	ND (0.190)	ND (0.12)	ND (0.0014)	ND (0.080)	ND (0.0015)	ND (0.098)	ND (0.0014)
cis-1,2-Dichloroethene	780	ND (0.046)	0.014	ND (0.085)	9.0 J	0.00074 J	1.7	0.098	5.70	0.650	0.130	2.60	0.0015	1.30	0.038	2.0	0.00056 J
1,2-Dichlorobenzene	7,800	ND (0.092)	ND (0.0032)	ND (0.170)	ND (22)	ND (0.0018)	ND (0.120)	ND (0.20)	ND (0.94)	ND (0.120)	ND (0.25)	ND (0.16)	0.00026 J	ND (0.110)	ND (0.002)	ND (0.130)	ND (0.0018)
1,2,4-Trichlorobenzene	780	ND (0.092)	ND (0.0032)	ND (0.170)	ND (22)	ND (0.0018)	ND (0.120)	ND (0.20)	ND (0.94)	ND (0.120)	ND (0.25)	ND (0.16)	0.00029 J	ND (0.110)	ND (0.002)	ND (0.130)	ND (0.0018)
1,4-Dichlorobenzene	27	ND (0.092)	ND (0.0032)	ND (0.170)	ND (22)	ND (0.0018)	ND (0.120)	ND (0.20)	ND (0.94)	ND (0.120)	ND (0.25)	ND (0.16)	0.00033 J	ND (0.110)	ND (0.002)	ND (0.130)	ND (0.0018)
2-Butanone	NA	ND (0.46)	ND (0.016)	ND (0.85)	ND (110)	ND (0.0091)	ND (0.62)	ND (0.98)	ND (4.7)	ND (0.58)	ND (1.20)	ND (0.82)	0.0076 J	ND (0.54)	ND (0.0098)	ND (0.650)	ND (0.0092)
Acetone	7,800	ND (0.46)	0.041	0.45 J	ND (110)	ND (0.0091)	ND (0.62)	0.58 J	ND (4.7)	ND (0.58)	0.71 J	0.520 J	0.031	ND (0.54)	0.0074 J	ND (0.650)	ND (0.0092)
Benzene	22	ND (0.023)	ND (0.00079)	ND (0.043)	ND (5.4)	ND (0.00045)	ND (0.031)	ND (0.049)	ND (0.24)	ND (0.029)	ND (0.063)	ND (0.041)	0.0004 J	ND (0.027)	ND (0.00049)	ND (0.033)	ND (0.00046)
Bromomethane	110	ND (0.092)	ND (0.0032)	ND (0.17)	ND (22)	ND (0.0018)	ND (0.12)	ND (0.25)	ND (0.94)	ND (0.12)	ND (0.25)	ND (0.16)	ND (0.0019)	ND (0.11)	ND (0.002)	ND (0.13)	ND (0.0018)
Chlorobenzene	1,600	ND (0.023)	ND (0.00079)	ND (0.043)	ND (5.4)	ND (0.00045)	ND (0.031)	ND (0.049)	ND (0.24)	ND (0.029)	ND (0.063)	ND (0.041)	0.00049	ND (0.027)	ND (0.0015)	ND (0.033)	ND (0.00046)
Chloroform	100	0.012 J	0.0003 J	0.021 J	ND (16)	0.00019 J	ND (0.093)	0.025 J	0.120 J	0.014 J	0.029 J	0.019 J	0.00018 J	ND (0.080)	ND (0.0098)	ND (0.098)	0.00018 J
Cyclohexane	NA	ND (0.46)	ND (0.016)	ND (0.85)	ND (110)	ND (0.0091)	ND (0.62)	ND (0.98)	ND (4.7)	ND (0.58)	ND (1.20)	ND (0.82)	0.0037 J	ND (0.54)	ND (0.0098)	ND (0.098)	ND (0.0092)
Ethylbenzene	7,800	ND (0.046)	ND (0.0016)	ND (0.085)	1.5 J	ND (0.00091)	ND (0.062)	ND (0.098)	ND (0.47)	ND (0.058)	0.024 J	ND (0.082)	0.00078 J	ND (0.054)	ND (0.00098)	ND (0.065)	ND (0.00092)
Isopropylbenzene	3,100	ND (0.046)	ND (0.0016)	ND (0.085)	ND (11)	ND (0.0091)	ND (0.062)	ND (0.098)	ND (0.47)	ND (0.058)	ND (0.120)	ND (0.082)	0.004	ND (0.054)	ND (0.00098)	ND (0.065)	ND (0.00092)
Methyl Acetate	NA	ND (0.180)	ND (0.0063)	0.37	ND (43)	ND (0.0036)	ND (0.25)	0.76	ND (1.9)	ND (0.23)	ND (0.50)	ND (0.33)	0.0011 J	ND (0.210)	ND (0.0039)	ND (0.260)	ND (0.0037)
Methyl cyclohexane	NA	ND (0.180)	ND (0.0063)	ND (0.34)	ND (43)	ND (0.0036)	ND (0.25)	ND (0.39)	ND (1.9)	ND (0.23)	0.25 J	0.062 J	0.0071	ND (0.210)	ND (0.0039)	0.096 J	ND (0.0037)
Tetrachloroethene	12	ND (0.023)	ND (0.00079)	ND (0.043)	ND (5.4)	ND (0.00045)	ND (0.031)	ND (0.049)	ND (0.24)	ND (0.029)	ND (0.063)	0.020 J	ND (0.00047)	ND (0.027)	ND (0.00049)	ND (0.033)	ND (0.00046)
Toluene	16,000	ND (0.046)	ND (0.0016)	ND (0.085)	ND (11)	ND (0.00091)	ND (0.062)	ND (0.098)	ND (0.47)	ND (0.058)	0.081 J	ND (0.082)	0.0015	ND (0.054)	ND (0.00098)	ND (0.065)	ND (0.00092)
Trichloroethene	58	0.14	0.0032	3.1	1,700	0.004	1.0	0.10	81.0	0.170	16.00	8.60	0.0068	0.17	0.032	14.00	0.00094
Vinyl chloride	0.34	ND (0.010)	0.0019	ND (0.085)	ND (11)	ND (0.00091)	0.036 J	0.037 J	ND (0.47)	0.050 J	ND (0.120)	0.041 J	0.0016	0.21	0.036	ND (0.065)	0.00037 J
Xylenes (mixed)	160,000	ND (0.092)	ND (0.0032)	ND (0.170)	ND (22)	ND (0.0018)	ND (0.120)	ND (0.20)	ND (0.94)	ND (0.120)	0.155 J	ND (0.16)	0.0045	ND (0.110)	ND (0.002)	ND (0.130)	ND (0.0018)
	MCCTC(2)																
(TCLP) Trichloroethene	0.5	ND (0.005)	ND (0.005)	0.086	5.60	ND (0.005)	0.038	0.0024 J	1.00	0.005	0.024	0.11	0.004 J	0.50	0.0028 J	0.120	ND (0.005)
(TCLP) Vinyl chloride	0.2	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	0.005 J	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	ND (0.010)	0.0012 J	ND (0.010)	ND (0.010)	ND (0.010)
(TCLP) Tetrachloroethene	0.7	ND (0.005)	ND (0.005)	ND (0.005)	0.0024 J	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)	ND (0.005)

Compound	Contained-In Action Level(1)	Sample Designation and Date											
		IRM-12 (7.5')	IRM-13 (11')	IRM-13 (11.2')	IRM-14 (2')	IRM-16 (7.5')	IRM-16 (9.5')	IRM-17 (11.5')	IRM-19 (7.5')	IRM-19 (11.5')	IRM-20 (0.7')	IRM-20 (6.5')	IRM-20 (11')
		10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019	10/24/2019
1,1-Dichloroethene	1.10	ND (0.00023)	NT	ND (0.38)	ND (0.015)	ND (0.00027)	ND (16)	ND (1.9)	ND (0.00024)	ND (1.3)	ND (0.026)	ND (0.018)	0.037 J
trans-1,2-Dichloroethene	1,600	ND (0.00013)	NT	ND (0.22)	ND (0.0088)	ND (0.00015)	ND (9.0)	ND (1.1)	ND (0.00014)	ND (0.77)	ND (0.015)	ND (0.01)	0.029 J
cis-1,2-Dichloroethene	780	0.001	NT	4.90	0.23	0.0014	44.0 J	28.0	0.00036 J	ND (0.98)	0.140	0.019 J	15.0
1,2-Dichlorobenzene	7,800	ND (0.00014)	NT	ND (0.23)	ND (0.0093)	ND (0.00016)	ND (9.5)	ND (1.2)	ND (0.00014)	ND (0.81)	ND (0.015)	ND (0.011)	ND (0.012)
1,2,4-Trichlorobenzene	780	ND (0.00026)	NT	ND (0.43)	ND (0.018)	ND (0.00031)	ND (18)	ND (2.2)	ND (0.00027)	ND (1.5)	ND (0.029)	ND (0.02)	ND (0.023)
1,4-Dichlorobenzene	27	0.00019 J	NT	ND (0.27)	ND (0.011)	ND (0.00019)	ND (11)	ND (1.4)	ND (0.00017)	ND (0.96)	ND (0.018)	ND (0.013)	ND (0.015)
2-Butanone	NA	ND (0.0021)	NT	ND (3.5)	ND (0.14)	0.024	ND (150)	ND (18)	0.0072 J	ND (12)	ND (0.24)	ND (0.16)	ND (0.19)
Acetone	7,800	0.021	NT	ND (7.6)	ND (0.31)	ND (0.0054)	ND (320)	ND (39)	0.046	ND (27)	ND (0.52)	ND (0.36)	ND (0.41)
Benzene	22	ND (0.00016)	NT	ND (0.26)	ND (0.011)	ND (0.00019)	ND (11)	ND (1.3)	ND (0.00016)	ND (0.93)	ND (0.018)	ND (0.012)	ND (0.014)
Bromomethane	110	ND (0.00056)	NT	ND (0.92)	0.088 J	ND (0.00066)	ND (38)	ND (4.7)	ND (0.00058)	ND (3.2)	0.082 J	0.096 J	ND (0.05)
Chlorobenzene	1,600	ND (0.00012)	NT	ND (0.20)	ND (0.0082)	ND (0.00014)	ND (8.4)	ND (1.0)	ND (0.00012)	ND (0.71)	ND (0.014)	ND (0.0094)	ND (0.011)
Chloroform	100	ND (0.00014)	NT	0.22	0.011 J	0.00026 J	11.0 J	1.2 J	0.00021 J	ND (0.78)	0.016 J	0.011 J	0.014 J
Cyclohexane	NA	ND (0.00052)	NT	ND (0.86)	ND (0.035)	ND (0.00061)	ND (36)	ND (4.4)	ND (0.00054)	ND (3.0)	ND (0.058)	ND (0.045)	ND (0.046)
Ethylbenzene	7,800	0.00043 J	NT	ND (0.22)	ND (0.091)	ND (0.00016)	ND (9.3)	ND (1.1)	ND (0.00014)	ND (0.79)	ND (0.015)	ND (0.01)	ND (0.012)
Isopropylbenzene	3,100	0.00055 J	NT	ND (0.17)	ND (0.007)	ND (0.00012)	ND (7.2)	ND (0.88)	ND (0.00011)	ND (0.61)	ND (0.012)	ND (0.0081)	ND (0.0093)
Methyl Acetate	NA	0.004	NT	ND (1.5)	ND (0.061)	0.0076	ND (63)	ND (7.7)	0.0078	ND (5.3)	ND (0.10)	ND (0.07)	ND (0.081)
Methyl cyclohexane	NA	ND (0.00058)	NT	2.70 J	ND (0.039)	ND (0.00068)	ND (40)	ND (4.9)	ND (0.0006)	ND (3.4)	0.16 J	ND (0.04)	0.15 J
Tetrachloroethene	12	ND (0.00019)	NT	ND (0.31)	ND (0.013)	ND (0.00022)	ND (13)	ND (1.6)	ND (0.00019)	ND (1.1)	ND (0.021)	ND (0.014)	ND (0.017)
Toluene	16,000	0.00083 J	NT	ND (0.86)	ND (0.035)	0.00069 J	ND (36)	ND (4.4)	0.0011	ND (3.0)	ND (0.058)	ND (0.04)	ND (0.046)
Trichloroethene (TCE)	58	0.007	NT	330	11.0	0.07	12,000	1,100	0.016	1,000	15.0	4.0	18.0
Vinyl chloride	0.34	0.00047 J	NT	ND (0.53)	ND (0.022)	0.001 J	ND (22)	ND (2.7)	0.00036 J	ND (1.9)	ND (0.036)	ND (0.025)	0.47
Xylenes (mixed)	160,000	0.00175 J	NT	ND (0.89)	ND (0.036)	ND (0.00063)	ND (37)	ND (4.5)	ND (0.00056)	ND (3.4)	ND (0.06)	ND (0.042)	ND (0.048)
	MCCTC(2)												
(TCLP) Trichloroethene	0.5	NT	98 (D)	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
(TCLP) Vinyl chloride	0.2	NT	0.0098	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
(TCLP) Tetrachloroethene	0.7	NT	0.015	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

Compound	Contained-In Action Level(1)	Sample Designation and Date								
		MW-A (4')	MW-A (8')	MW-A (11')	MW-A (13')	TB-01 (11')	TB-01 (12.5')	TB-02 (11.5')	TB-05 (12.5')	TB-22 (13')
		11/8/2018	11/8/2018	11/8/2018	11/8/2018	12/19/2018	12/19/2018	12/19/2018	12/19/2018	12/20/2018
1,1-Dichloroethene	1.10	ND (0.0048)	ND (0.0562)	0.121 J	ND (0.205)	ND (46)	ND (0.160)	0.11 J	ND (0.20)	0.0019 J
trans-1,2-Dichloroethene	1,600	ND (0.0048)	ND (0.0562)	ND (0.185)	ND (0.205)	ND (46)	ND (0.160)	0.049 J	0.022 J	0.0013 J
cis-1,2-Dichloroethene	780	0.0074	ND (0.0562)	12	12.6	34.0 J	0.26 J	17	2.9	2.9
Tetrachloroethene	12	ND (0.0048)	ND (0.0562)	ND (0.185)	ND (0.205)	ND (46)	ND (0.160)	ND (0.240)	0.067 J	ND (0.0024)
Trichloroethene	58	24.5	0.0382 J	32.4	198	4,400	10	81	100	1.4
Vinyl chloride	0.34	ND (0.0048)	ND (0.0562)	0.48	0.193 J	ND (46)	ND (0.160)	1.5	0.021 J	0.025 J
n-Butylbenzene	12	NT	NT	NT	NT	NT	NT	NT	NT	NT
sec-Butylbenzene	11	NT	NT	NT	NT	NT	NT	NT	NT	NT

NOTES

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

(1) = "Contained-In" Action Level as referenced in Technical and Administrative Guidance Memorandum (TAGM) 3028, Contained-In Criteria, dated Noveml

(2) = Maximum Concentration of Contaminants for the Toxicity Characteristic as reference in Table 1 of 40 CFR § 261.24.

NT = Not Tested

NA = Not Available

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

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

D = concentration following dilution

Highlighted value exceeds the "Contained-In" Action Level

Highlighted value exceeds the MCCTC

Attachment A

Analytical Laboratory Data Packages

(Included in Appendix D of the IRM Work Plan)

APPENDIX F

Quality Assurance Project Plan

QUALITY ASSURANCE PROJECT PLAN

441 CHANDLER STREET
ROCHESTER, NEW YORK

NYSDEC SITE NUMBER: C907048

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.

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).

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.

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:

<u>Owner/Data Validator – Vali-Data of WNY, LLC, West Falls, NY (February 2008 to present)</u>

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.

<u>Analytical Chemist – Elf Atochem North America, Inc., King of Prussia, PA (1992 to 1994).</u>

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.

<u>GC Analyst/Laboratory Technician – Centre Analytical Laboratories, Start College, PA (1991 to 1992)</u>

Analytical chemist performing analyses of environmental samples.

HONORS:

<u>Honors in Chemistry</u>

Bioinorganic chemistry research conducted from June 1988 – June 1990. Requirements included: one year of research, written and oral examinations and a written thesis.

APPENDIX G

Health and Safety Plan

HEALTH AND SAFETY PLAN and Community Air Monitoring Plan

441 CHANDLER STREET
JAMESTOWN, NEW YORK

NYSDEC SITE NO.: C907048

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

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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 μg/m^3 over an integrated period not to exceed 15 minutes.	Continue working
	> 100 μg/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 μg/m^3, then upgrade PPE to Level C

μg/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 μg/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.]

<u>Continuous monitoring</u> 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.

<u>Periodic monitoring</u> 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 $\mu g/m^3$ 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 $\mu g/m^3$ 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 $\mu g/m^3$ 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

- Head southeast on Chandler St toward Allen St

  190 ft

- Turn right onto Allen St

  0.5 mi

- Turn left onto Maple St

  0.1 mi

- Turn right onto Garfield St

  459 ft

- Garfield St turns left and becomes Sherman St

  171 ft

- Turn right onto Prather Ave

  49 ft

- Turn right

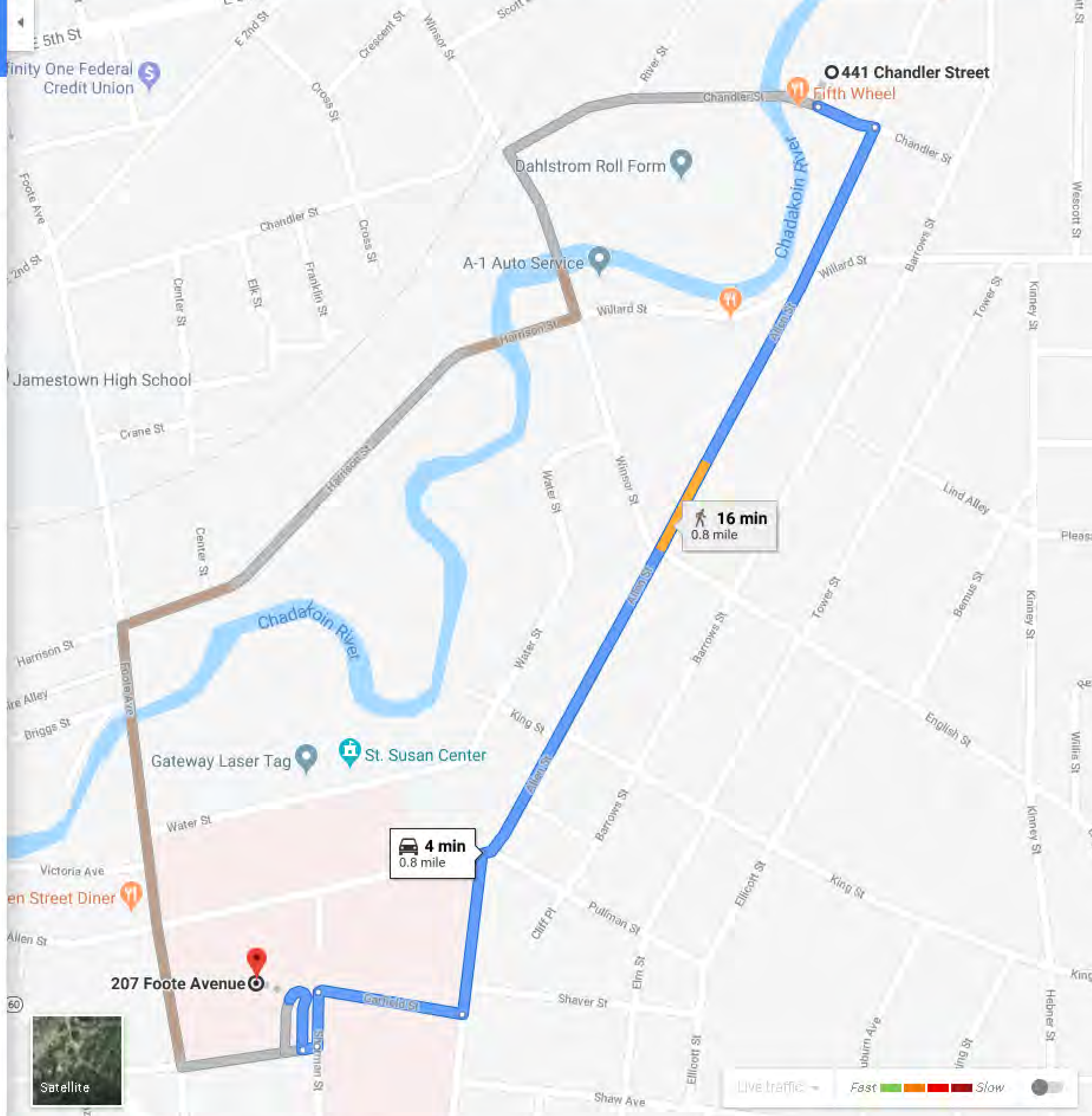
  Destination will be on the right

  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 H

Project Schedule

Proposed IRM Project Schedule
441 Chandler Street
Jamestown, New York
NYSDEC Site No. C907048

TASK	A	M	J	J	A	S	O	N	D	J	F	M	A	M
	2019									2020				
Interim Remedial Actions (IRM)														
-Submittal of IRM Work Plan, HASP and CAMP (in conjunction with BCP Application and RI Work Plan)														
-NYSDEC approval of IRM Work Plan														
Implement IRM Work Plan														
-Delineation Studies, Structural Evaluation and Site Preparation														
-Contractor Selection and Coordination														
-Source Area Removal and Excavation Backfill														
-Waste Characterization, Transportation and Disposal														
-Installation and Development of Additional Monitoring Wells (as necessary)														
Reporting														
-Submittal of IRM Construction Completion Report														