Phase II Environmental Site Assessment

Location:

1-5, 2, 7-9, 8-8.5 Laura Street and
1200, 1214-1216, 1222, 1228-1230, 1240, 1244-1246, 1252
East Main Street,
Rochester, New York 14609

Prepared for:

City of Rochester
Division of Environmental Quality
30 Church Street, Room 300-B
Rochester, New York 14614

LaBella Project No. 2182815

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1.0 INTRODUCTION

LaBella Associates, D.P.C. ("LaBella") was retained by the City of Rochester (City) to conduct a Phase II Environmental Site Assessment (ESA) at various properties located on East Main Street and Laura Street in the City of Rochester, Monroe County, New York, hereinafter referred to as the "Site" (see Figure 1).

Surface and sub-surface ESA investigation activities were conducted within the parcel boundaries of the following City of Rochester owned properties:

- 2 Laura Street.
- 1200, 1240, and 1244-1246 East Main Street.

The following privately owned parcel addresses were not specifically evaluated, rather, accessible areas in the right-of-way (ROW) were:

- 1-5, 7-9 and 8-8.5 Laura Street.
- 1214-1216, 1222, 1228-1230, and 1252 East Main Street.

Specifically, sub-surface ESA investigation activities were conducted within the road right-of-way, outside the parcel boundaries of the 7-9, and 8-8.5 Laura Street, and 1228-1230 East Main Street properties. Access to the private properties was not available at the time the ESA was conducted, therefore ground intrusive work was not completed on private property. Figure 2 illustrates surface and sub-surface investigation locations associated with the ESA.

In addition, LaBella also retained Foundation Design, P.C. (Foundation Design) to complete a Pre-Development Geotechnical Assessment to assess for geotechnical considerations for future development.

1.1 Special Terms & Conditions

The findings of this Phase II ESA are based on the scope of work and project objectives as stated in LaBella Proposal number P1804052 dated October 2018.

1.2 Limitations & Exceptions

Work associated with this Phase II ESA was performed in accordance with generally accepted environmental engineering and environmental contracting practices for this region. LaBella makes no other warranty or representation, either expressed or implied, nor is one intended to be included as part of its services, proposals, contracts or reports.

In addition, LaBella cannot provide guarantees, certifications or warranties that the property is or is not free of environmental impairment or other regulated solid wastes. The Client shall be aware that the data and representative samples from any given soil sampling point or monitoring well may represent conditions that apply only at that particular location, and such conditions may not necessarily apply to the general Site as a whole.

2.0 BACKGROUND

2.1 Site Description & Features

The Site is comprised of eleven (11) parcels. The parcels include a combination of vacant land and residential structures.

2.2 Physical Setting

The Site is located in a predominantly urban area in proximity to the intersection of East Main Street and Laura Street in the City of Rochester.

2.3 Site History & Land Use

Historical land uses at the Site included residential and commercial operations. Residential and commercial properties in areas of the Site have been demolished, filled and graded. Environmental concerns associated with past residential property use include regulated materials used for filling (i.e. in basements or crawl spaces) as well as use of fuel oil for heating systems. Environmental concerns associated with past commercial property use also include regulated fill materials used during building demolition and grading, as well as petroleum usage (i.e. former gasoline filling station and heating systems). It is noted that environmental concerns associated with historic commercial and industrial property use at properties adjacent to the Site include the potential for contaminant migration onto the Site from off Site.

Section 2.5 provides a detailed summary of historical uses of each Site property and Recognized Environmental Conditions (RECs) associated with each property. It also provides RECs associated with historical uses of adjacent properties.

2.4 Adjacent Property Use

The Site parcels are bordered by the following properties:

ORIENTATION	LAND USE
North	Residential (4-6, 10, 11-15 Laura Street, and 405, 409, 417, 423, and 427 Hayward Avenue properties)
East	Residential (25 and 31 Baldwin Street), Vacant (35 Baldwin Street), Commercial (1258 East Main Street)
South	East Main Street and Commercial/Industrial properties (1185-1233 East Main Street)
West	Residential (409 Hayward Avenue, 427 Hayward Avenue) and Commercial (Autozone - 1180-1192 East Main Street)

2.5 Summary of Previous Studies

LaBella completed a Phase I Environmental Site Assessment (ESA) dated June 2018, for the referenced properties and the following Recognized Environmental Condition(s) (REC) were identified at each property as summarized below. It should be noted that the following sections are summaries of the Phase I findings. Full descriptions can be referenced in LaBella's previously completed Phase I ESA for each property.

- 1-5 Laura Street
    - REC 1: The west adjacent property, 1200 East Main Street, is a listed New York State Department of Environmental Conservation (NYSDEC) Environmental Restoration Program (ERP) Site #B00129. The property was formerly utilized as a gasoline filling station from before 1928 to at least 1993. Historic use of this facility as an automobile service facility and filling station resulted in subsurface petroleum contamination at the property. Confirmatory sampling indicated petroleum impacts remain on the property. Given the proximity of this property to the Site and the potential for contaminant migration toward the Site, the west adjacent property represents a REC to the Site at this time.

- 2 Laura Street
    - REC 1: A former dwelling at the Site was demolished in 2013, and likely contained a basement or crawlspace. The source, composition, environmental and geotechnical quality of the backfill material used to fill in the basement or crawlspace is unknown. Disturbed ground was observed proximate this area at the time of the site visit. The property card for the dwelling indicated it was heated with fuel oil. Although the oil was likely contained in a basement above ground storage tank (AST), it is possible it was contained in an underground storage tank (UST). The condition of the former tank was not documented and it is unknown if the tank was removed.

    - REC 2: The south adjacent property, addressed as 1240 East Main Street, was formerly utilized as residential property; former dwellings at the Site were demolished in 1953 and 2013, and likely contained a basement or crawlspace. The source, composition, and environmental and geotechnical quality of the backfill material used to fill in the basements or crawlspaces is unknown. Disturbed ground was observed proximate this area at the time of the site visit.

    - REC 3: Additionally, the southern adjacent property located south of East Main Street, addressed as 1237-1261 East Main Street, has been utilized as Fedder Industrial Park since at least 1976 (approximately 42 years). The industrial park has included various commercial and industrial tenants including machine shops, print shops, laminating shops, woodworking, and finishing, and plating operations. Such operations are typically known to incorporate various solvents and petroleum products into their operations. Although Phase II ESAs have been performed at the southeast adjacent property associated with “closed” Spill #1006197 above, no information has been obtained to date regarding sampling locations or laboratory analytical results associated with the Phase II ESAs.
      No violations have been identified associated with the RCRA listings, and the spills identified for the southeast adjacent property have been assigned a closed or inactive status by the NYSDEC. However, based on the long-term industrial use of the property likely including the utilization of various solvents and petroleum products, and the apparent groundwater flow direction to the northeast towards the Site, there is an apparent REC related to the nature of operations historically and currently conducted at the southeast adjacent property at this time.

- 7-9 Laura Street
    - REC 1: The Site building is heated with fuel oil.

    - REC 2: The west adjacent property, 1200 East Main Street, is a listed NYSDEC ERP Site #B00129 and was formerly utilized as a gasoline filling station from before 1928 to at least 1993. Historic use of this facility as an automobile service facility and filling station resulted in subsurface petroleum contamination at the property. Confirmatory sampling indicated petroleum impacts remain on the property. Given the proximity of this property to the Site and the potential for contaminant migration toward the Site, the west adjacent property represents a REC to the Site at this time.

- 8-8.5 Laura Street
    - REC 1: The Site building is heated with fuel oil.

- 1200 East Main Street (Controlled Recognized Environmental Condition (CREC))
    - REC 1: A comprehensive investigation and cleanup of the Site was completed through the NYSDEC ERP. Following completion of the soil and groundwater remediation a Soil Management Plan (SMP) was developed for the Site and approved in November 2018. Contaminated soils encountered in future excavations must be handled according to the SMP and the Excavation Work Plan (EWP), included as an appendix of the SMP. Per the SMP, soil vapor samples are required to be collected as part of pre-design for a future Sub-Slab Vapor Depressurization System (SSDS) at 1200 East Main Street to be coordinated with NYSDEC for mitigation of potential vapor intrusion into future building(s) and to be collected after such system is installed to demonstrate compliance and confirmation of the active SSDS. To ensure protection of public health and the environment, contamination remaining on the property is to be handled through Institutional Controls and Engineering Controls (IC and EC) as outlined in the 2017 SMP prepared for the Site. Compliance with the SMP is required through an Environmental Easement for the Site and granted to the NYSDEC.

- 1214-1216 East Main Street
    - REC 1: A former dwelling at the Site was demolished in 2016, and likely contained a basement or crawlspace. The source, composition, and environmental and geotechnical quality of the backfill material used to fill in the basement or crawlspace is unknown. Disturbed ground was observed proximate this area at the time of the site visit.

    - REC 2: The south adjacent property, currently addressed as 1185 East Main Street (formerly 1185-1223 East Main Street), has been utilized for various industrial and commercial purposes including Rochester Fireworks manufacturer from at least 1892 until at least 1912, Unit Parts Rochester Corporation auto parts, including two USTs, from at least 1939 until at least 1954, and a bus garage from at least 1981 until present day. Based on the proximity of this facility to the Site and the apparent groundwater flow direction to the northeast and towards the Site, there is an apparent REC related to the historical use of the south adjacent property at this time.

- CREC: The west adjacent property, 1200 East Main Street, is a listed NYSDEC ERP Site #B00129. Soil vapor samples were collected and evaluated on the Site in association with the ERP. A SSDS was installed at the former Site Building to mitigate potential vapor intrusion into the building. Based on a SMP for the west adjacent property, soil vapor samples are required to be collected as part of pre-design for a future SSDS at the Site, for mitigation of potential vapor intrusion into future building(s) and to be collected after such system is installed to demonstrate compliance and confirmation of the active SSDS.

- 1222 East Main Street
  - REC 1: A former dwelling at the Site was demolished in 2001, and likely contained a basement or crawlspace. The source, composition, and environmental and geotechnical quality of the backfill material used to fill in the basement or crawlspace is unknown. Disturbed ground was observed proximate this area at the time of the site visit.

  - REC 2: The south adjacent property, addressed as 1233 East Main Street, has been utilized for various industrial and commercial purposes from at least 1930 until at least 1967, again from at least 1972 until at least 1992, and again from at least 2007 until present day. Based on the long term industrial use of the property and the apparent groundwater flow direction towards the Site to the northeast, there is an apparent REC related to the historical use of the south adjacent property at this time.

    Additionally, the southeastern adjacent property, currently addressed as 1185 East Main Street (formerly addressed as 1185-1223 East Main Street), has been utilized for various industrial and commercial purposes including Rochester Fireworks manufacturer from at least 1892 until at least 1912, Unit Parts Rochester Corporation auto parts, including two USTs, from at least 1939 until at least 1954, and a bus garage from at least 1981 until present day. Based on the proximity of this facility to the Site and the apparent groundwater flow direction to the northeast and towards the Site, there is an apparent REC related to the historical use of the south adjacent property at this time.

- 1228-1230 East Main Street
  - REC 1: The south adjacent property, addressed as 1233 East Main Street, has been utilized for various industrial and commercial purposes from at least 1930 until at least 1967, again from at least 1972 until at least 1992, and again from at least 2007 until present day. Based on the long term industrial and commercial use of the property and the apparent groundwater flow direction to the northeast and towards the Site, there is an apparent REC related to the historical use of the south adjacent property at this time.

  - REC 2: The southwest adjacent property, currently addressed as 1185 East Main Street (formerly addressed as 1185-1223 East Main Street), has been utilized for various industrial and commercial purposes from at least 1892 until at least 1912, including two USTs. Additionally, from at least 1939 until at least 1954, and again from at least 1981 until present day. Based on the proximity of this facility to the

Site and the apparent groundwater flow direction to the northeast and towards the Site, there is an apparent REC related to the historical use of the southwest adjacent property at this time.

- REC 3: In addition, the southeast adjacent property, addressed as 1237-1261 East Main Street, has been utilized as Fedder Industrial Park since at least 1976 (approximately 42 years). The industrial park has included various commercial and industrial tenants including machine shops, print shops, laminating shops, woodworking, and finishing, and plating operations. Such operations are typically known to incorporate various solvents and petroleum products into their operations. Although Phase II ESAs have been performed at the southeast adjacent property associated with "closed" Spill #1006197 above, no information has been obtained to date regarding sampling locations or laboratory analytical results associated with the Phase II ESAs.

  No violations have been identified associated with the RCRA listings, and the spills identified for the southeast adjacent property have been assigned a closed or inactive status by the NYSDEC. However, based on the long-term industrial use of the property likely including the utilization of various solvents and petroleum products, and the apparent groundwater flow direction to the northeast towards the Site, there is an apparent REC related to the nature of operations historically and currently conducted at the southeast adjacent property at this time.

- 1240 East Main Street.
  - REC 1: Former dwellings at the Site were demolished in 1953 and 2013, and likely contained a basement or crawlspace. The source, composition, and environmental and geotechnical quality of the backfill material used to fill in the basements or crawlspaces is unknown. Disturbed ground was observed proximate this area at the time of the site visit.

  - REC 2: The south adjacent property, addressed as 1237-1261 East Main Street, has been utilized as Fedder Industrial Park since at least 1976 (approximately 42 years). The industrial park has included various commercial and industrial tenants including machine shops, print shops, laminating shops, woodworking, and finishing, and plating operations. Such operations are typically known to incorporate various solvents and petroleum products in their operations. Although Phase II ESAs have been performed at the south adjacent property associated with "closed" Spill #1006197 above, no information has been obtained to date regarding sampling locations or laboratory analytical results associated with the Phase II ESAs.

    No violations have been identified associated with the RCRA listings, and the spills identified for the south adjacent property have been assigned a closed or inactive status by the NYSDEC. However, based on the long-term industrial use of the property likely including the utilization of various solvents and petroleum products, and the apparent groundwater flow direction to the northeast and towards the Site, there is an apparent REC related to the nature of operations historically and currently conducted at the south adjacent property at this time.

  - REC 3: In addition, the southwest adjacent property, addressed as 1233 East Main Street, has been utilized for various industrial and commercial purposes from at

least 1930 until at least 1967, again from at least 1972 until at least 1992, and again from at least 2007 until present day. Based on the long term industrial and commercial use of the property and the apparent groundwater flow direction to the northeast and towards the Site, there is an apparent REC related to the historical use of the southwest adjacent property at this time.

- 1252 East Main Street.
  - REC 1: A former dwelling at the Site was demolished in 2016, and likely contained a basement or crawlspace. The source, composition, and environmental and geotechnical quality of the backfill material used to fill in the basement or crawlspace is unknown. Disturbed ground was observed proximate this area at the time of the site visit.

  - REC 2: The south adjacent property, addressed as 1237-1261 East Main Street, has been utilized as Fedder Industrial Park since at least 1976 (approximately 42 years). The industrial park has included various commercial and industrial tenants including machine shops, print shops, laminating shops, woodworking, and finishing, and plating operations. Such operations are typically known to incorporate various solvents and petroleum products in their operations. Although Phase II ESAs have been performed at the south adjacent property associated with "closed" Spill #1006197 above, no information has been obtained to date regarding sampling locations or laboratory analytical results associated with the Phase II ESAs.

    No violations have been identified associated with the RCRA listings, and the spills identified for the south adjacent property have been assigned a closed or inactive status by the NYSDEC. However, based on the long-term industrial use of the property likely including the utilization of various solvents and petroleum products, and the apparent groundwater flow direction to the northeast and towards the Site, there is an apparent REC related to the nature of operations historically and currently conducted at the south adjacent property at this time.

3.0 OBJECTIVE

Based on the findings of the Phase I ESA, the objective of this Phase II ESA was to conduct an evaluation of surface and subsurface soil conditions for evidence of impairment at the following properties:

- 2 Laura Street
- 1240 East Main Street
- 1244-1246 East Main Street

Site properties where surface and subsurface soil conditions were not evaluated for evidence of impairment within the parcel boundaries included the following:

- 1-5 Laura Street
- 7-9 Laura Street
- 8-8.5 Laura Street
- 1200 East Main
- 1214-1216 East Main Street
- 1222 East Main Street
- 1228-1230 East Main Street

- 1252 East Main Street

Subsurface conditions were evaluated within the Laura Street right-of-way in proximity to the 7-9, and 8-8.5 Laura Street, and 1228-1230 East Main Street properties. Surface and subsurface investigation activities were not conducted on the above-listed private properties during this ESA due to access restrictions.

It is noted that groundwater quality was also evaluated in the southern portion of the 1240 East Main Street property in an effort to determine whether or not groundwater impacts existed from historical Site operations or due to potential off site contamination migration from properties south of the Site, across East Main Street.

In addition to the above environmental assessments, the objective of the geotechnical work was to evaluate subsurface conditions for future development related to parking lots and foundation approaches for future buildings.

4.0 SCOPE OF WORK

To achieve the project objectives the following Scope of Work was performed:

4.1 Underground Facilities Protection Organization (UFPO)

Prior to the initiation of subsurface work, an underground utility stake-out, via *Dig Safely New York*, was completed at the Site to locate subsurface utilities in the areas where the subsurface assessment would take place.

4.2 Test Pit Excavations

Subsurface investigation was completed on the following City-owned parcels by excavating a series of test pits for geotechnical assessment and/or evidence of impairment by use of a Cat 308 Mini-Excavator. The following summarizes the number and locations of test pits excavated on each associated property:

- 1200 East Main Street: Eight (8) test pits, identified as TP-01 through TP-08, were excavated for geotechnical assessment only in the following areas:
  - six (6) within the former excavation areas (TP-01, TP-03 through TP-07),
  - one (1) in the lawn outside former excavations areas and structures (TP-02), and
  - one (1) within the footprint of former structure (TP-08).
- 2 Laura Street: one (1) test pit was excavated for environmental assessment within the footprint of a former structure (TP-12).
- 1240, 1244, & 1246 East Main: three (3) test pits were excavated for environmental assessment within the footprints of former structures (TP-09 through TP-11).

With the exception of the 1200 East Main Street parcel, test pits completed at the above City-owned parcels included environmental monitoring and soil sampling and ranged in total depth between 3.7 feet (TP-01) and 10 feet (TP-03) below ground surface (bgs). Soils in each test pit that included environmental monitoring were continuously assessed for visible impairment, olfactory indications of impairment, and/or indication of detectable volatile organic compounds (VOCs) with a photo-ionization detector (PID). Positive indications from

any of these screening methods are collectively referred to as "evidence of impairment."

Representative soil grab samples were collected from test pits TP-09, TP-10, TP-11 and TP-12 for environmental analysis. Grab samples were collected from TP-09 and from TP-10 and were composited into sample C-1. Grab samples were collected from TP-11 and from TP-12 and composited into sample C-2. Both composite soil samples were analyzed for the following parameters:

- United States Environmental Protection Agency (USEPA) Target Compound List (TCL) and NYSDEC Commissioner Policy 51 (CP-51) VOCs using USEPA Method 8260C,
- TCL and CP-51 SVOCs by USEPA Method 8270D,
- Target Analyte List (TAL) metals by USEPA Methods 6010C/7470/7471B,
- Polychlorinated Biphenyls (PCBs) by USEPA method 8082A.

Test pit locations are illustrated on Figure 2 and test pit logs are included in Appendix 1.

4.3 Surface Soil Sampling

In order to assess shallow soils at the Site, surface soil samples were collected from the following properties:

- 1240 East Main St. (1 sample; SS-01)
- 1244-1246 East Main St. (2 samples; SS-02, SS-03)
- 2 Laura St. (1 sample; SS-04)

A total of four (4) shallow surface soil samples were collected. Samples were collected from areas outside of the footprints of former structures from depths of 0-1 foot below vegetative cover. Each sample was collected with a pre-cleaned stainless steel spoon and analyzed for the following parameters:

- TCL and CP-51 VOCs by USEPA Method 8260C,
- TCL and CP-51 SVOCs by USEPA Method 8270D,
- TAL Metals by USEPA Methods 6010C/7470/7471B,
- PCBs by USEPA Method 8082A,
- Pesticides by USEPA Method 8081B.

4.4 Subsurface Soil Borings

A direct-push soil boring and sampling program was implemented at the Site to evaluate subsurface soil conditions. Soil borings were advanced with a track-mounted Geoprobe® Systems Model 54LT direct-push drill rig. The use of direct-push technology allowed for rapid sampling, observation, and characterization of overburden soils. The Geoprobe utilized a 4-foot long MacroCore® sampler with disposable polyethylene sleeves for collection of the soil from each depth interval.

A total of nine (9) soil borings were advanced to refusal at the Site to total depths ranging from 8 to 14.8 feet (ft) below ground surface (bgs). Soils from each boring were continuously assessed for visible impairment, olfactory indications of impairment, and/or indication of detectable volatile organic compounds (VOCs) with a PID. Positive indications from any of

these screening methods are collectively referred to as “evidence of impairment”. Representative soil samples were collected based on screening observations.

Immediately following sample collection, soil samples were placed in a cooler on ice and sent under standard chain of custody procedures to Pace Analytical in Mount Juliet, Tennessee and Alpha Analytical in Westborough, Massachusetts. The following table summarizes the sample locations, depths and laboratory analysis performed:

Soil Sample Analytical Program

SAMPLE ID	LOCATION	SAMPLE DEPTH (ft bgs)	LABORATORY ANALYSES
SB-01	Center of 1244-1246 East Main St	0.5-1	- USEPA TCL and CP-51 List VOCs - CP-51 List SVOCs - USEPA TAL Metals - PCBs
SB-02	Northwestern edge of 1244-1246 East Main St	10-11	
SB-04	Northern corner of 2 Laura St	1-3	-USEPA TCL and CP-51 List VOCs -CP-51 List SVOCs -USEPA TAL Metals
SB-05	Right of Way, outside 7-9 Laura St	6-8	
SBGT-06	Right of Way, outside 1228-1230 East Main St & Laura (off the corner)	6-8	-USEPA TCL and CP-51 List VOCs -CP-51 List SVOCs -PCBs
SB-08	Right of Way on the eastern portion of 1228-1230 E. Main St & Laura St	0.75-1.25	-USEPA TAL Metals -PCBs
SB-08		12.75-13.5	-USEPA TCL and CP-51 List VOCs -CP-51 List SVOCs
BW-01	Southern portion of 1240 East Main	8.5-9	-USEPA TCL and CP-51 VOCs
C-1	TP-09 & TP-10	2.5-5.0	- USEPA TCL and CP-51 List VOCs - CP-51 List SVOCs - USEPA TAL Metals - PCBs
C-2	TP-11 & TP-12	2.8-3.0	

Notes:
1. USEPA Target Compound List (TCL) and New York State Department of Environmental Conservation (NYSDEC) Commissioner Policy (CP-51) list VOC analysis performed via USEPA Method 8260
2. CP-51 List SVOC analysis performed via USEPA Method 8270
3. Resource Conservation and Recovery Act (RCRA) metals analysis performed via USEPA Method 6010/7470
4 Polychlorinated Biphenyls (PCBs) analysis performed via USEPA Method 8082

Soil boring locations are illustrated on Figure 2 and soil boring logs are included in Appendix 1.

4.5 Bedrock Monitoring Well Installation

One (1) permanent bedrock groundwater monitoring well, designated as BW-01, was installed by NYEG Drilling near the southern property line of the 1240 East Main Street parcel, within borehole BW-01. A CME 55 drill rig was used to advance 6.25-inch diameter hollow-stem augers through overburden soils at this location. Soils were continuously observed and screened with a PID for evidence of impairment until the bedrock surface was reached at approximately nine (9) feet bgs. Other than the occurrence of minor amounts of shallow fill materials, evidence of impairment was not observed in this boring.

Bedrock in BW-01 was cored with a NX core bit and barrel system using rotary drilling methods with recirculating water. Bedrock features appeared consistent with the Lockport Dolomite group, which was medium light grey to medium grey in color, and hard with slight to moderate weathering observed within water-bearing discontinuities. Rock Quality Designation (RQD) ranged from approximately 49% from 10-15 feet bgs to 87.9% from 15-20 feet bgs. Bedrock was cored to a total depth of twenty-five (25) feet bgs, was retrieved and placed in a core box for observation and logging by a qualified LaBella geologist. No evidence of impairment was observed within the retrieved bedrock core.

Following coring, the well was not left as an open rock well due to concerns about cave-in relating to rock quality. Therefore, the well was constructed using a 10-ft section of 2-inch diameter, 0.01-in slotted PVC screen and solid riser to grade. The well annulus was filled with 00N clean quartz sand and the well was completed with a steel flush-mounted protective curb box. A total of approximately 725 gallons of coring water was lost into the bedrock formation during coring of BW-01.

It is noted that a total of two (2) bedrock wells were proposed for installation during the Phase II ESA. However, due to numerous subsurface utilities being located beneath the sidewalk in close proximity to the proposed second well location, the City decided to eliminate installation of the second bedrock well during this phase of work. Figure 2 illustrates the location of the second proposed well.

The following table provides the BW-01 well construction details:

WELL ID	OVERBURDEN DEPTH (ft bgs)	4" STEEL CASING DEPTH (ft bgs)	WELL SCREEN INTERVAL (ft bgs)	SANDPACK INTERVAL (ft bgs)	BENTONITE SEAL (ft bgs)	GROUT INTERVAL (ft bgs)
BW-01	9.0	0-10.0	14-24	12-24	9-12	1-9

Following well installation and prior to sampling, BW-01 was developed by evacuating 100 gallons of groundwater using a submersible Whale pump. Consultation with the City of Rochester determined that evacuation of 100 gallons from the well would be adequate for development. Depth to groundwater at the time of development measured 15.5-ft bgs in BW-01.

Following development, the well was allowed to sit for approximately one month prior to sampling on December 21, 2018. Low-flow sampling methodologies were conducted in BW-01 by use of a submersible Geotech bladder pump placed at twenty (20) feet bgs during purging and sampling. Prior to groundwater sample collection, water quality measurements including pH, temperature, conductivity, turbidity, dissolved oxygen, and redox were recorded. Once satisfactory stabilization of groundwater parameters was achieved, groundwater sample BW-01 was collected. The sample was analyzed for the following parameters.

- TCL and CP-51 VOCs by USEPA Method 8260C,
- CP-51 SVOCs by USEPA Method 8270D,
- RCRA Metals by USEPA Methods 6010C/7470/7471B.

A BW-01 soil boring log, monitoring well construction log, rock core log and groundwater

sampling log are included in Appendix 1.

4.6 Investigation Derived Waste

Investigation Derived Waste (IDW) generated during this Phase II ESA consisted of the following:

- Two (2) 55-gallon drums of soil cuttings from installation of BW-01; includes solids from rock coring activities and minor amount of water from recirculation tub,
- Two (2) 55-gallon steel drums (110 gallons) of development and purge water from bedrock well BW-01.

The four (4) drums of IDW were characterized by using the laboratory data generated from the BW-01 soil and groundwater samples collected during the Phase II ESA. The waste was profiled and disposed of per applicable regulations on February 20, 2019 at the American Recyclers Company facility in Tonawanda, New York. A copy of the waste profiles and manifest are included in Appendix 3.

4.7 Geotechnical Evaluation

The geotechnical evaluation included the following services performed by Foundation Design:

- Review of Sanborn Fire Insurance Mapping and determine test pit locations to assess former structures.
- Provide a staff person on site full-time during test pitting, soil boring and bedrock well work. Work with LaBella staff to log the geotechnically critical information and collect samples for lab testing.
- Select a limited number of representative samples for lab testing (sieve/hydrometer analysis, moisture content, plastic limits and liquid limits test).
- Review findings in conjunction with the latest conceptual level design. Assess foundation approaches for future buildings.
- Summarize findings, conclusions and preliminary recommendations in a report.

Additional details on the geotechnical scope of work can be found in the Geotechnical Report dated April 3, 2019 by Foundation Design which is included in Appendix 4.

5.0 FINDINGS

5.1 Subsurface Findings

Nine (9) soil borings were advanced at the Site between October 22, 2018 and November 3, 2018. Borings were designated as SB-01 through SB-05, SBGT-06, SB-07- through SB-08 and BW-01. The test pits and soil borings were advanced to equipment refusal. The maximum depth of overburden soils encountered in the test pits ranged from approximately 5.3 feet bgs in TP-09 to 7 feet bgs in TP-10. It is noted that shallow refusal in TP-09 was due to encountering a footer. Depth to refusal in the soil borings ranged from approximately 8 to 14.8 feet bgs. Soil boring refusal was presumed to be on the bedrock surface.

Subsurface soils at the Site generally consisted of minor amounts of shallow fill materials overlying native lacustrine silt with varying amounts of very fine to fine sand and fine to coarse, sub angular to sub-rounded gravel, and trace amounts of clay. Groundwater was not observed in overburden soils. At the time of the Phase II ESA, the depth to groundwater on the 1240 East Main Street property was approximately 15.5 feet bgs, in bedrock.

Shallow fill materials observed during subsurface investigation included brick, cinder block, cinders, ash, asphalt, glass, slag, concrete, and reworked silt, sand and gravel. Fill materials were observed in varying amounts throughout the Site, as reflected in the field logs. The following table identifies the fill materials observed in each test pit and soil boring, and includes associated depths of occurrence:

LOCATION	FILL MATERIAL TYPE	DEPTH (feet bgs)
TP-09	foundation block, brick, stone fragments, reworked silt,sand,gravel	1.5-5.5 (footer encountered at 5.5 ft)
TP-10	brick, asphalt, reworked silt,sand,gravel	0.25-4.4
TP-11	reworked silt, sand, gravel	0.25-3
TP-12	brick, stone, concrete slab, reworked silt, sand, gravel	0.25-4.1 (basement slab at 4.1)
SB-01	black cinders, ash, reworked silt,sand,gravel	0.25-1
SB-02	cinders, cement, reworked silt,sand,gravel	0-7.4
SB-03	reworked silt, sand, gravel	0.5-2.4
SB-04	reworked silt, sand, gravel	1-3.6
SB-05	reworked silt, sand, gravel	1-2.3
SBGT-06	reworked silt, sand, gravel, rock fragments	0.5-3.6
SB-07	asphalt (road), cinders, reworked silt, sand, gravel	0-5.75
SB-08	asphalt (road), cinders, reworked silt, sand, gravel	0-5.75
BW-01	trace glass, trace slag	0-1
	reworked silt, sand, gravel, rock fragments	1-4.5

Soil boring and monitoring well locations are illustrated on Figure 2. Fill material thickness contouring is illustrated on Figure 3. Copies of the field logs for the test pits, soil borings and the monitoring well are included in Appendix 1.

5.2 Field Screening Results

Test pit soils from TP-09 through TP-12 and soil cores from each boring were continuously assessed by a qualified LaBella environmental analyst for evidence of impairment, and were classified and logged on applicable field logs. Elevated PID readings greater than one (1) part per million (ppm) were not observed in test pits TP-09 through TP-12 or in any of the nine (9) soil borings. The highest PID reading observed was 0.6 ppm in soil boring SB-07 at a depth interval of 1-3 feet bgs, beneath the asphalt road surface. No other evidence of impairment (other than the presence of fill materials) was observed at this location. It is noted that in soil boring SB-08, grey-black discolored silt and gravel was observed with a faint sewage-like odor at a depth of approximately 12.75 feet bgs. PID readings from 12.75-13.4 feet bgs (boring refusal) ranged from 0.2 to 0.4 ppm in SB-08. A representative soil sample was collected from this location and analyzed.

The table below summarizes the PID screening results observed at each depth interval within the test pits and soil borings:

Test Boring/Well Summary and Soil PID Readings

Test Boring ID	Well ID	Depth Interval (ft bgs) and Associated Peak PID Reading (ppm)							
		0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16
TP-09	--	0.0	0.0	0.0	--	--	--	--	--
TP-10	--	0.0	0.0	0.0	0.0	--	--	--	--
TP-11	--	0.0	0.0	0.0	0.0	--	--	--	--
TP-12	--	0.0	0.0	0.0	--	--	--	--	--
SB-01	--	0.0*	0.0	0.0	0.0	0.0	0.0	0.0	--
SB-02	--	0.0	0.0	0.0	0.0	0.0	0.0*	0.0	--
SB-03	--	0.0	0.0	0.0	0.0	--	--	--	--
SB-04	--	0.0*	0.0*	0.0	0.0	0.0	0.0	0.0	0.0
SB-05	--	0.0	0.0	0.0	0.0*	--	--	--	--
SBGT-06	--	0.0*	0.0	0.0	0.0	0.0	0.0	--	--
SB-07	--	0.6	0.6	0.0	0.0	0.0	0.0	0.0	--
SB-08	--	0.0*	0.0	0.0	0.0	0.0	0.0	0.4*	--
BW-01	BW-01	0.2	0.0	0.0	0.0	0*	--	--	--

Notes:

1. *All PID readings were collected utilizing a Minirae 3000 photoionization detector and are expressed in parts per million (ppm).*
2. *The PID screening is performed as a method of determining general presence of VOCs in soil, and to provide a basis for selecting samples for laboratory analysis. The readings obtained provide only an indication of the relative levels of VOC presence in the soil, and are not considered to be a direct quantization of actual soil VOC concentration.*
3. *"--" denotes boring not completed to above-listed depth due to refusal or insufficient recovery.*
4. *"*" denotes a soil sample was submitted for laboratory analysis from this interval.*

Soil boring and monitoring well locations are illustrated on Figure 2. Copies of the field logs for the test pits, soil borings and the monitoring well are included in Appendix 1.

5.3 Laboratory Analytical Results

5.3.1 Soil

A total of thirteen (13) soil samples were selected for laboratory analysis, including four (4) surface soil grab samples, two (2) composite test pit samples, and seven (7) soil boring samples. Soil samples were analyzed for the constituents previously listed in Section 4.0 of this report. The following summarizes the soil sample results for each sample type.

Test Pit Samples

Two (2) soil samples from the test pits were analyzed for TAL metals and the following summarizes the metals detected above NYSDEC Soil Cleanup Objectives (SCOs).

- Lead (355 mg/kg), mercury (0.284 mg/kg), and zinc (271 mg/kg) were detected in sample C-1 (2.5-5 feet bgs) at a concentrations above their respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs but below the Commercial Use SCOs.

Two (2) soil samples from the test pits were analyzed for VOCs and the following summarizes the

results.

- No VOCs were detected in the two (2) test pit soil samples.

Two (2) soil samples were analyzed from the test pits for SVOCs. SVOCs were detected in both samples; however, the concentrations were below their respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs.

Two (2) soil samples from the test pits were analyzed for PCBs and the following summarizes the results.

- No PCBs were detected in the two (2) test pit composite soil samples.

Surface Soil Samples

Four (4) surface soil samples were analyzed for TAL metals and the following summarizes the metals detected above NYSDEC SCOs.

- Lead was detected in samples SS-01 (0-0.5 foot bgs), SS-02 (0-0.3 foot bgs), SS-03 (0-1.0 foot bgs), and SS-04 (0-0.5 foot bgs) at concentrations above the respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCO but below the Commercial Use SCO.
- Mercury was detected in sample SS-01 (0.277 mg/kg at 0-0.5 foot bgs) at a concentration above its respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCO but below the Commercial Use SCO.
- Zinc was detected in sample SS-04 (115 mg/kg at 0-0.5 foot bgs) at a concentration above its respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCO but below the Commercial Use SCO.
- All other metal detections were below the NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs.

Four (4) surface soil samples were analyzed for VOCs and the following summarizes the results.

- No VOCs were detected in the four (4) surface soil samples.

Four (4) surface soil samples were analyzed for TCL and CP-51 SVOCs. SVOCs were detected in each of the four (4) surface soil samples; however only benzo(b)fluoranthene was detected in sample SS-01 (1.1 mg/kg at 0-0.5 foot bgs) at a concentration slightly above its respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCO but below the Commercial Use SCO.

- All other SVOC detections were below the NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs.

Pesticides were not detected above the laboratory detection limit in three (3) of the four (4) surface soil samples. Two (2) pesticides were detected in sample SS-04 (0-0.5 foot bgs), and this is summarized below.

- 4,4-DDE (0.0257 mg/kg) and 4,4-DDT (0.0245 mg/kg) were detected in sample SS-04 at concentrations above their respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs, but below the Commercial Use SCOs.

Four (4) surface soil samples were analyzed for PCBs and the following summarizes the results.

- No PCBs were detected in the four (4) surface soil samples.

Soil Boring Samples

Five (5) soil boring samples were analyzed for TAL metals and the following summarizes the metals detected above NYSDEC SCOs.

- Lead was detected in sample SB-04 (117 mg/kg at 0.5-1 foot bgs) at a concentration above its respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCO but below the Commercial Use SCO.
- All other metal detections were detected at concentrations below their respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs.

Seven (7) soil boring samples were analyzed for TCL and CP-51 VOCs. VOCs were detected in two (2) samples; however, the concentrations were below their respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs. The following summarizes the VOCs detected above NYSDEC SCOs.

- 1,4-Dichlorobenzene (0.00053 mg/kg), acetone (0.0051 mg/kg), and benzene (0.003 mg/kg) were each detected in sample SB-08 (12.75-13.4 feet bgs) at estimated concentrations below their respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs.

Six (6) soil boring samples were analyzed for CP-51 SVOCs. SVOCs were detected in two (2) samples; however, the concentrations were below their respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs.

No PCBs were detected in the four (4) subsurface soil boring samples.

Refer to Figure 4 and Tables 1 through 5 for summarized soil sample results. Laboratory analytical reports are included in Appendix 2.

5.3.2 Groundwater

Following installation, bedrock monitoring well BW-01 was purged of approximately 100 gallons water and allowed to stabilize for approximately one month prior to sampling. A groundwater sample, designated BW-01, was collected on December 21, 2018 and submitted for laboratory analysis of USEPA RCRA metals, USEPA TCL and NYSDEC CP-51 list VOCs and NYSDEC CP-51 list SVOCs.

Metals detected in sample BW-01 were below the applicable NYSDEC Part 703 Groundwater Quality Standards and NYSDEC Technical & Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (AWQS).

No VOCs or SVOCs were detected in groundwater sample BW-01.

Refer to Figure 4 and Tables 6 through 8 for summarized groundwater results. Laboratory analytical reports are included in Appendix 2.

6.0 CONCLUSIONS

LaBella was retained by City of Rochester, to conduct a Phase II ESA and Geotechnical Evaluation at the properties located at 1-5, 2, 7-9 and 8-8.5 Laura Street, and 1214-1216, 1222, 1228-1230, 1240, and 1252 East Main Street in the City of Rochester, Monroe County, New York. The ESA was performed to evaluate surface and subsurface soils and groundwater quality at the Site for evidence

of impairment based on the historical uses of the Site and surrounding properties. Surface and sub-surface ESA investigation activities were conducted within the parcel boundaries of 2 Laura Street, 1200, 1240, and 1244-1246 East Main Street, which are City of Rochester owned properties. Subsurface investigation was also conducted within the Laura Street right-of-way in proximity to the 7-9, and 8-8.5 Laura Street, and 1228-1230 East Main Street properties. Access to the private properties was not available at the time the ESA was conducted, therefore ground intrusive work was not completed on private property and as such specific conditions related to those such parcels are unknown.

ESA activities consisted of the advancement of twelve (12) test pits, nine (9) soil borings, and installation of one (1) permanent bedrock groundwater monitoring well in areas of planned future development. A total of thirteen (13) soil samples and one (1) groundwater sample were sent for laboratory analysis.

6.1 Geotechnical Conclusions

The Pre-Development Geotechnical Assessment Report is included as Appendix 4 and should be consulted for details on the geotechnical conclusions; however, below is a summary of pertinent conclusions:

- The in-place fill is not suitable to support foundations or floors for new structure(s).
- Variable fill quality will result in erratic amounts of settlement as the fill consolidates and organic matter in the fill will decompose with time and result in further settlement.
- New buildings should avoid environmental remedial excavations (1200 East Main Parcel) and to keep new building footprints at least 10 ft. east of previous excavation limits. If the structure was in previous excavations or within 10 ft. of such excavations there would likely be a need to remove, sort (to remove organics) and reinstall/compact the backfill.
- New pavements constructed over in-place fill material are likely to develop wavy, uneven, settled and severely cracked surfaces. However, removal of all in-place fill may be cost prohibitive and mitigation measures could be utilized (thicker subbase, geogrid, removal of old foundations and larger debris).

6.2 Environmental Conclusions

Based on the testing completed, the following findings are provided:

- Fill materials were encountered in each test pit and soil boring. TP-11, SB-3, SB-4 and SB-5 only identified apparent re-worked soil; however, the other locations identified one or more of the following: brick, asphalt, cinder blocks, glass, cinders, ash and slag. As noted in the Geotechnical Conclusions above, these fill materials will likely require removal from certain areas of the Site in order to support buildings and/or pavement. The removal of fill materials will require management in accordance with NYSDEC Part 360 Regulations. NYSDEC Part 360.13(c) states:

  *Fill material used as backfill for the excavation from which the fill material was taken, or as fill in areas of similar physical characteristics on the project property is exempt from regulation (*under NYSDEC Part 360.13*). If fill material exhibits historical or visual evidence of contamination (including odors), and will be used in an area with public access, the relocated fill material must be covered with a minimum of 12 inches of soil or fill material that meets the criteria for general fill, as defined in* NYSDEC Part 360.13*.*

In the event that fill materials cannot be re-worked on-site due to site constraints, off-site reuse would require a Beneficial Use Determination (approved by NYSDEC) or would require off-site disposal at an approved landfill.

- Test Pit Soil Sample:
  - Lead (355 mg/kg), mercury (0.284 mg/kg), and zinc (271 mg/kg) were detected in sample C-1 at a concentrations above their respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs but below the Commercial Use SCOs.
- Surface Soil Samples:
  - Lead was detected in samples SS-01, SS-02, SS-03, and SS-04 at concentrations above the respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCO but below the Commercial Use SCO.
  - Mercury was detected in sample SS-01 (0.277 mg/kg) at a concentration above its respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCO but below the Commercial Use SCO.
  - Zinc was detected in sample SS-04 (115 mg/kg) at a concentration above its respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCO but below the Commercial Use SCO.
  - SVOCs were detected in each of the four (4) surface soil samples; however only benzo(b)fluoranthene was detected in sample SS-01 (1.1 mg/kg) at a concentration slightly above its respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCO but below the Commercial Use SCO.
  - Pesticides were not detected above the laboratory detection limits in three (3) of the four (4) surface soil samples; 4,4-DDE (0.0257 mg/kg) and 4,4-DDT (0.0245 mg/kg) were detected in sample SS-04 at concentrations above their respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCOs, but below the Commercial Use SCOs.
- Soil Boring Samples:
  - Lead was detected in sample SB-04 (117 mg/kg) at a concentration above its respective NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use SCO but below the Commercial Use SCO.
- Groundwater Samples:
  - VOCs and SVOCs, were not detected above the laboratory detection limits in the groundwater sample from BW-01.
  - Metals detected in groundwater sample BW-01 were below applicable NYSDEC TOGS 1.1.1 AWQSs.
- A second bedrock well was proposed for installation in the sidewalk south of 1222 East Main Street; however, several subsurface utilities located beneath the sidewalk were in close proximity to the proposed well location and therefore it was not installed as part of this Phase II ESA.

All detected compounds in soil and groundwater were reported at concentrations below the applicable NYSDEC standards given the proposed zoning and planned development at the Site (i.e., commercial development).

7.0 RECOMMENDATIONS

7.1 Geotechnical Conclusions

The Pre-Development Geotechnical Assessment Report is included as Appendix 4 and should be consulted for additional details on the geotechnical conclusions; however, below is a summary of pertinent recommendations by Foundation Design:

1. Any new building was recommended to be constructed within the 1214-1216, 1222 and 1228-1230 East Main Street parcels and that should a building extend into Laura Street deeper utility lines may require addressing.
2. Future development should plan to remove in-place fill material and buried topsoil from proposed building footprints. These areas would require backfill/compaction with appropriate stone (e.g., crusher run). Foundation Design indicated that consideration could be given to utilizing the stone backfill placed in the remedial excavation identified as Area 4 at 1200 East Main and if this is utilized, the resulting void could be a location for placement of fill materials.
3. Subsequent to removal/replacement of fill material, spread footing foundations systems with a slab on grade are feasible.
4. A Site Classification of C (Very Dense Soil Profile) was recommended for the seismic design criteria (refer to report for specific design parameters).
5. Future pavement areas were recommended to have the contractor rework and re-compact at least the upper 18-inches of in-place fill material with proof rolling observed by the Geotechnical Engineer. In addition, a geogrid was recommended to be placed on the subgrade prior to placing subbase. A slope of at least 2.0 percent was recommended to facilitate water flow to the stormwater system. Concrete pavements were recommended in loading dock and/or dumpster areas.
6. Green infrastructure designs (e.g., permeable pavement, rain gardens, infiltration chambers) should include infiltration tests to assess the rate infiltration.

7.2 Environmental Conclusions

Sample results indicate the compounds detected in surface and subsurface soils, and in groundwater fall below the applicable NYSDEC standards given the proposed zoning and development plans for the Site (i.e., commercial use).

Based on the findings of the multi-property Phase II ESA, LaBella recommends:

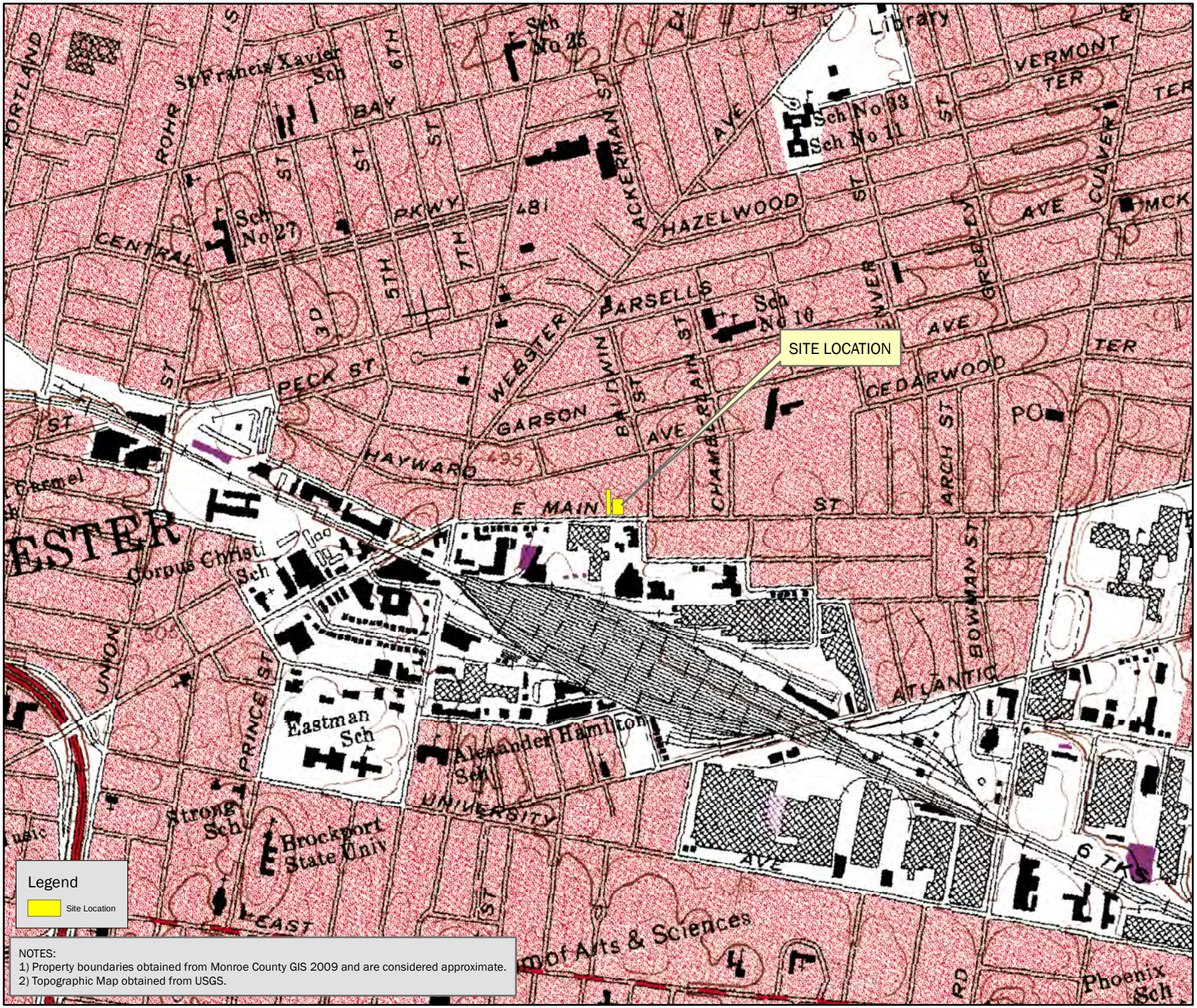
- An Environmental Management Plan (EMP) be developed for future ground intrusive work at the Site in order to manage fill materials properly.
- No further testing is recommended on the parcels investigated during implementation of this scope of work.
- Once the City acquires the properties east of 1200 East Main Street, LaBella recommends installing a second bedrock well in the vicinity of where it had been proposed for this Phase II ESA (Figure 2).
- In the event that the remedial excavation identified as Area 4 at 1200 East Main is utilized as a ‘borrow pit’ for stone backfill, this stone should be assessed impacts due to residual contamination prior to excavation and/or reuse (particularly from the saturated zone and smear zone).

A copy of all information collected during this assessment, including maps, notes, analytical data and other material will be kept on file at the offices of LaBella Associates, D.P.C. This information is available upon the request.

8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Report Prepared By:	Report Reviewed By:
Eric Detweiler	Dan Noll
Name Title: Environmental Geologist	Name Project Manager

FIGURES



LaBella
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Feet

1 inch = 1,000 feet

INTENDED TO PRINT AS: 8.5" X 11"

CLIENT:

CITY OF ROCHESTER

PROJECT:

PHASE II ESA

LOCATION:

EAST MAIN AND
LAURA STREET
ROCHESTER, NEW YORK

TITLE:

SITE LOCATION

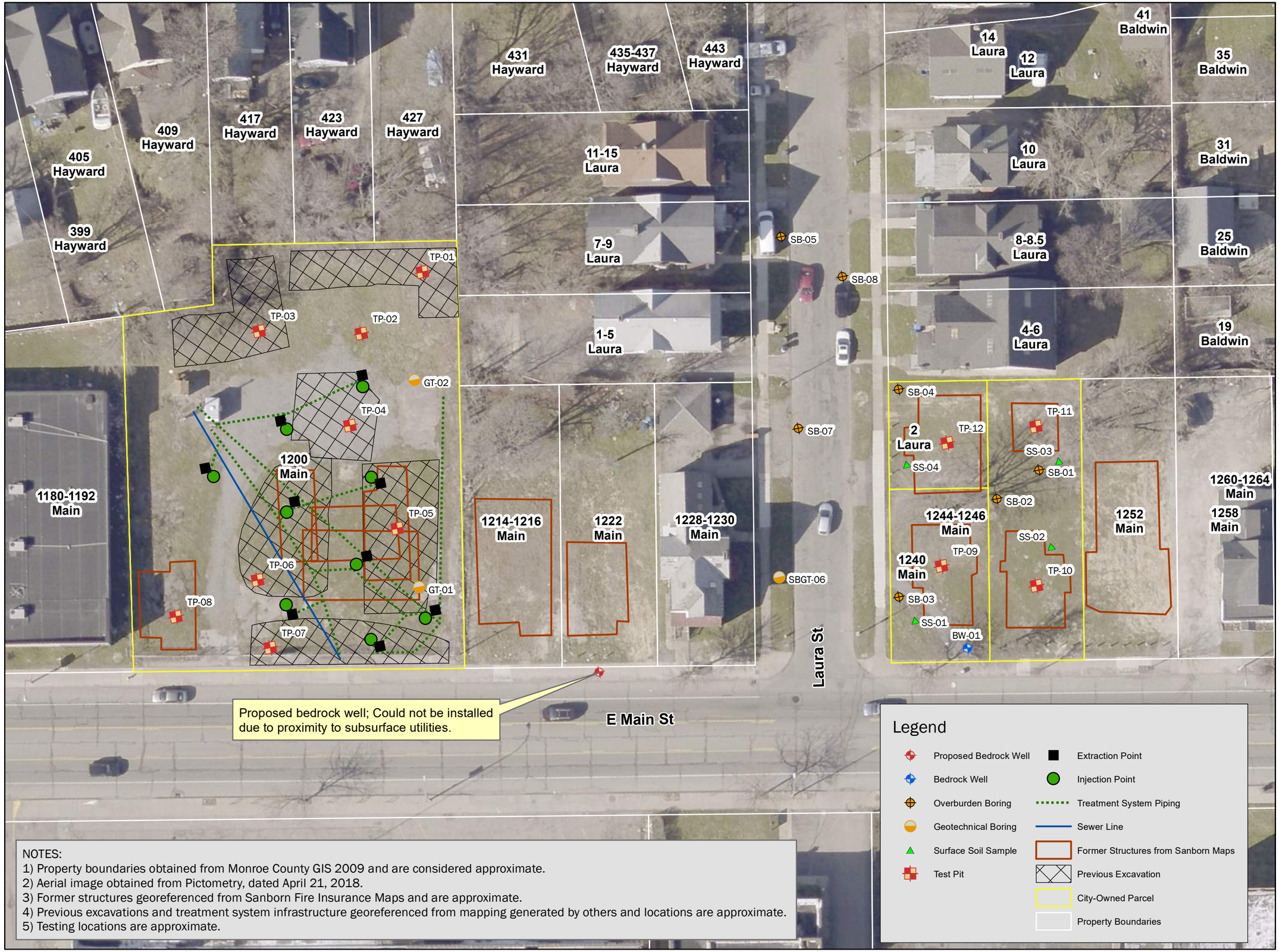
PROJECT #/DRAWING #/ DATE

2182815

FIGURE 1

2/22/2019

\\Projects2\ProjectsNZ-2\Rochester, City\2182815 - E Main & Laura St Ph II ESA\Drawings\East Main and Laura Street _Figure 1.mxd



NOTES:
1) Property boundaries obtained from Monroe County GIS 2009 and are considered approximate.
2) Aerial image obtained from Pictometry, dated April 21, 2018.
3) Former structures georeferenced from Sanborn Fire Insurance Maps and are approximate.
4) Previous excavations and treatment system infrastructure georeferenced from mapping generated by others and locations are approximate.
5) Testing locations are approximate.

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Feet
1 inch = 40 feet

INTENDED TO PRINT AS: 11" X 17"

CLIENT:

CITY OF ROCHESTER

PROJECT:

PHASE II ESA

LOCATION:

EAST MAIN AND
LAURA STREET
ROCHESTER, NEW YORK

TITLE:

TESTING LOCATIONS

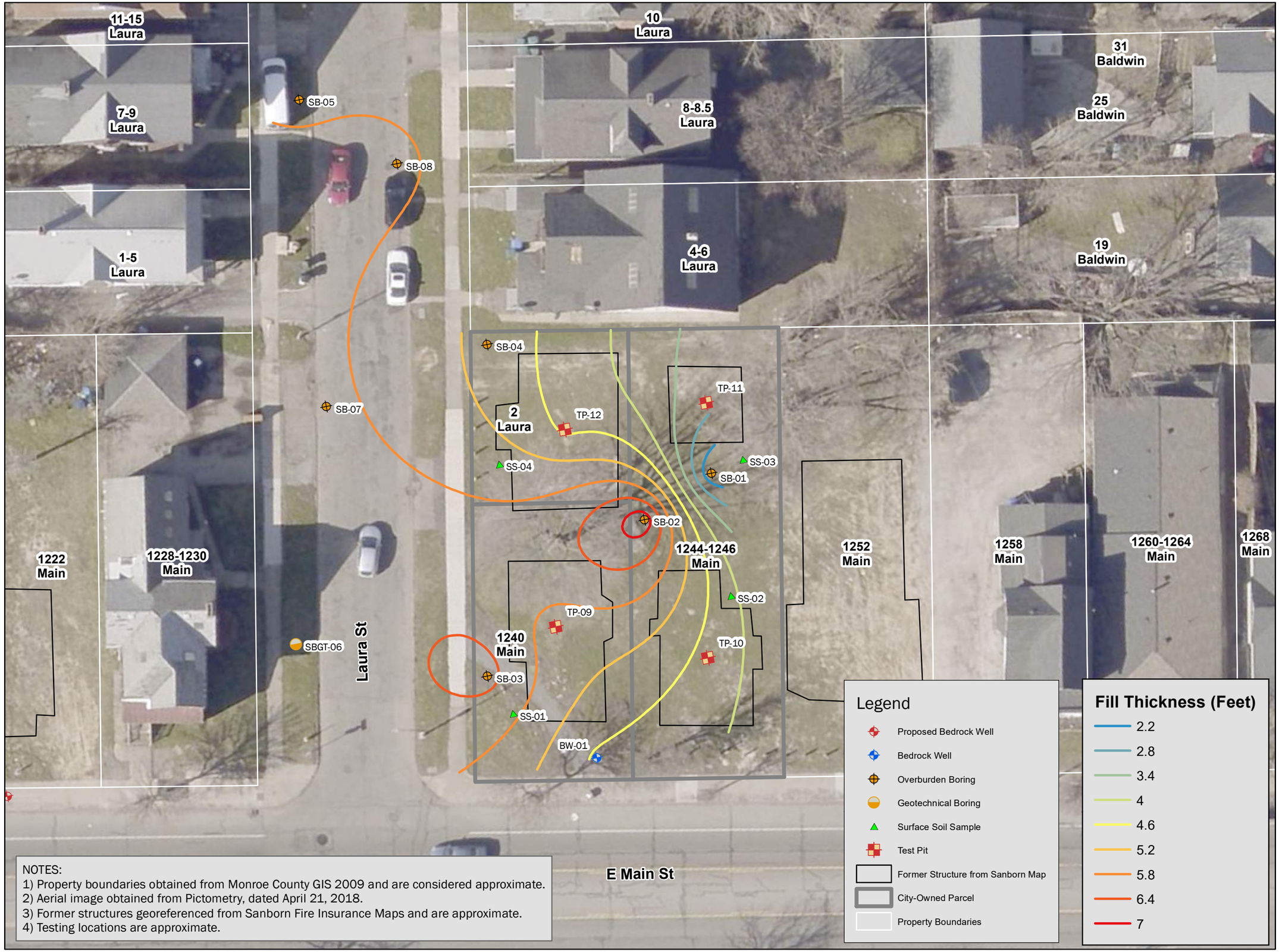
PROJECT #/DRAWING #/ DATE

2182815

FIGURE 2

3/18/2019

\\Projects2\ProjectsNZ-2\Rochester, City\2182815 - E Main & Laura St Ph II ESA\Drawings\East Main and Laura Street _Figure 2.mxd



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0 20 40 Feet

1 inch = 25 feet

INTENDED TO PRINT AS: 11" X 17"

CLIENT:

CITY OF ROCHESTER

PROJECT:

PHASE II ESA

LOCATION:

EAST MAIN AND
LAURA STREET
ROCHESTER, NEW YORK

TITLE:

FILL MATERIAL
THICKNESS CONTOURS

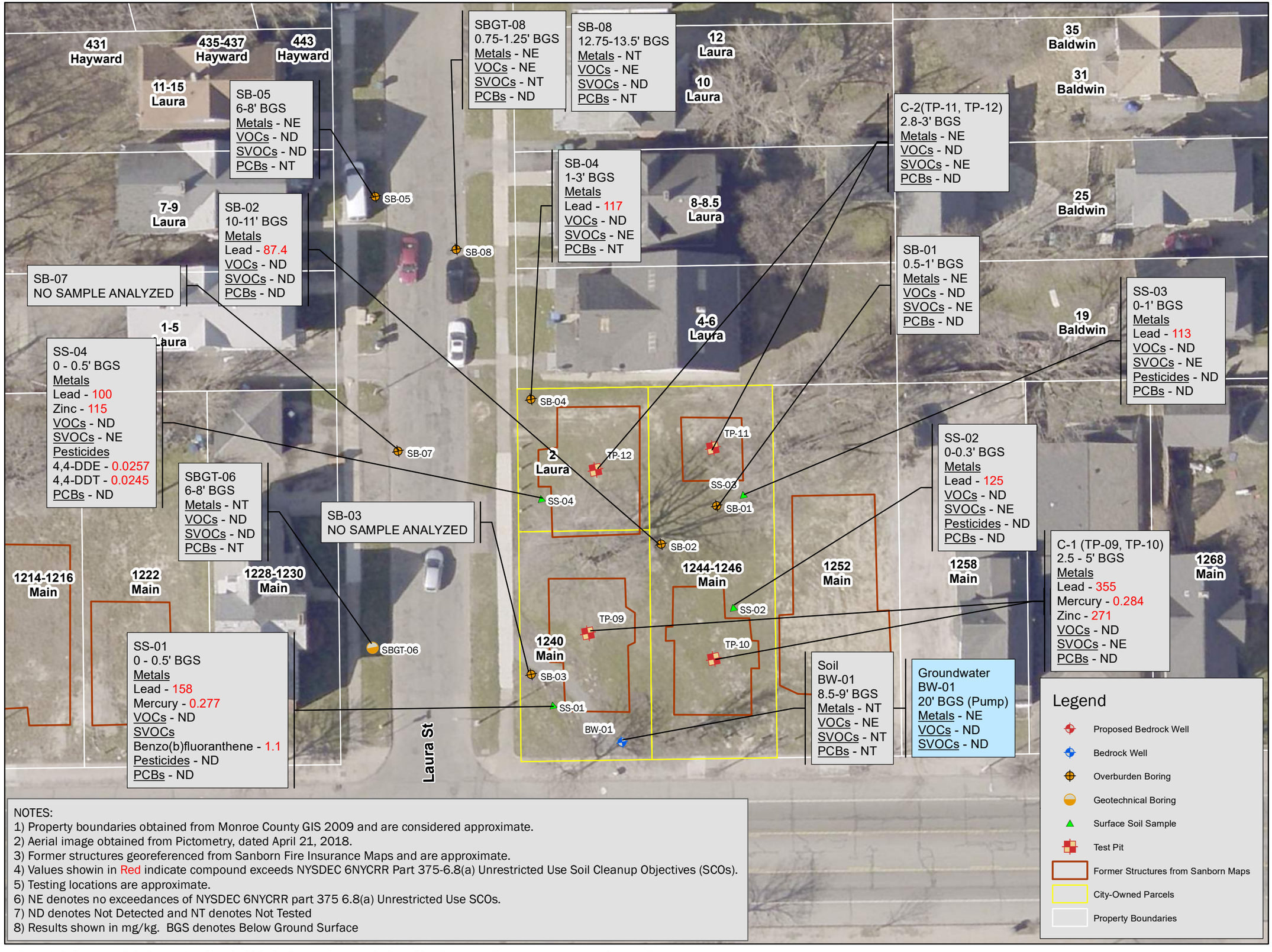
PROJECT #/DRAWING #/ DATE

2182815

FIGURE 3

3/18/2019

\\Projects2\ProjectsNZ-2\Rochester, City\2182815 - E Main & Laura St Ph II ESA\Drawings\East Main and Laura Street _Figure 3.mxd



NOTES:
1) Property boundaries obtained from Monroe County GIS 2009 and are considered approximate.
2) Aerial image obtained from Pictometry, dated April 21, 2018.
3) Former structures georeferenced from Sanborn Fire Insurance Maps and are approximate.
4) Values shown in Red indicate compound exceeds NYSDEC 6NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objectives (SCOs).
5) Testing locations are approximate.
6) NE denotes no exceedances of NYSDEC 6NYCRR part 375 6.8(a) Unrestricted Use SCOs.
7) ND denotes Not Detected and NT denotes Not Tested
8) Results shown in mg/kg. BGS denotes Below Ground Surface

N E S W

0 20 40 Feet

1 inch = 30 feet

INTENDED TO PRINT AS: 11" X 17"

CLIENT:

CITY OF ROCHESTER

PROJECT:

PHASE II ESA

LOCATION:

EAST MAIN AND LAURA STREET ROCHESTER, NEW YORK

TITLE:

SAMPLE RESULTS PLAN

PROJECT #/DRAWING #/ DATE

2182815

FIGURE 4

3/18/2019

\\Projects2\ProjectsNZ-2\Rochester, City\2182815 - E Main & Laura St Ph II ESA\Drawings\East Main and Laura Street _Figure 4.mxd

TABLES

Table 1
Phase II Environmental Site Assessment
East Main & Laura Street, Rochester, NY
Summary of TAL Metals in Soil
LaBella Project # 2182815

Sample ID	NYCRR Part 375 Unrestricted Use SCOs	NYCRR Part 375 Commercial Use SCOs	NYCRR Part 375 Protection of Groundwater SCOs	SS-01		SS-02		SS-03		SS-04		SB-01		SB-02		SB-04		SB-05		SB-08		C-1		C-2	
Sample Depth (ft bgs)				0-0.5		0-0.3		0-1.0		0-0.5		0.5-1		10-11		1-3		6-8		0.75-1.25		2.5-5		2.8-3	
Sample Date				10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		11/1/2018		10/18/20108		10/18/2018	
				Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Method 6010C																									
Aluminum	NL	NL	NL	8550		9620		10100		7020		8060		6810		12000		4740		2020		7440		8120	
Antimony	NL	NL	NL	< 2.5		< 2.22		< 2.25		< 2.14		< 2.2		< 2.19		< 2.31		< 2.22		<4.09		< 2.18		< 2.23	
Arsenic	13	16	16	5.01		2.97		2.91		2.96		4.38		2.51		3.41		< 2.22		3.41		5.56		2.83	
Barium	350	400	820	58.7		74		73		49		45		49.7		62.3		24.6		18.5		300		41.8	
Beryllium	7.2	590	47	0.430		0.433		0.450		0.369		0.354		0.272		0.464		< 2.22		0.098	J	0.363		0.373	
Cadmium	2.5	9.3	7.5	< 0.626		< 0.555		< 0.564		< 0.536		< 0.551		< 0.547		< 0.578		< 0.556		0.442	J	1.44		< 0.557	
Calcium	NL	NL	NL	5570		33400		40100		49500		30100		51000		2720		70200		61100		40300		28700	
Chromium, trivalent	30	1500	NL	18.8		13.5		12.9		10.1		8.21		11.1		12.7		6.17		4.11		10.6		9.86	
Cobalt	NL	NL	NL	4.76		5.67		5.86		4.69		4.31		5.36		5.4		3.39		2.15		4.65		5.36	
Copper	50	270	1720	34.9		21		19		23		19.2		35.9		17.3		9.46		9.50		30.8		18	
Iron	NL	NL	NL	13900		15000		15000		13600		11000		14300		15000		9880		6170		15300		14700	
Lead	63	1000	450	158		125		113		100		41.8		87.4		117		6.07		25.1		355		42.6	
Magnesium	NL	NL	NL	2950		13600		14400		23900		7450		11500		2830		23300		18000		11700		6290	
Manganese	1600	10000	2000	385		350		381		368		312		734		353		314		249		378		606	
Nickel	30	310	130	11.2		14.7		13.4		12.2		9.95		14.2		10.9		7.42		7.67		10.5		12.3	
Potassium	NL	NL	NL	1150		1730		1520		1790		1450		1290		795		1160		315		1180		1430	
Selenium	3.9	1500	4	< 2.5		< 2.22		< 2.25		< 2.14		< 2.2		< 2.19		< 2.31		< 2.22		<1.64		< 2.18		< 2.23	
Silver	2	1500	8.3	< 1.25		< 1.11		< 1.13		< 1.07		< 1.1		< 1.09		< 1.16		< 1.11		<0.818		< 1.09		< 1.11	
Sodium	NL	NL	NL	130	B	165	B	163	B	210	B	397	B	197	B	< 116		185		153	J	345		210	B
Thallium	NL	NL	NL	< 2.5		< 2.22		< 2.25		< 2.14		< 2.2		< 2.19		< 2.31		< 2.22		<1.64		< 2.18		< 2.23	
Vanadium	NL	NL	NL	< 2.5		17.6		18.1		12.2		10.8		12		17.9		9.23		24.2		15.2		14.1	
Zinc	109	10000	2480	108		107		93.9		115		47.1		59.5		96.5		21.9		29.6		271		69.6	
Method 7471B																									
Mercury	0.18	2.8	0.73	0.277		0.134		0.147		0.153		0.0999		0.0315	B	0.118		< 0.0222		<0.067		0.284		0.0571	B

NOTES:
All values displayed in milligrams per kilograms (mg/kg) or parts per million (ppm)
"<" - Indicates compound was not detected above the indicated laboratory method detection limit (MDL).
NL indicates not listed
*indicates no NYCRR Part 375 value, corresponding CP-51 Supplemental Soil Cleanup Objective is listed
NT indicates sample not tested for specific compounds.
J indicates an estimated value. The Target analyte was below the quntitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
Yellow highlight indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objective (SCO)
Red font indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) CommercialUse SCO
Bold type indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) Protection of Groundwater SCO
Metals analyzed by USEPA Method 6010/7470
Mercury analyzed by USEPA Method 7471B.
B: The same analyte is found in the associated blank.

Table 2
Phase II Environmental Site Assessment
East Main & Laura Street, Rochester, NY
Summary of TCL and CP-51 Volatile Organic Compounds in Soil
LaBella Project # 2182815

Sample ID	NYCRR Part 375 Unrestricted Use SCOs	NYCRR Part 375 Commercial Use SCOs	NYCRR Part 375 Protection of Groundwater SCOs	SS-01		SS-02		SS-03		SS-04		SB-01		SB-02		SB-04		SB-05		SBGT-06		SB-08		BW-01		C-1		C-2	
Sample Depth (ft bgs)				0-0.5		0-0.3		0-1.0		0-0.5		0.5-1		10-11		1-3		6-8		6-8		12.75-13.4		8.5-9		2.5-5		2.8-3	
Sample Date				10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		11/1/2018		1/1/2018		10/18/20108		10/18/2018	
				Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1-Trichloroethane	0.68	500	0.68	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		<0.00289		< 0.00278		< 0.00268		<0.00043		<0.00069		< 0.00273		< 0.00279	
1,1,2,2-Tetrachloroethane	NL	NL	0.6*	< 0.00313		< 0.00277		< 0.00282		< 0.00268		< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00043		<0.00069		< 0.00273		< 0.00279	
1,1,2-Trichloroethane	NL	NL	NL	< 0.00313		< 0.00277		< 0.00282		< 0.00268		< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00085		<0.0014		< 0.00273		< 0.00279	
1,1,2-Trichlorotrifluoroethane (freon 113)	NL	NL	6*	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		NL		NL		< 0.00273		< 0.00279	
1,1-Dichloroethane	0.27	240	0.27	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00085		<0.0014		< 0.00273		< 0.00279	
1,1-Dichloroethene	0.33	500	0.33	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00085		<0.0014		< 0.00273		< 0.00279	
1,2,3-Trichlorobenzene	NL	NL	NL	< 0.00313		< 0.00277		< 0.00282		< 0.00268		< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		NL		NL		< 0.00273		< 0.00279	
1,2,4-Trichlorobenzene	NL	NL	3.4*	< 0.0156		< 0.0139		< 0.0141		< 0.0134		< 0.0138		< 0.0137		< 0.0145		< 0.0139		< 0.0134		<0.0017		<0.0028		< 0.0136		< 0.0139	
1,2,4-Trimethylbenzene	3.6	190	3.6	< 0.00626		< 0.00555		< 0.00564		< 0.00536		< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.0017		<0.0028		< 0.00545		< 0.00557	
1,2-Dibromo-3-Chloropropane	NL	NL	NL	< 0.0313		< 0.0277		< 0.0282		< 0.0268		< 0.0276		< 0.0273		< 0.0289		< 0.0278		< 0.0268		<0.0026		<0.0042		< 0.0273		<0.0279	
1,2-Dibromoethane	NL	NL	NL	< 0.00313	J4	< 0.00277	J4	< 0.00282	J4	< 0.00268	J4	< 0.0276	J4	< 0.0273	J4	< 0.0289	J4	< 0.0278	J4	< 0.0268	J4	<0.00085		<0.0014		< 0.0273	J4	<0.0279	J4
1,2-Dichlorobenzene	1.1	500	1.1	< 0.00626		< 0.00555		< 0.00564		< 0.00536		< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.0017		<0.0028		< 0.00545		< 0.00557	
1,2-Dichloroethane	0.02	30	0.02	< 0.00313		< 0.00277		< 0.00282		< 0.00268		< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00085		<0.00069		< 0.00273		< 0.00279	
1,2-Dichloropropane	NL	NL	NL	< 0.00626		< 0.00555		< 0.00564		< 0.00536		< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.00085		<0.0014		< 0.00545	Q	< 0.00557	Q
1,3,5-Trimethylbenzene	8.4	190	8.4	< 0.00626		< 0.00555		< 0.00564		< 0.00536	J3	< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.0017		<0.0028		< 0.00545		< 0.00557	
1,3-Dichlorobenzene	2.4	280	2.4	< 0.00626		< 0.00555		< 0.00564		< 0.00536		< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.0017		<0.0028		< 0.00545		< 0.00557	
1,4-Dichlorobenzene	1.8	130	1.8	< 0.00626		< 0.00555		< 0.00564		< 0.00536		< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		0.00053	J	<0.0028		< 0.00545		< 0.00557	
2-Hexanone	NL	NL	NL	< 0.0313		< 0.0277		< 0.0282		< 0.0268		< 0.0276		< 0.0273		< 0.0289		< 0.0278		< 0.0268		NL		<0.014		< 0.0273		< 0.0279	
4-Methyl-2-Pentanone (MIBK)	NL	NL	1*	< 0.0313		< 0.0277		< 0.0282		< 0.0268		< 0.0276		< 0.0273		< 0.0289		< 0.0278		< 0.0268		<0.0085		<0.014		< 0.0273		< 0.0279	
Acetone	0.05	500	0.05	< 0.0313		< 0.0277		< 0.0282		< 0.0268		< 0.0276		< 0.0273		< 0.0289		< 0.0278		< 0.0268		0.0051	J	<0.014		< 0.0273		< 0.0279	
Benzene	0.06	44	0.06	< 0.00125		< 0.00111		< 0.00113		< 0.00107	J3	< 0.0011		< 0.00109		< 0.0016		< 0.00111		< 0.00107		<0.00043		0.0003	J	< 0.00109		< 0.00111	
Bromochloromethane	NL	NL	NL	< 0.00626		< 0.00555		< 0.00564		< 0.00536		< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		NL		NL		< 0.00545		< 0.00557	
Bromodichloromethane	NL	NL	NL	< 0.00313		< 0.00277		< 0.00282		< 0.00268		< 0.00276		< 0.00273		< 0.00289		< 0.00278		< .00268		<0.00043		<0.00069		< 0.00273		< 0.00279	
Bromoform	NL	NL	NL	< 0.0313		< 0.0277		< 0.0282		< 0.0268		< 0.0276		< 0.0273		< 0.0289		< 0.0278		< 0.0268		<0.0034		<0.0055		< 0.0273		< 0.00279	
Bromomethane	NL	NL	NL	< 0.0156		< 0.0139		< 0.0141		< 0.0134	J3	< 0.0138		< 0.0137		< 0.01465		< 0.0139		< 0.0134		<0.0017		<0.0028		< 0.0136		<0.0139	
Carbon Disulfide	NL	NL	2.7*	< 0.0156		< 0.0139		< 0.0141		< 0.0134	J3	< 0.0138		< 0.0137		< 0.01465		<0.0139		< 0.0134		<0.0085		<0.014		< 0.0136		< 0.0139	
Carbon tetrachloride	0.76	22	0.76	< 0.00626		< 0.00555		< 0.00564		< 0.00536	J3	< 0.00551		< 00547		< 0.00578		< 0.00556		< 0.00537		<0.00085		<0.0014		< 0.00545		< 0.00557	
Chlorobenzene	1.1	500	1.1	< 0.00313		< 0.00277		< 0.00282		< 0.00268		< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00043		<0.00069		< 0.00273		< 0.00279	
Chlorodibromomethane	NL	NL	NL	< 0.00313		< 0.00277		< 0.00282		< 0.00268		< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		NL		NL		< 0.00273		< 0.00279	
Chloroethane	NL	NL	NL	< 0.00626		< 0.00555		< 0.00564		< 0.00536		< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.0017		<0.0028		< 0.00545		< 0.00557	
Chloroform	0.37	350	0.37	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.0013		<0.0021		< 0.00273		< 0.00279	
Chloromethane	NL	NL	NL	< 0.0156		< 0.0139		< 0.0141		< 0.0134	J3	< 0.0138		< 0.0137		< 0.0145		< 0.0139		< 0.0134		<0.0034		<0.0055		< 0.0136		< 0.0139	
cis -1,2-Dichloroethene	0.25	500	0.25	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00085		<0.0014		< 0.00273		< 0.00279	
cis -1,3-Dichloropropene	NL	NL	NL	< 0.00313		< 0.00277		< 0.00282		< 0.00268		NL		NL		NL		NL		NL		NL		NL		NL		NL	
Cyclohexane	NL	NL	NL	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.0085		<0.014		< 0.00273		< 0.00279	
Dichlorodifluoromethane	NL	NL	NL	< 0.00313		< 0.00277		< 0.00282		< 0.00268		< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.0085		<0.014		< 0.00273	Q	< 0.00279	Q
Ethylbenzene	1	390	1	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00085		<0.0014		< 0.00273		< 0.00279	
Isopropylbenzene	NL	NL	2.3*	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00085		<0.0014		< 0.00273		< 0.00279	
Methyl Acetate	NL	NL	NL	< 0.00626		< 0.00555		< 0.00564		< 0.00536	J3	< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.0034		<0.0055		< 0.00545		< 0.00557	
Methyl Cyclohexane	NL	NL	NL	< 0.00626		< 0.00555		< 0.00564		< 0.00536	J3	< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		< 0.0034		<0.0055		< 0.00545		< 0.00557	
Methyl ethyl ketone (2-butanone)	0.12	500	0.12	< 0.0313		< 0.0277		< 0.0282		< 0.0268		< 0.0276		< 0.0273		< 0.0289		< 0.0278		< 0.0268		<0.0085		<0.014		< 0.00273	Q	< 0.0279	Q
Methyl tert-butyl ether	0.93	500	0.93	< 0.00125		< 0.00111		< 0.00113		< 0.00107		< 0.0011		< 00109		< 0.00116		< 0.00111		< 0.00107		<0.0017		<0.0069		< 0.00109		< 0.00111	
Methylene chloride	0.05	500	0.05	< 0.0313		< 0.0277		< 0.0282		< 0.0268		< 0.0276		< 0.0273		< 0.0289		< 0.0278		< 0.0268		<0.0043		<0.0069		< 0.0273		< 0.0279	
n - Propylbenzene	3.9	500	3.9	< 0.00626		< 0.00555		< 0.00564		< 0.00536	J3	< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.00085		<0.0014		< 0.00545		< 0.00557	
Naphthalene	NL	NL	NL	< 0.0156		< 0.0139		< 0.0141		< 0.0134		< 0.0138		< 0.0137		< 0.0145		< 0.0139		< 0.0134		<0.0034		<0.0055		< 0.0136		< 0.0139	
n-Butylbenzene	12	500	12	< 0.0156		< 0.0139		< 0.0141		< 0.0134	J3	< 0.0138		< 0.0137		< 0.0145		< 0.0139		< 0.0134		<0.00085		<0.0014		< 0.0136		< 0.0139	
p-Isopropyltoluene	NL	NL	10*	< 0.00626		< 0.00555		< 0.00564		< 0.00536	J3	< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.00085		<0.0014		< 0.00545		< 0.00557	
sec-Butylbenzene	11	500	11	< 0.0156		< 0.0139		< 0.0141		< 0.0134	J3	< 0.0138		< 0.0137		< 0.0145		< 0.0139		< 0.0134		<0.00085		<0.0014		< 0.0136		< 0.0139	
Styrene	NL	NL	NL	< 0.0156		< 0.0139		< 0.0141		< 0.0134		< 0.0138		< 0.0137		< 0.0145		< 0.0139		< 0.0134		<0.00085		<0.0014		< 0.0136		< 0.0139	
tert-Butylbenzene	5.9	500	5.9	< 0.00626	J4	< 0.00555	J4	< 0.00564	J4	< 0.00536	J4	< 0.00551	J4	< 0.00547	J4	< 0.00578	J4	< 0.00556	J4	< 0.00537	J4	<0.0017		<0.0028		< 0.00545	J4	< 0.00557	J4
Tetrachloroethene	1.3	150	1.3	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00043		<0.00069		< 0.00273		< 0.00279	
Toluene	0.7	500	0.7	< 0.00626		< 0.00555		< 0.00564		< 0.00536	J3	< 0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.00085		0.00077	J	< 0.00545		< 0.00557	
trans-1,2-Dichloroethene	0.19	500	0.19	< 0.00626		< 0.00555		< 0.00564		< 0.00536	J3	<0.00551		< 0.00547		< 0.00578		< 0.00556		< 0.00537		<0.0013		<0.0021		< 0.00545		< 0.00557	
trans-1,3-Dichloropropene	NL	NL	NL	< 0.00626		< 0.00555		< 0.00564		< 0.00536		NL		NL		NL		NL		NL		NL		NL		NL		NL	
Trichloroethene	0.47	200	0.47	< 0.00125	J4	< 0.00111	J4	< 0.00113	J4	< 0.00107	J3 J4	< 0.0011	J4	< 0.00109	J4	< 0.00116	J4	< 0.00111	J4	< 0.00107	J4	<0.00043		<0.00069		< 0.00109	J4	< 0.00111	J4
Trichlorofluoromethane	NL	NL	NL	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.0034		<0.0055		< 0.0273		< 0.00279	
Vinyl chloride	0.02	13	0.02	< 0.00313		< 0.00277		< 0.00282		< 0.00268	J3	< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00085		<0.0014		< 0.00273		< 0.00279	
o-xylene	0.26	500	1.6	< 0.00313		< 0.00277		< 0.00282		< 0.00268		< 0.00276		< 0.00273		< 0.00289		< 0.00278		< 0.00268		<0.00085		<0.0014		< 0.00273		< 0.00279	
m,p-xylene				< 0.00500		< 0.00444		< 0.00451		< 0.00429	J3	< 0.00441		< 0.00437		< 0.00463		< 0.00445		< 0.00429		<0.0017		<0.0028		< 0.00436		< 0.00446	

NOTES:
All values displayed in milligrams per kilograms (mg/kg) or parts per million (ppm).
"<" - Indicates compound was not detected above the indicated laboratory reported detection limit (RDL).
NL indicates not listed.
*indicates no Part 375 value, corresponding CP-51 Supplemental Soil Cleanup Objective is listed.
NT indicates sample not tested for specific compounds.
J indicates an estimated value. The Target analyte was below the quntitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
Yellow highlight indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objective (SCO)
Red font indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) CommercialUse SCO
Bold type indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) Protection of Groundwater SCO
J4: The associated batch QC was otuside the established quality control range for accuracy.
VOCs analyzed by USEPA Method 8260.
J4: The associated batch QC was otuside the established quality control range for accuracy.
Q: Sample was prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

Table 3A
Phase II Environmental Site Assessment
East Main & Laura Street, Rochester, NY
Summary of CP-51 Semi-Volatile Organic Compounds in Soil
LaBella Project # 2182815

Sample ID	NYCRR Part 375 Unrestricted Use SCOs	NYCRR Part 375 Commercial Use SCOs	NYCRR Part 375 Protection of Groundwater SCOs	SB-01		SB-02		SB-04		SB-05		SBGT-06		SB-08		C-1		C-2	
Sample Depth (ft bgs)				0.5-1		10-11		1-3		6-8		6-8		12.75-13.4		2.5-5		2.8-3	
Sample Date				10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		11/1/2018		10/18/2018		10/18/2018	
				Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
2,4-Dimethylphenol	NL	NL	NL	NT		NT		NT		NT		NT		NT		< 3.63	J0	< 0.371	J0
Acenaphthene	20	500	98	< 0.0364		< 0.0361		< 0.0382		< 0.0367		< 0.0354		< 0.150		< 0.36		< 0.0368	
Acenapthylene	100	500	107	< 0.0364		< 0.0361		< 0.0382		< 0.0367		< 0.0354		< 0.150		< 0.36		< 0.0368	
Anthracene	100	500	1000	0.043		< 0.0361		0.117		< 0.0367		< 0.0354		< 0.110		< 0.36		< 0.0368	
Benz(a)anthracene	1	5.6	1	0.255		< 0.0361		0.341		< 0.0367		< 0.0354		< 0.110		< 0.36		< 0.0368	
Benzo(a)pyrene	1	1	22	0.294		< 0.0361		0.346		< 0.0367		< 0.0354		< 0.150		< 0.36		< 0.0368	
Benzo(b)fluoranthene	1	5.6	1.7	0.434		< 0.0361		0.519		< 0.0367		< 0.0354		< 0.110		0.367		0.0432	
Benzo(g,h,i)perylene	100	500	1000	0.203		< 0.0361		0.216		< 0.0367		< 0.0354		< 0.150		< 0.36		< 0.0368	
Benzo(k)fluoranthene	0.8	56	1.7	0.106		< 0.0361		0.141		< 0.0367		< 0.0354		< 0.110		< 0.36		< 0.0368	
Chrysene	1	56	1	0.256		< 0.0361		0.4		< 0.0367		< 0.0354		< 0.110		< 0.36		< 0.0368	
Dibenz(a,h)anthracene	0.33	0.56	1000	< 0.0364		< 0.0361		0.0555		< 0.0367		< 0.0354		< 0.110		< 0.36		< 0.0368	
Fluoranthene	100	500	1000	0.614		< 0.0361		0.911		< 0.0367		< 0.0354		< 0.110		0.653		0.0478	
Fluorene	30	500	386	< 0.0364		< 0.0361		< 0.0382		< 0.0367		< 0.0354		< 0.190		< 0.36		< 0.0368	
Hexachlorocyclopentadiene	NL	NL	NL	NT		NT		NT		NT		NT		< 0.540		< 3.63	J0	< 0.371	J0
Indeno(1,2,3-cd)pyrene	0.5	5.6	8.2	0.173		< 0.0361		0.188		< 0.0367		< 0.0354		< 0.150		< 0.36		< 0.0368	
Naphthalene	12	500	12	< 0.0364		< 0.0361		< 0.0382		< 0.0367		< 0.0354		< 0.190		< 0.36		< 0.0368	
Phenanthrene	100	500	1000	0.258		< 0.0361		0.431		< 0.0367		< 0.0354		< 0.110		NT		NT	
Pyrene	100	500	1000	0.457		< 0.0361		0.668		< 0.0367		< 0.0354		< 0.110		0.388		< 0.0368	

NOTES:
All values displayed in milligrams per kilograms (mg/kg) or parts per million (ppm)
"<" - Indicates compound was not detected above the indicated laboratory reported detection limit (RDL).
NL indicates not listed
*indicates no Part 375 value, corresponding CP-51 Supplemental Soil Cleanup Objective is listed
NT indicates sample not tested for specific compounds.
J indicates an estimated value. The Target analyte was below the quntitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
Yellow highlight indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objective (SCO)
Red font indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) CommercialUse SCO
Bold type indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) Protection of Groundwater SCO
J0: The assocaited batch QC was outside the established quality control range for precision.
SVOCs analyzed by USEPA Method 8270

Table 3B
Phase II Environmental Site Assessment
East Main & Laura Street, Rochester, NY
Summary of TCL and CP-51 Semi-Volatile Organic Compounds in Surface Soil
LaBella Project # 2182815

Sample ID	NYCRR Part 375 Unrestricted Use SCOs	NYCRR Part 375 Commercial Use SCOs	NYCRR Part 375 Protection of Groundwater SCOs	SS-01		SS-02		SS-03		SS-04	
Sample Depth (ft bgs)				0-0.5		0-0.3		0-1.0		0-0.5	
Sample Date				10/22/2018		10/22/2018		10/22/2018		10/22/2018	
				Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,2,4,5-TETRACHLOROBENZENE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
2,4,5-TRICHLOROPHENOL	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
2,4,6-TRICHLOROPHENOL	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
2,4-DICHLOROPHENOL	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
2,4-DIMETHYLPHENOL	NL	NL	NL	< 2.09	J0	< 1.85	J0	< 1.88	J0	< 1.79	J0
2,4-DINITROPHENOL	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
2,4-DINITROTOLUENE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
2,6-DINITROTOLUENE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
2-CHLORONAPHTHALENE	NL	NL	NL	< 0.206		< 0.183		< 0.186		< 0.177	
2-CHLOROPHENOL	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
2-METHYLNAPHTHALENE	NL	NL	NL	< 0.206		< 0.183		< 0.186		< 0.177	
2-METHYLPHENOL	0.33	500	0.33	< 2.09		< 1.85		< 1.88		< 1.79	
2-NITROANILINE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
2-NITROPHENOL	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
3&4-METHYL PHENOL	0.33	500	0.33	< 2.09		< 1.85		< 1.88		< 1.79	
3,3-DICHLOROBENZIDINE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
3-NITROANILINE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
4,6-DINITRO-2-METHYLPHENOL	NL	NL	NL	< 2.09		< 1.85		<1.88		< 1.79	
4-BROMOPHENYL-PHENYLETHER	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
4-CHLORO-3-METHYLPHENOL	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
4-CHLOROANILINE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
4-CHLOROPHENYL-PHENYLETHER	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
4-NITROANILINE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
4-NITROPHENOL	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
ACENAPHTHENE	20	500	98	< 0.206		< 0.183		< 0.186		< 0.177	
ACENAPHTHYLENE	100	500	107	< 0.206		< 0.183		< 0.186		< 0.177	
ACETOPHENONE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
ANTHRACENE	100	500	1000	< 0.206		< 0.183		< 0.186		< 0.177	
ATRAZINE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
BENZALDEHYDE	NL	NL	NL	< 2.09	J3	< 1.85	J3	< 1.88	J3	< 1.79	J3
BENZO(A)ANTHRACENE	1	5.6	1	0.7		0.4		0.4		0.5	
BENZO(A)PYRENE	1	1	22	0.7		0.4		0.4		0.5	
BENZO(B)FLUORANTHENE	1	5.6	1.7	1.1		0.6		0.6		0.7	
BENZO(G,H,I)PERYLENE	100	500	1000	0.4		0.2		0.2		0.2	
BENZO(K)FLUORANTHENE	0.8	56	1.7	0.3		0.2		0.2		0.2	
BENZYLBUTYL PHTHALATE	NL	NL	NL	< 2.09		< 1.85		< 1.88		<1.79	
BIPHENYL	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
BIS(2-CHLORETHOXY)METHANE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
BIS(2-CHLOROETHYL)ETHER	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
BIS(2-CHLOROISOPROPYL)ETHER	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
BIS(2-ETHYLHEXYL)PHTHALATE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
CAPROLACTAM	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
CARBAZOLE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
CHRYSENE	1	56	1	0.8		0.4		0.5		0.5	
DIBENZ(A,H)ANTHRACENE	0.33	0.56	1000	< 0.206		< 0.183		< 0.186		< 0.177	
DIBENZOFURAN	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
DIETHYL PHTHALATE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
DIMETHYL PHTHALATE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
DI-N-BUTYL PHTHALATE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
DI-N-OCTYL PHTHALATE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
FLUORANTHENE	100	500	1000	1.6		1.0		1.0		1.0	
FLUORENE	30	500	386	< 0.206		< 0.183		< 0.186		< 0.177	
HEXACHLORO-1,3-BUTADIENE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
HEXACHLOROBENZENE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
HEXACHLOROCYCLOPENTADIENE	NL	NL	NL	< 2.09	J0	< 1.85	J0	< 1.88	J0	< 1.79	J0
HEXACHLOROETHANE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
INDENO(1,2,3-CD)PYRENE	0.5	5.6	8.2	0.4		0.2		0.2		0.2	
ISOPHORONE	NL	NL	NL	<2.09		< 1.85		< 1.88		< 1.79	
NAPHTHALENE	12	500	12	< 0.206		< 0.183		< 0.186		< 0.177	
NITROBENZENE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
N-NITROSODI-N-PROPYLAMINE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
N-NITROSODIPHENYLAMINE	NL	NL	NL	< 2.09		< 1.85		< 1.88		< 1.79	
PENTACHLOROPHENOL	0.8	500	1000	< 2.09		< 1.85		< 1.88		< 1.79	
PHENANTHRENE	100	500	1000	0.6		0.4		0.4		0.5	
PHENOL	0.33	500	0.33	< 2.09		< 1.85		< 1.88		< 1.79	
PYRENE	100	500	1000	1.2		0.7		0.7		0.8	

NOTES:
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"<" - Indicates compound was not detected above the indicated laboratory reported detection limit (RDL).
NL indicates not listed
*indicates no Part 375 value, corresponding CP-51 Supplemental Soil Cleanup Objective is listed
NT indicates sample not tested for specific compounds.
J indicates an estimated value. The Target analyte was below the quntitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
Yellow highlight indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objective (SCO)
Red font indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) CommercialUse SCO
Bold type indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) Protection of Groundwater SCO
J0: The assocaited batch QC was outside the established quality control range for precision.
SVOCs analyzed by USEPA Method 8270

Table 4
Phase II Environmental Site Assessment
East Main & Laura Street, Rochester, NY
Summary of Pesticides in Soil
LaBella Project # 2182815

Sample ID	NYCRR Part 375 Unrestricted Use SCOs	NYCRR Part 375 Commercial Use SCOs	NYCRR Part 375 Protection of Groundwater SCOs	SS-01		SS-02		SS-03		SS-04	
Sample Depth (ft bgs)				0-0.5		0-0.3		0-1.0		0-0.5	
Sample Date				10/22/2018		10/22/2018		10/22/2018		10/22/2018	
				Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
ALDRIN	0.005	0.68	0.19	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
ALPHA BHC	0.02	3.4	0.02	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
BETA BHC	0.036	3	0.09	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
DELTA BHC	0.04	500	0.25	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
GAMMA BHC	NL	NL	NL	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
CHLORDANE	0.094	24	2.9	< 0.250		< 0.222		< 0.225		< 0.214	P
4,4-DDD	0.0033	92	14	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
4,4-DDE	0.0033	62	17	< 0.0250		< 0.0222	P	< 0.0225	P	0.0257	
4,4-DDT	0.0033	47	136	< 0.0250		< 0.0222		< 0.0225		0.0245	
DIELDRIN	0.005	1.4	0.1	< 0.0250		< 0.0222	P	< 0.0225		< 0.0214	
ENDOSULFAN I	2.4	200	102	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
ENDOSULFAN II	2.4	200	102	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
ENDOSULFAN SULFATE	2.4	200	1000	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
ENDRIN	0.014	89	0.06	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
ENDRIN ALDEHYDE	NL	NL	NL	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
ENDRIN KETONE	NL	NL	NL	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
HEPTACHLOR	0.042	15	0.38	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
HEPTACHLOR EPOXIDE	NL	NL	NL	< 0.0250		< 0.0222		< 0.0225		< 0.0214	P
HEXACHLOROBENZENE	NL	NL	NL	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
METHOXYCHLOR	NL	NL	NL	< 0.0250		< 0.0222		< 0.0225		< 0.0214	
TOXAPHENE	NL	NL	NL	< 0.500		< 0.444		< 0.451		< 0.429	

NOTES:
All values displayed in milligrams per kilograms (mg/kg) or parts per million (ppm)
"<" - Indicates compound was not detected above the indicated laboratory reported detection limit (RDL).
NL indicates not listed
*indicates no Part 375 value, corresponding CP-51 Supplemental Soil Cleanup Objective is listed
NT indicates sample not tested for specific compounds.
J indicates an estimated value. The Target analyte was below the quntitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
Yellow highlight indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objective (SCO)
Red font indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) CommercialUse SCO
Bold type indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) Protection of Groundwater SCO
J0: The assocaited batch QC was outside the established quality control range for precision.
Pesticides analyzed by USEPA Method 8081

Table 5
Phase II Environmental Site Assessment
East Main & Laura Street, Rochester, NY
Summary of Polychlorinated Biphenyls in Soil
LaBella Project # 2182815

Sample ID	NYCRR Part 375 Unrestricted Use SCOs	NYCRR Part 375 Commercial Use SCOs	NYCRR Part 375 Protection of Groundwater SCOs	SS-01		SS-02		SS-03		SS-04		SB-01		SB-02		SBGT-06		SB-08		C-1		C-2	
Sample Depth (ft bgs)				0-0.5		0-0.3		0-1.0		0-0.5		0.5-1		10-11		6-8		0.75-1.25		2.5-5		2.8-3	
Sample Date				10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		10/22/2018		11/1/2018		10/18/20108		10/18/2018	
				Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
PCB 1016	TOTALS ONLY	TOTALS ONLY	TOTALS ONLY	< 0.0213		< 0.0189		< 0.0192		< 0.0182		< 0.0187		< 0.0186		< 0.0182		<0.0346		< 0.0185		< 0.0189	
PCB 1221				< 0.0213		< 0.0189		< 0.0192		< 0.0182		< 0.0187		< 0.0186		< 0.0182		<0.0346		< 0.0185		< 0.0189	
PCB 1232				< 0.0213		< 0.0189		< 0.0192		< 0.0182		< 0.0187		< 0.0186		< 0.0182		<0.0346		< 0.0185		< 0.0189	
PCB 1242				< 0.0213		< 0.0189		< 0.0192		< 0.0182		< 0.0187		< 0.0186		< 0.0182		<0.0346		< 0.0185		< 0.0189	
PCB 1248				< 0.0213		< 0.0189		< 0.0192		< 0.0182		< 0.0187		< 0.0186		< 0.0182		<0.0346		< 0.0185		< 0.0189	
PCB 1254				< 0.0213		< 0.0189		< 0.0192		< 0.0182		< 0.0187		< 0.0186		< 0.0182		<0.0346		< 0.0185		< 0.0189	
PCB 1260				< 0.0213		< 0.0189		< 0.0192		< 0.0182		< 0.0187		< 0.0186		< 0.0182		<0.0346		< 0.0185		< 0.0189	
Total PCBs	0.1	1	3.2	< 0.0213		< 0.0189		< 0.0192		< 0.0182		< 0.0187		< 0.0186		< 0.0182		<0.0346		< 0.0185		< 0.0189	

NOTES:
All values displayed in milligrams per kilograms (mg/kg) or parts per million (ppm)
"<" - Indicates compound was not detected above the indicated laboratory reported detection limit (RDL).
NL indicates not listed
*indicates no Part 375 value, corresponding CP-51 Supplemental Soil Cleanup Objective is listed
NT indicates sample not tested for specific analyte.
J indicates an estimated value. The Target analyte was below the quntitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
Yellow highlight indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(a) Unrestricted Use Soil Cleanup Objective (SCO)
Red font indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) CommercialUse SCO
Bold text indicates that the compound was detected at a concentration above its respective NYCRR Part 375-6.8(b) Protection of Groundwater SCO
PCBs analyzed by USEPA Method 8082

Table 6
Phase II Environmental Site Assessment
East Main & Laura Street, Rochester, NY
Summary of RCRA Metals in Groundwater
LaBella Project # 2182815

Sample ID	NYSDEC TOGS 1.1.1 AWQS	BW-01	
Sample Depth (ft bgs)			
Sample Date		10/22/2018	
		Result	Qualifier
Method 6020B			
Arsenic	25	0.26	J
Barium	1000	92.08	
Cadmium	5.0	0.07	J
Chromium, trivalent	50	0.53	J
Lead	25	0.46	J
Selenium	10	< 1.73	
Silver	50	< 0.16	
Method 7470B			
Mercury	0.70	< 0.06	

NOTES:

All values displayed in micrograms per liter (ug/l) or parts per billion (ppb)

"<" - Indicates compound was not detected above the indicated laboratory method detection limit (MDL).

NL indicates not listed

J indicates an estimated value. The Target analyte was below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.

Yellow highlight indicates that the compound was detected at a concentration above its respective NYSDEC TOGS 1.1.1 AWQ Standard or Guidance Value

Metals analyzed by USEPA Method 6020B

Mercury analyzed by USEPA Method 7470B.

B: The same analyte is found in the associated blank.

Table 7
Phase II Environmental Site Assessment
East Main & Laura Street, Rochester, NY
Summary of TCL and CP-51 Volatile Organic Compounds in Groundwater
LaBella Project # 2182815

Sample ID	NYSDEC TOGS 1.1.1 AWQS	BW-01	
Sample Depth (ft bgs)			
Sample Date		10/22/2018	
		Result	Qualifier
1,1,1-Trichloroethane	5	<0.7	
1,1,2,2-Tetrachloroethane	5	< 0.17	
1,1,2-Trichloroethane	1	< 0.5	
1,1,2-Trichlorotrifluoroethane (freon 113)	NL	< 0.7	
1,1-Dichloroethane	5	< 0.7	
1,1-Dichloroethene	5	< 0.17	
1,2,4-Trichlorobenzene	5	< 0.7	
1,2,4-Trimethylbenzene	5	< 0.7	
1,2-Dibromo-3-Chloropropane	0.04	< 0.7	
1,2-Dibromoethane	0.6	< 0.65	
1,2-Dichlorobenzene	5	< 0.7	
1,2-Dichloroethane	0.6	< 0.13	
1,2-Dichloropropane	1	< 0.14	
1,3,5-Trimethylbenzene	5	< 0.7	
1,3-Dichlorobenzene	3	< 0.7	
1,4-Dichlorobenzene	3	< 0.7	
2-Hexanone	50	< 1	
4-Methyl-2-Pentanone (MIBK)	NL	< 1	
Acetone	50	< 1.5	
Benzene	1	< 0.16	
Bromodichloromethane	50	< 0.19	
Bromoform	50	< 0.65	
Bromomethane	5	< 0.7	
Carbon Disulfide	60	< 1	
Carbon tetrachloride	5	< 0.13	
Chlorobenzene	5	< 0.7	
Chlorodibromomethane	NL	< 0.15	
Chloroethane	5	< 0.7	
Chloroform	7	< 0.7	
Chloromethane	NL	< 0.7	
cis -1,2-Dichloroethene	5	< 0.7	
cis-1,3-Dichloropropene	0.4	< 0.14	
Cyclohexane	NL	< 0.27	
Dichlorodifluoromethane	5	< 1	
Ethylbenzene	5	< 0.7	
Isopropylbenzene	5	< 0.7	
Methyl Acetate	NL	< 0.23	
Methyl Cyclohexane	NL	< 0.4	
Methyl ethyl ketone (2-butanone)	50	< 1.9	
Methyl tert-butyl ether	10	< 0.7	
Methylene chloride	5	< 0.7	
n - Propylbenzene	5	< 0.7	
Naphthalene	10	< 0.7	
n-Butylbenzene	5	< 0.7	
p-Isopropyltoluene	5	< 0.7	
sec-Butylbenzene	5	< 0.7	
Styrene	5	< 0.7	
tert-Butylbenzene	5	< 0.7	
Tetrachloroethene	5	< 0.18	
Toluene	5	< 0.7	
trans-1,2-Dichloroethene	5	< 0.7	
trans-1,3-Dichloropropene	0.4	< 0.16	
Trichloroethene	5	< 0.18	
Trichlorofluoromethane	5	< 0.7	
Vinyl chloride	2	< 0.07	
o-xylene	5	< 0.7	
m,p-xylene		< 0.7	

NOTES:
All values displayed in micrograms per liter (ug/l) or parts per billion (ppb).
"<" - Indicates compound was not detected above the indicated laboratory method detection limit (MDL).
NL indicates not listed.
J indicates an estimated value. The Target analyte was below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
Yellow highlight indicates that the compound was detected at a concentration above its respective NYSDEC TOGS 1.1.1 AWQ Standard or Guidance Value
VOCs analyzed by USEPA Method 8260C.

Table 8
Phase II Environmental Site Assessment
East Main & Laura Street, Rochester, NY
Summary of CP-51 Semi-Volatile Organic Compounds in Groundwater
LaBella Project # 2182815

Sample ID	NYSDEC TOGS 1.1.1 AWQS	BW-01	
Sample Depth (ft bgs)			
Sample Date		10/22/2018	
		Result	Qualifier
Acenaphthene	20	< 0.04	
Acenapthylene	NL	< 0.04	
Anthracene	50	< 0.04	
Benz(a)anthracene	0.002	< 0.02	
Benzo(a)pyrene	ND	< 0.04	
Benzo(b)fluoranthene	0.002	< 0.02	
Benzo(g,h,i)perylene	NL	< 0.04	
Benzo(k)fluoranthene	0.002	< 0.04	
Chrysene	0.002	< 0.04	
Dibenz(a,h)anthracene	NL	< 0.04	
Fluoranthene	50	< 0.04	
Fluorene	50	< 0.04	
Indeno(1,2,3-cd)pyrene	0.002	< 0.04	
Phenanthrene	50	< 0.02	
Pyrene	50	< 0.04	

NOTES:
All values displayed in micrograms per liter (ug/l) or parts per billion (ppb)
"<" - Indicates compound was not detected above the indicated laboratory method detection limit (MDL).
NL indicates not listed
J indicates an estimated value. The Target analyte was below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses.
Yellow highlight indicates that the compound was detected at a concentration above its respective NYSDEC TOGS 1.1.1 AWQ Standard or Guidance Value
SVOCs analyzed by USEPA Method 8270D-SIM

APPENDIX 1

Field Logs

LaBella
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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Various East Main & Laura Street Properties
Location:
1200 East Main Street & Laura Street
Rochester, NY 14609

TEST PIT: TP-09
SHEET 1 OF 1
JOB: 2182815
CHKD BY: DN
DATE: 10/18/2018

CONTRACTOR: LaBella Environmetal, LLC
OPERATOR: Pete Spagnola
LABELLA REPRESENTATIVE: Mike Marrash

TEST PIT LOCATION: See figure.
GROUND SURFACE ELEVATION NA
DATUM: NA
TYPE OF EQUIPMENT: Excavator

DEPTH (FEET)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0		0	Topsoil, dark, dry, no odor, organics.	0.0	1.5" topsoil
1					
		1.5	Fill, medium subangular rock and gravel. Some foundation block.	0.0	
2			Brick, some silt, some sand.		
		2.5	Brick, large debris, C&D, block, building materials, some silt.	0.0	
3					
			As above.	0.0	
4					
5		5.3	As above.	0.0	
6			Footer at 5.3' and refusal.		
7					
8					
9					
10					
11					
12					
13					
14					
15					

WATER LEVEL DATA		
DATE	TIME	ELAPSED TIME
NA	NA	NA

DEPTH (FT)	
BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED
5.3' ft bgs	No

Notes:
approximately 75% C&D by weight.
Samples from 2.5' and 4.5'

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface
NA = Not Applicable

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

LaBella
Powered by partnership.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Various East Main & Laura Street Properties
Location:
1200 East Main Street & Laura Street
Rochester, NY 14609

TEST PIT: TP-10
SHEET 1 OF 1
JOB: 2182815
CHKD BY: DN
DATE: 10/18/2018

CONTRACTOR: LaBella Environmetal, LLC
OPERATOR: Pete Spagnola
LABELLA REPRESENTATIVE: Mike Marrash

TEST PIT LOCATION: See figure.
GROUND SURFACE ELEVATION NA

DATUM: NA
TYPE OF EQUIPMENT: Excavator

DEPTH (FEET)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0		0	Topsoil, organics.	0.0	3" topsoil.
		3"	Fill, some brick, some asphalt, medium subangular gravel.	0.0	
1					
		1.5	Darker silt and sand, medium coarse, more asphalt, no odor.	0.0	
2					
		2.5	Signifcant asphalt, no odor, darker fill, no staining.	0.0	
3					
4		4	Some silt, some coarse sand, light brown, no odor, dry.	0.0	
		4.4	Bottom of fill, no asphalt, no brick, no odor, no staining.	0.0	
5					
6			As above.	0.0	
7		7	Refusal.	0.0	
8					
9					
10					
11					
12					
13					
14					
15					

WATER LEVEL DATA		
DATE	TIME	ELAPSED TIME
NA	NA	NA

DEPTH (FT)	
BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED
7' ft bgs	No

Notes:
Samples from 2.5' and 5'

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface
NA = Not Applicable

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Various East Main & Laura Street Properties
Location:
1200 East Main Street & Laura Street
Rochester, NY 14609

TEST PIT: TP-11
SHEET 1 OF 1
JOB: 2182815
CHKD BY: DN
DATE: 10/18/2018

CONTRACTOR: LaBella Environmetal, LLC
OPERATOR: Pete Spagnola
LABELLA REPRESENTATIVE: Mike Marrash

TEST PIT LOCATION: See figure.
GROUND SURFACE ELEVATION NA

DATUM: NA
TYPE OF EQUIPMENT: Excavator

DEPTH (FEET)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0		0	Toposoil, organics.	0.0	2" topsoil
		2"	Fill, minor subangular gravel, silt, some medium coarse sand.	0.0	
1					
			As above.	0.0	
2					
3		3	Some sand some silt, light brown, dry, minor subangular gravel.	0.0	
4					
			As above.	0.0	
5					
6					
		6.6	Refusal.	0.0	
7					
8					
9					
10					
11					
12					
13					
14					
15					

WATER LEVEL DATA		
DATE	TIME	ELAPSED TIME
NA	NA	NA

DEPTH (FT)	
BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED
6.6' ft bgs	No

Notes:
Sample at 2.8'

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface
NA = Not Applicable

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Various East Main & Laura Street Properties
Location:
1200 East Main Street & Laura Street
Rochester, NY 14609

TEST PIT: TP-12
SHEET 1 OF 1
JOB: 2182815
CHKD BY: DN
DATE: 10/18/2018

CONTRACTOR: LaBella Environmetal, LLC
OPERATOR: Pete Spagnola
LABELLA REPRESENTATIVE: Mike Marrash

TEST PIT LOCATION: See figure.
GROUND SURFACE ELEVATION NA
DATUM: NA
TYPE OF EQUIPMENT: Excavator

DEPTH (FEET)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0		0	Toposoil, organics.	0.0	2" topsoil
		2"	Fill, bricks, large stone, some silt, light brown, dry.	0.0	
1					
		1.5	As above, larger gravel and stone.	0.0	
2					
3					
4					
		4.1	Former basement slab, approximately 2" thick. No odor.	0.0	
5		4.3	Light brown, fine silt, some sand, less gravel, minor subrounded gravel.		
6		5.9	Refusal.	0.0	
7					
8					
9					
10					
11					
12					
13					
14					
15					

WATER LEVEL DATA		
DATE	TIME	ELAPSED TIME
NA	NA	NA

DEPTH (FT)	
BOTTOM OF TEST PIT	GROUNDWATER ENCOUNTERED
5.9' ft bgs	No

Notes:
Sample at 3'

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface
NA = Not Applicable

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING: SB-01
SHEET 1 OF 1
JOB: 2182882
CHKD BY: DN
DATE: 10/22/2018

CONTRACTOR:	LaBella Env. LLC	BORING LOCATION:		TIME:	1330 TO 1352
DRILLER:	DH	GROUND SURFACE ELEVATION	NA	DATUM:	NA
LABELLA REPRESENTATIVI	MM	START DATE: 10/22/18	END DATE: 10/22/18	WEATHER:	Cloudy

TYPE OF DRILL RIG: Geoprobe 6620DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE: Macrocore
INSIDE DIAMETER: 2"
OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	19	0-5	0	Topsoil.	0.0	3" topsoil
			3"	Some cinders, dark, no odor, some minor subangular gravel.	0.0	
1			1	Light brown silt, minor subangular gravel, some ash, no odor, no staining.	0.0	
			1.7	light brown silt, transitioning to darker silt, no odor, minor gravel. No cinders/ash.	0.0	
2						
3						
4						
5	40	5-10		As above.	0.0	
6			6	Tightly packed silt, no odor, little gravel, no staining.	0.0	
7						
8						
9				As above.	0.0	
10	24	10-15				
11				As above.	0.0	
12						
13			13.1	Refusal.	0.0	
14						
15						
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	Samples from 0.5-1' and 10'
NA	NA	NA	NA	13.1	No	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface	and = 35 - 50%	C = Coarse	R = Rounded
NA = Not Applicable	some = 20 - 35%	M = Medium	A = Angular
	little = 10 - 20%	F = Fine	SR = Subrounded
	trace = 1 - 10%	VF = Very Fine	SA = Subangular

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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING: SB-02
SHEET 1 OF 1
JOB: 2182882
CHKD BY: DN
DATE: 10/22/2018

CONTRACTOR:	LaBella Env. LLC	BORING LOCATION:			TIME:	1358 TO 1422
DRILLER:	DH	GROUND SURFACE ELEVATION		NA	DATUM:	NA
LABELLA REPRESENTATIVI	MM	START DATE:	10/22/18	END DATE: 10/22/18	WEATHER:	Cloudy

TYPE OF DRILL RIG: Geoprobe 6620DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE: Macrocore
INSIDE DIAMETER: 2"
OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	32		0	Topsoil, organics.	0.0	3" topsoil
1			1	Some dark silt, no odor, no staining, minor subangular gravel. Dry.	0.0	
			1.7	Some sand, medium coarse, brown, no odor, less gravel.	0.0	
2			2	Cinders, no odor, no staining, dark silt. Dry.	0.0	
			2.4	Cement dust, light gray, no odor, minor subangular gravel. Dry.	0.0	
3						
4						
5	54		5	Mixed silt and some sand, dark brown. No odor, no staining, dry.	0.0	
6						
			6.6	Cement, gravel, gray, no odor, dry. Subangular gravel.	0.0	
7						
			7.4	Light brown, tightly packed silt, less gravel, dry, no odor.	0.0	
8						
9						
10	38		10	Loosely packed silt, minor subangular gravel, dry. No odor, no staining. Light brown.	0.0	
11						
12			12.8	Refusal 12.8'	0.0	
13						
14						
15						
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	12.8	No	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface	and = 35 - 50%	C = Coarse	R = Rounded
NA = Not Applicable	some = 20 - 35%	M = Medium	A = Angular
	little = 10 - 20%	F = Fine	SR = Subrounded
	trace = 1 - 10%	VF = Very Fine	SA = Subangular

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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING: SB-03
SHEET 1 OF 1
JOB: 2182882
CHKD BY: DN
DATE: 10/22/2018

CONTRACTOR:	LaBella Env. LLC	BORING LOCATION:			TIME:	1430 TO 1457
DRILLER:	DH	GROUND SURFACE ELEVATION		NA	DATUM:	NA
LABELLA REPRESENTATIV	MM	START DATE:	10/22/18	END DATE: 10/22/18	WEATHER:	Cloudy

TYPE OF DRILL RIG: Geoprobe 6620DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE: Macrocore
INSIDE DIAMETER: 2"
OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	48		0	Dark, silt, some coarse sand, dark black, no odor, no staining.	0.0	3" topsoil
			0.75	Light brown silt, minor subangular gravel, no odoro, no staining.	0.0	
1						
2						
			2.4	Light brown silt, some sand, lossely packed, no odor, no staining, minor gravel.	0.0	
3			3	Tightly packed silt, coarse medium sand.	0.0	
4						
5	28			As above.	0.0	
6						
			6.6	Some large subangular gravel, no odor, no staining, Loosely packed, some cement.	0.0	
7						
8			8	Refusal 8'	0.0	
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	Samples 6-8'
NA	NA	NA	NA	8.0	No	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

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NA = Not Applicable

and = 35 - 50%
some = 20 - 35%
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trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING: SB-04
SHEET 1 OF 1
JOB: 2182882
CHKD BY: DN
DATE: 10/22/2018

CONTRACTOR:	LaBella Env. LLC	BORING LOCATION:			TIME:	1500 TO 1517
DRILLER:	DH	GROUND SURFACE ELEVATION		NA	DATUM:	NA
LABELLA REPRESENTATIVI	MM	START DATE:	10/22/18	END DATE: 10/22/18	WEATHER:	Cloudy

TYPE OF DRILL RIG: Geoprobe 6620DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE: Macrocore
INSIDE DIAMETER: 2"
OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	48		0	Dark organics, no staining, some silt.	0.0	3" topsoil
1			1.3	Loosely packed light brown silt, some medium coarse sand, no gravel, no odor.	0.0	
2						
3						
4			3.6	Tightly packed silt, as above.	0.0	
5	36		5	Light brown silt, no odor, no staining, less gravel.	0.0	
6						
7						
8				As above.	0.0	
9						
10	28					
11			11	Less gravel, light brown tightly packed silt, some coarse sand. No odor.	0.0	
12						
13			13	Minor subangular gravel, dry, no odor, no staining.	0.0	
14			14.8	Refusal 14.8	0.0	
15						
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	Samples 1-3'
NA	NA	NA	NA	14.8	No	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

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NA = Not Applicable

and = 35 - 50%
some = 20 - 35%
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trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

LaBella
Powered by partnership.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING: SB-05
SHEET 1 OF 1
JOB: 2182882
CHKD BY: DN
DATE: 10/22/2018

CONTRACTOR:	LaBella Env. LLC	BORING LOCATION:			TIME:	1523 TO 1538
DRILLER:	DH	GROUND SURFACE ELEVATION		NA	DATUM:	NA
LABELLA REPRESENTATIV	MM	START DATE:	10/22/18	END DATE: 10/22/18	WEATHER:	Cloudy

TYPE OF DRILL RIG: Geoprobe 6620DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE: Macrocore
INSIDE DIAMETER: 2"
OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	34		0	Organics, dark silt, no odor, topsoil.	0.0	
1			1	Light brown silt, tightly packed minor coarse sand. No odor, no staining.	0.0	
2						
3			2.3	More coarse sand, light brown silt/some sand. Some medium subangular gravel.	0.0	
4						
5	30					
6			5.7	Light brown sand, medium subangular gravel, tightly packed silt/some sand. No odor, no staining.	0.0	
7						
8			8	Refusal 8'	0.0	
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	Samples 6-8'
NA	NA	NA	NA	8.0	No	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface
NA = Not Applicable

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING: SBGT-06
SHEET 1 OF 1
JOB: 2182882
CHKD BY: DN
DATE: 10/22/2018

CONTRACTOR: LaBella Env. LLC
DRILLER: DH
LABELLA REPRESENTATIVI MM
BORING LOCATION:
GROUND SURFACE ELEVATION NA
START DATE: 10/22/18 END DATE: 10/22/18
TIME: 1544 TO 1610
DATUM: NA
WEATHER: Cloudy

TYPE OF DRILL RIG: Geoprobe 6620DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE: Macrocore
INSIDE DIAMETER: 2"
OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	8		0	Organics, no gravel, no odor, topsoil.	0.0	
1						
2	20		2	Sand, loosely packed, dark brown, dry, trace gravel. No odor.	0.0	
3						
			3.6	Light brown coarse sand, no odor, no gravel.	0.0	
4	16		4	Rock fragments, dry, no odor, larger subangular gravel, No staining.	0.0	
5						
6	24		6	As above.	0.0	
7						
8	16		8	Tightly packed silt, light brown trace sand, no odor, no gravel, dry.	0.0	
9						
10	24					
11			11.1	Refusal 11.1	0.0	
12						
13						
14						
15						
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	Samples 6-8'
NA	NA	NA	NA	11.1	No	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
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NA = Not Applicable

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some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

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M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING: SB-07
SHEET 1 OF 1
JOB: 2182815
CHKD BY: DN
DATE: 11/1/2018

CONTRACTOR:	NYEG Drilling	BORING LOCATION: see map		TIME:	TO
DRILLER:	Chris	GROUND SURFACE ELEVATION	NA	DATUM:	NA
LABELLA REPRESENTATIVE	ED/JP	START DATE: 11/1/18	END DATE: 11/1/18	WEATHER:	Cloudy, rain, 50s

TYPE OF DRILL RIG: Geoprobe 7720DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE: 5 ft Macrocore
INSIDE DIAMETER: 2"
OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0				0-0.5 ft: asphalt	0': 0	
				0.5-1.0 ft: mf angular gravel (asphalt base)		
1				@ 1.0 ft: dark brown SILT, little f Gravel (A to SA), little cinders, dry - fill	1': 0.6	
			1	@ 1.4 ft: pushed through 2" of stone		
2			1.5	@ 1.5 ft: light brown SILT and vf Sand, some cmf Gravel (SA), moist	2': 0.4	
	37" ↓					
3					3': 0.6	
4					4': 0	
5					5': 0	
6					6': 0	
7					7': 0	
	33" ↓					
8					8': 0	
9					9': 0	
				@ 9.5 ft: push through fragmented stone from 9.5-10.0 ft bgs; possible boulder		
10				@ 10.0 ft: as above	10': 0	
11					11': 0	
	21" ↓					
12					12': 0	
					12.5': 0	
13				12.5		
14				Total Depth = 12.5 ft bgs (refusal on presumed bedrock)		
15						
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	No samples submitted for analysis; no evidence of impairment observed other than cinder type fill materials at 1.0-1.5 ft bgs
NA	NA	NA	NA	12.5	No	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
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BGS = Below Ground Surface
NA = Not Applicable

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING: SB-08
SHEET 1 OF 1
JOB: 2182815
CHKD BY: DN
DATE: 11/1/2018

CONTRACTOR:	NYEG Drilling	BORING LOCATION: see map		TIME:	TO
DRILLER:	Chris	GROUND SURFACE ELEVATION	NA	DATUM:	NA
LABELLA REPRESENTATIVE	ED/JP	START DATE: 11/1/18	END DATE: 11/1/18	WEATHER:	Cloudy, rain, 50s

TYPE OF DRILL RIG: Geoprobe 7720DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE: 5 ft Macrocore
INSIDE DIAMETER: 2"
OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0				0-0.75 ft: asphalt and mf Gravel base (A)	0': 0	
1		1 - 0.75 to 1.25 ft	0.75	@ 0.75 ft: dark brown to black SILT, some cinders, little cmf Gravel (A to SA), dry - fill	1': 0	
2			1.25	@ 1.25 ft: light brown SILT, little vf Sand, little cmf Gravel, trace Clay, Fe mottling, moist	2': 0	
3	45" ↓				3': 0	
4				@4.0 ft: as above with some vf Sand, some cmf Gravel (SA)	4': 0	
5					5': 0	
6					6': 0	
7					7': 0	
8	31" ↓				8': 0	
9					9': 0	
10					10': 0	
11					11': 0	
12	24" ↓			@ 11.5 ft: 3" clay lense	12': 0	
13		2 - 12.75 to 13.4 ft		@ 12.75 ft: grey to black (discoloration) cmf Gravel (A to SA) and Silt, wet sewage-type odor; no sheen	13': 0.4 13.4': 0.2	
			12.75			
14				13.4		
15				Total depth = 13.4 ft bgs (refusal on presumed bedrock)		
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	Collect soil samples from 0.75-1.25 ft bgs & 12.75-13.4 ft bgs for analysis grey-black discoloration & sewage-type odor from 12.75-13.4 ft
NA	NA	NA	NA	13.4	No	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface	and = 35 - 50%	C = Coarse	R = Rounded
NA = Not Applicable	some = 20 - 35%	M = Medium	A = Angular
	little = 10 - 20%	F = Fine	SR = Subrounded
	trace = 1 - 10%	VF = Very Fine	SA = Subangular

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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING: BW-01
SHEET 1 OF 1
JOB: 2182815
CHKD BY: DN
DATE: 10/31/2018

CONTRACTOR:	NYEG Drilling	BORING LOCATION: see map			TIME:	TO
DRILLER:	Chris	GROUND SURFACE ELEVATION	NA		DATUM:	NA
LABELLA REPRESENTATIVE	ED/JP	START DATE:	10/31/18	END DATE: 10/31/18	WEATHER:	Cloudy, rain, 50s

TYPE OF DRILL RIG: CME 55 — DRIVE SAMPLER TYPE: 2 ft split spoon
AUGER SIZE AND TYPE: 6.25" HAS — INSIDE DIAMETER: 2"
OVERBURDEN SAMPLING METHOD: 140-lb autohammer — OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0				@ 0 ft: dark brown SILT, little vf Sand, trace glass and slag, moist - fill	0': 0	
1	19" ↓			@ 1.0 ft: light brown SILT, little vf Sand, little mf Gravel (A to SA), dry - fill	1': 0	
2			1		2': 0	
3	18" ↓				3': 0	
4				@ 4.5 ft: as above but medium dense	4': 0	
5	19.5" ↓				5': 0	
6				@ 5.5 ft: as above with little cmf Gravel, moist @ 6.25 ft: pushed through cobble/stone; 2" thick and fragmented	6': 0	
7	21" ↓		6.5	@ 6.5 ft: light brown vf SAND and Silt, little cmf Gravel, moist, dolomite-like rock fragment in cutting shoe	7': 0	
8				@ 8 ft: difficult augering; auger through boulder or weathered bedrock then into soil at approx. 8.5 ft	8': 0	
9	NA - augered through rock	1 - 8.5-9 ft bgs		@ +/- 9 ft: encounter presumed weathered bedrock; drive spoon from 9-9.4 ft	9': 0	
10	3" (50/0.4)		9	@ 9.2 ft: weathered dolomite-type rock in cutting shoe (2" thick)		
11				Total sampled depth = 9.4 ft bgs (spoon refusal in weathered rock) Total augered depth = 10.0 ft bgs (auger refusal on competent rock)		
12						
13						
14						
15						
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	no evidence of impairment collect soil sample from 8.5-9 ft bgs for lab analysis
NA	NA	NA	NA	10.0	No	Drillers set & grout 4" steel casing at 10 ft bgs for bedrock well BW-01 installation

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface	and = 35 - 50%	C = Coarse	R = Rounded
NA = Not Applicable	some = 20 - 35%	M = Medium	A = Angular
	little = 10 - 20%	F = Fine	SR = Subrounded
	trace = 1 - 10%	VF = Very Fine	SA = Subangular

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300 STATE STREET, ROCHESTER, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

PROJECT NAME: Phase II Environmental Site Assessment
LOCATION: 1238/1240 East Main Street, Rochester, NY

MONITORING WELL BW-01
SHEET 1 OF 2
JOB # 2182815
CHKD. BY:

CONTRACTOR: NYEG Drilling, Inc.
DRILLER: Chris/Joel
LABELLA REPRESENTATIVE: JP/DN

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
START DATE: 11/2/18 END DATE: 11/3/18

TYPE OF DRILL RIG: CME 55
AUGER SIZE AND TYPE: 6.25-inch HAS
OVERBURDEN SAMPLING METHOD: 2" Split spoon
ROCK DRILLING METHOD: NX Core Barrel, rotary drilling

WATER LEVEL DATA			
DATE	TIME	WATER	REMARKS

DEPTH	BLOW COUNT / 6"	SAMPLE INTERVAL (FT)	CORE RECOVERY	RQD (%)	VISUAL OBSERVATIONS	WELL INSTALLATION INFORMATION	PID (ppm)	NOTES
	4		19"	NA	@ 0 ft: dark brown SILT, little vf Sand, trace glass and slag, moist - fill			
1	5		↓	↓	@ 1.0 ft: light brown SILT, little vf Sand, little mf Gravel (A to SA), dry - fill			
	6							
2	6		18"					
	5		↓					
3	13							
	15							
4	10		19.5"					
	4		↓		@ 4.5 ft: as above but medium dense		0-8 ft: 0.0 ppm	
5	12							
	14				@ 5.5 ft: as above with little cmf Gravel, moist			
6	14		21"		@ 6.25 ft: pushed through cobble/stone; 2" thick and fragmented			
	15		↓		@ 6.5 ft: light brown vf SAND and Silt, little cmf Gravel, moist, dolomite-like rock			
7	17				fragment in cutting shoe			
	19							
8	14		NA		@ 8 ft: difficult augering; auger through boulder or weathered bedrock then into soil at approx.			
	NA		↓		8.5 ft			
9	↓				@ +/- 9 ft: encounter presumed weathered bedrock; drive spoon from 9-9.4 ft (spoon refusal)			
	50/0.4		3"		@ 9.2 ft: weathered dolomite in spoon and cutting shoe (3" thick)		9 ft: 10.2 ppm	
10	NA	Run 1	10-15'=62%	10-15'=49.2%	Run 1: 10-15 ft bgs: dolomite; medium light grey to medium grey; hard; fresh to light weathering;		bedrock/overburden interface	
	↓				laminar to parting bedding; very close to close fracturing; pitted to vug voids		at +/- 9 ft bgs	
11								
12								
13							Run 1 (10-15 ft): 0.0 ppm	
14					@ 14.1 ft: vug			
					@ 14.2 ft: moderate weathering of discontinuity (i.e. Fe staining)			
15		Run 2	15-20'=99%	15-20'=87.9%	@ 14.6 ft: moderate weathering of discontinuity (i.e. Fe staining)			
					Run 2: 15-20 ft bgs: dolomite; medium light grey to medium grey; hard to very hard; slighty to			
16					moderate weathering; laminar to parting bedding, close fracturing;itted to vug voids		Run 2(15-20 ft): 0.0 ppm	

NOTES: Augured through bedrock from approx. 9-10 ft bgs to form rock socket for 4" diam steel well casing.
No evidence of impairment observed during boring/well installation

GENERAL NOTES:

N LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

ADINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
CUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

BGS = Below Ground Surface
NA = Not Applicable

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300 STATE STREET, ROCHESTER, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

PROJECT NAME: Phase II Environmental Site Assessment
LOCATION: 1238/1240 East Main Street, Rochester, NY

MONITORING WELL BW-01
SHEET 2 OF 2
JOB # 2182815
CHKD. BY:

CONTRACTOR: NYEG Drilling, Inc.
DRILLER: Chris/Joel
LABELLA REPRESENTATIVE: JP, DN

BORING LOCATION
GROUND SURFACE ELEVATION
START DATE: 11/2/18

DATUM
END DATE: 11/3/18

TYPE OF DRILL RIG: CME 55
AUGER SIZE AND TYPE: 6.25-inch HAS
OVERBURDEN SAMPLING METHOD: 2" Split spoon
ROCK DRILLING METHOD: NX Core Barrel, rotary drilling

WATER LEVEL DATA

DATE	TIME	WATER	REMARKS
11/8/2018		approx 15' btoc	

DEPTH	BLOW COUNT / 6"	SAMPLE INTERVAL (FT)	CORE RECOVERY	RQD (%)	VISUAL OBSERVATIONS	WELL INSTALLATION INFORMATION	PID (ppm)	NOTES
	NA	Run 2	15-20'=99%	15-20'=87.9%	@ 15.1 ft: moderate weathering of discontinuity (i.e. Fe staining)		Run 2: 0.0 ppm	
17	↓	↓			@ 15.2 ft: vug with calcite crystals in void; at 15.4 ft: moderate weathering of discontinuity			
					moderate weathering of discontinuities observed at approx. 16.1 ft, 17.8 ft, 18.9 ft			
18								
19								
20		Run 3	20-25'=93%	20-25'=84.5%				
		↓			Run 3: 20-25 ft bgs: dolomite; medium light grey to medium grey; hard to very hard; slighty to			
21					moderate weathering; laminar bedding; close fracturing, pitted to vug voids			
22								
							Run 3: 0.0 ppm	
23					@ 22.9 ft; moderate wethering of discontinuity (staining)			
24								
25								
					25			
26								
					Total corehole depth = 25 ft bgs			
27								
28								
29							Run 1 (10-15 ft): 0.0 ppm	
30								
31								
32								

NOTES: No evidence of impairment observed in core; monitoring well BW-01 set at 24 ft (screen 24-14 ft, sandpack 24-11 ft, bentonite seal 11-9 ft, grout 9-1 ft)

GENERAL NOTES:

N LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

ADINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
CUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

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some = 20 - 35%
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trace = 1 - 10%

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F = Fine
VF = Very Fine

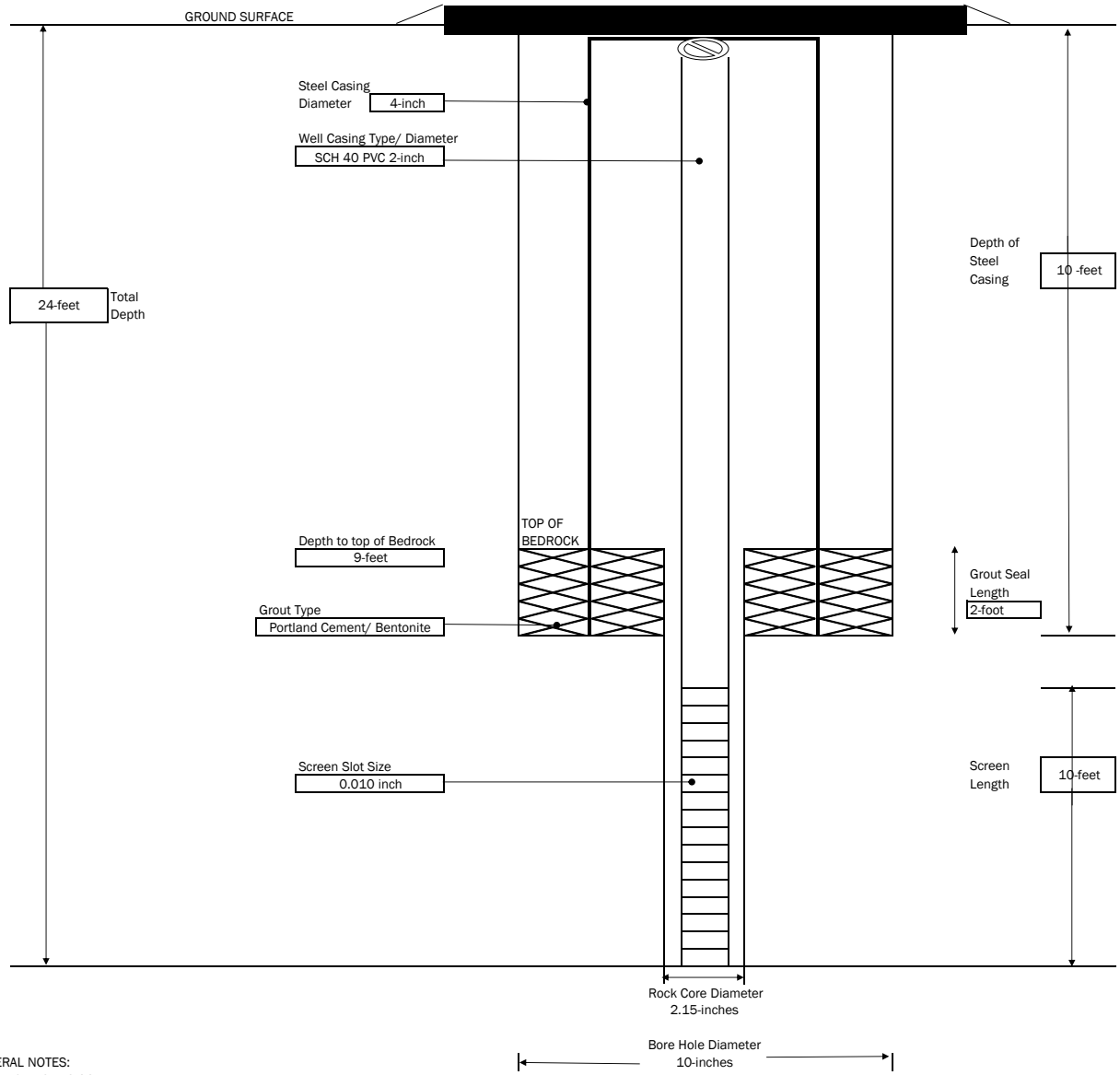
R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

BGS = Below Ground Surface
NA = Not Applicable

LaBella Powered by partnership. 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	**PROJECT** Phase II Environmental Site Assessment LOCATION: 1238/1240 East Main St., Rochester, NY	**MONITORING WELL :** **BW-01** **SHEET** 1 OF 1 **JOB #** 2182815

CONTRACTOR: NYEG Drilling Inc.	BORING LOCATION: see map	
DRILLER: Chris	GROUND SURFACE ELEVATION:	DATUM:
LABELLA REPRESENTATIVE: ED/JP	START DATE: 10/31/18	END DATE: 11/3/18

	WATER LEVEL DATA				
TYPE OF DRILL RIG: Truck mount CME 55	DATE	TIME	WATER	CASING	REMARKS
AUGER SIZE AND TYPE: 6.25" HSA					
OVERBURDEN SAMPLING METHOD: 2" split spoons					
ROCK DRILLING METHOD: NX Core Barrel					



GENERAL NOTES:

1) NOT TO SCALE
2) DEPTHS ARE APPROXIMATE
3) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCUR
4) BGS = BELOW GROUND SURFACE

LaBella
Powered by partnership.
300 STATE STREET, ROCHESTER, NY
PH: (585) 454-6110 FAX: (585) 454-3066

GROUNDWATER DEVELOPMENT FORM

WELL I.D. BW-01

Project Name: East Main & Laura Street Phase II ESA
Project No.: 2182815
Location: 1238-1240 E. Main St., Rochester, NY
Development By: J. Porter
Date: 11/8/2018
Weather: overcast, 45 degrees F

PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch
Static Water Level: 15.1 -Feet
Depth of Well: 24.00 -Feet
Single Well Volume: 1.45 -Gallons

PURGE & SAMPLING METHOD

☐ Bailer - Type:
☐ Pump - Type Water Spout submersible
Sampling Device:
Pump Rate: 1.5-2.0 gpm

FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)		Comments
							Color = clear
							LNAPL or DNAPL observed = No
							Odor: NO
							Sheen: NO

Total 100.00 Gallons Purged
Purge Start Time: 9:00
Purge End Time: 10:45

OBSERVATIONS:

Water quality measurements not collected during development; no sheen,odors or evidence of impairment observed during development

Well appeared to pump dry for approximately 3-5 seconds then would resume pumping for approximately 10-15 seconds; flow cycle continued throughout development.

Well Volume (1" well) = 0.0408-gal/ft.	Well Volume (4" well) = 0.65-gal/ft.
Well Volume (2" well) = 0.163-gal/ft.	

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300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: LBA-BW-01

Project Name: Various East Main Street & Laura Street Properties – Phase II ESA
Location: 1240 East Main Street, Rochester, NY
Project No.: 2182815
Sampled By: Sarah Logan
Date: 12/21/18
Weather: Overcast, 47 F

WELL SAMPLING INFORMATION

Well Diameter:	2”	Static Water Level:	15.55
Depth of Well:	24 ft bgs	Length of Well Screen:	10
Measuring Point:	TOC	Depth to Top of Pump:	20 ft btoc
Pump Type:	Geotech submersible bladder pump	Tubing Type:	¼” diam HDPE

FIELD PARAMETER MEASUREMENT

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O_2 (mg/L)	Redox (mV)	Alkalinity	Iron (II)	Comments
			+/- 0.1		+/- 3%		+ 10%	+/- 10 mV			
9:20	500 ml/min										
9:25	500 ml/min		6.93	13.1	1.603	3.7	2.75	169.7			DTW = 15.65
9:35	500 ml/min		6.91	13.1	1.598	2.0	2.87	163.1			DTW = 15.6
9:45	500 ml/min		6.89	13.1	1.597	3.0	2.87	159.5			DTW = 15.6
9:55	500 ml/min		6.88	13.1	1.595	3.2	2.85	156.5			DTW = 15.6
10:05	500 ml/min		6.87	13.1	1.594	3.3	2.81	153.6			DTW = 15.6
10:15	500 ml/min		6.88	13.1	1.593	3.4	2.82	150.6			DTW = 15.6
10:20	500 ml/min	7									Collect sample

Total 7 Gallons Purged

Purge Time Start: 9:20 Purge Time End: 10:20 Final Static Water Level: 15.60

OBSERVATIONS

Purge water clear, no sheen or other evidence of impairment

APPENDIX 2

Laboratory Reports

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 05, 2018

LaBella Associates, P.C.

Sample Delivery Group:	L1038877
Samples Received:	10/27/2018
Project Number:	2182815
Description:	East Main and Laura Street

Report To: Mr. Mike Marrash
300 State Street, Suite 201
Rochester, NY 14614

Entire Report Reviewed By:

T. Alan Harvill
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

C-1 L1038877-01 Solid

Collected by: Mike Marrash
Collected date/time: 10/18/18 12:00
Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189508	1	11/01/18 14:10	11/01/18 14:18	JD
Mercury by Method 7471B	WG1188180	1	10/30/18 13:00	10/31/18 14:32	ABL
Metals (ICP) by Method 6010C	WG1188132	1	10/30/18 11:29	11/01/18 09:38	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 12:01	10/31/18 11:32	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 12:01	11/04/18 13:38	JHH
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1189308	1	10/31/18 20:06	11/01/18 14:02	TD
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1189323	10	11/01/18 11:37	11/02/18 07:14	SNR

C-2 L1038877-02 Solid

Collected by: Mike Marrash
Collected date/time: 10/18/18 12:18
Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189508	1	11/01/18 14:10	11/01/18 14:18	JD
Mercury by Method 7471B	WG1188180	1	10/30/18 13:00	10/31/18 14:34	ABL
Metals (ICP) by Method 6010C	WG1188132	1	10/30/18 11:29	11/01/18 09:41	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 12:01	10/31/18 11:52	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 12:01	11/04/18 13:56	JHH
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1189308	1	10/31/18 20:06	11/01/18 14:15	TD
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1189323	1	11/01/18 11:37	11/02/18 04:10	SNR

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

T. Alan Harvill
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.7		1	11/01/2018 14:18	WG1189508

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	284		21.8	1	10/31/2018 14:32	WG1188180

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Aluminum	7440000		10900	1	11/01/2018 09:38	WG1188132
Antimony	ND		2180	1	11/01/2018 09:38	WG1188132
Arsenic	5560		2180	1	11/01/2018 09:38	WG1188132
Barium	300000		545	1	11/01/2018 09:38	WG1188132
Beryllium	363		218	1	11/01/2018 09:38	WG1188132
Cadmium	1440		545	1	11/01/2018 09:38	WG1188132
Calcium	40300000		109000	1	11/01/2018 09:38	WG1188132
Chromium	10600		1090	1	11/01/2018 09:38	WG1188132
Cobalt	4650		1090	1	11/01/2018 09:38	WG1188132
Copper	30800		2180	1	11/01/2018 09:38	WG1188132
Iron	15300000		10900	1	11/01/2018 09:38	WG1188132
Lead	355000		545	1	11/01/2018 09:38	WG1188132
Magnesium	11700000		109000	1	11/01/2018 09:38	WG1188132
Manganese	378000		1090	1	11/01/2018 09:38	WG1188132
Nickel	10500		2180	1	11/01/2018 09:38	WG1188132
Potassium	1180000		109000	1	11/01/2018 09:38	WG1188132
Selenium	ND		2180	1	11/01/2018 09:38	WG1188132
Silver	ND		1090	1	11/01/2018 09:38	WG1188132
Sodium	345000	B	109000	1	11/01/2018 09:38	WG1188132
Thallium	ND		2180	1	11/01/2018 09:38	WG1188132
Vanadium	15200		2180	1	11/01/2018 09:38	WG1188132
Zinc	271000		5450	1	11/01/2018 09:38	WG1188132

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		27.3	1	10/31/2018 11:32	WG1188986
Benzene	ND		1.09	1	10/31/2018 11:32	WG1188986
Bromochloromethane	ND		5.45	1	10/31/2018 11:32	WG1188986
Bromodichloromethane	ND		2.73	1	10/31/2018 11:32	WG1188986
Bromoform	ND		27.3	1	10/31/2018 11:32	WG1188986
Bromomethane	ND		13.6	1	10/31/2018 11:32	WG1188986
Carbon disulfide	ND		13.6	1	10/31/2018 11:32	WG1188986
Carbon tetrachloride	ND		5.45	1	10/31/2018 11:32	WG1188986
Chlorobenzene	ND		2.73	1	10/31/2018 11:32	WG1188986
Chlorodibromomethane	ND		2.73	1	10/31/2018 11:32	WG1188986
Chloroethane	ND		5.45	1	10/31/2018 11:32	WG1188986
Chloroform	ND		2.73	1	10/31/2018 11:32	WG1188986
Chloromethane	ND		13.6	1	10/31/2018 11:32	WG1188986
Cyclohexane	ND		2.73	1	10/31/2018 11:32	WG1188986
1,2-Dibromo-3-Chloropropane	ND		27.3	1	10/31/2018 11:32	WG1188986
1,2-Dibromoethane	ND	J4	2.73	1	10/31/2018 11:32	WG1188986
Dichlorodifluoromethane	ND	Q	2.73	1	11/04/2018 13:38	WG1191199
1,1-Dichloroethane	ND		2.73	1	10/31/2018 11:32	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		2.73	1	10/31/2018 11:32	WG1188986
1,2-Dichlorobenzene	ND		5.45	1	10/31/2018 11:32	WG1188986
1,3-Dichlorobenzene	ND		5.45	1	10/31/2018 11:32	WG1188986
1,4-Dichlorobenzene	ND		5.45	1	10/31/2018 11:32	WG1188986
1,1-Dichloroethene	ND		2.73	1	10/31/2018 11:32	WG1188986
cis-1,2-Dichloroethene	ND		2.73	1	10/31/2018 11:32	WG1188986
trans-1,2-Dichloroethene	ND		5.45	1	10/31/2018 11:32	WG1188986
1,2-Dichloropropane	ND	Q	5.45	1	11/04/2018 13:38	WG1191199
cis-1,3-Dichloropropene	ND		2.73	1	10/31/2018 11:32	WG1188986
trans-1,3-Dichloropropene	ND		5.45	1	10/31/2018 11:32	WG1188986
Ethylbenzene	ND		2.73	1	10/31/2018 11:32	WG1188986
2-Hexanone	ND		27.3	1	10/31/2018 11:32	WG1188986
Isopropylbenzene	ND		2.73	1	10/31/2018 11:32	WG1188986
2-Butanone (MEK)	ND	Q	27.3	1	11/04/2018 13:38	WG1191199
Methyl Acetate	ND		5.45	1	10/31/2018 11:32	WG1188986
Methyl Cyclohexane	ND		5.45	1	10/31/2018 11:32	WG1188986
Methylene Chloride	ND		27.3	1	10/31/2018 11:32	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		27.3	1	10/31/2018 11:32	WG1188986
Methyl tert-butyl ether	ND		1.09	1	10/31/2018 11:32	WG1188986
Naphthalene	ND		13.6	1	10/31/2018 11:32	WG1188986
Styrene	ND		13.6	1	10/31/2018 11:32	WG1188986
1,1,2,2-Tetrachloroethane	ND		2.73	1	10/31/2018 11:32	WG1188986
Tetrachloroethene	ND		2.73	1	10/31/2018 11:32	WG1188986
Toluene	ND		5.45	1	10/31/2018 11:32	WG1188986
1,2,3-Trichlorobenzene	ND		2.73	1	10/31/2018 11:32	WG1188986
1,2,4-Trichlorobenzene	ND		13.6	1	10/31/2018 11:32	WG1188986
1,1,1-Trichloroethane	ND		2.73	1	10/31/2018 11:32	WG1188986
1,1,2-Trichloroethane	ND		2.73	1	10/31/2018 11:32	WG1188986
Trichloroethene	ND	J4	1.09	1	10/31/2018 11:32	WG1188986
Trichlorofluoromethane	ND		2.73	1	10/31/2018 11:32	WG1188986
1,1,2-Trichlorotrifluoroethane	ND		2.73	1	10/31/2018 11:32	WG1188986
Vinyl chloride	ND		2.73	1	10/31/2018 11:32	WG1188986
o-Xylene	ND		2.73	1	10/31/2018 11:32	WG1188986
m&p-Xylenes	ND		4.36	1	10/31/2018 11:32	WG1188986
n-Butylbenzene	ND		13.6	1	10/31/2018 11:32	WG1188986
sec-Butylbenzene	ND		13.6	1	10/31/2018 11:32	WG1188986
tert-Butylbenzene	ND	J4	5.45	1	10/31/2018 11:32	WG1188986
p-Isopropyltoluene	ND		5.45	1	10/31/2018 11:32	WG1188986
n-Propylbenzene	ND		5.45	1	10/31/2018 11:32	WG1188986
1,2,4-Trimethylbenzene	ND		5.45	1	10/31/2018 11:32	WG1188986
1,3,5-Trimethylbenzene	ND		5.45	1	10/31/2018 11:32	WG1188986
(S) Toluene-d8	*107*		*75.0-131*		*10/31/2018 11:32*	WG1188986
(S) Toluene-d8	*97.3*		*75.0-131*		*11/04/2018 13:38*	WG1191199
(S) Dibromofluoromethane	*88.5*		*65.0-129*		*10/31/2018 11:32*	WG1188986
(S) Dibromofluoromethane	*119*		*65.0-129*		*11/04/2018 13:38*	WG1191199
(S) a,a,a-Trifluorotoluene	*102*		*80.0-120*		*10/31/2018 11:32*	WG1188986
(S) a,a,a-Trifluorotoluene	*99.9*		*80.0-120*		*11/04/2018 13:38*	WG1191199
(S) 4-Bromofluorobenzene	*94.9*		*67.0-138*		*10/31/2018 11:32*	WG1188986
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*11/04/2018 13:38*	WG1191199

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		18.5	1	11/01/2018 14:02	WG1189308
PCB 1221	ND		18.5	1	11/01/2018 14:02	WG1189308
PCB 1232	ND		18.5	1	11/01/2018 14:02	WG1189308
PCB 1242	ND		18.5	1	11/01/2018 14:02	WG1189308
PCB 1248	ND		18.5	1	11/01/2018 14:02	WG1189308
PCB 1254	ND		18.5	1	11/01/2018 14:02	WG1189308
PCB 1260	ND		18.5	1	11/01/2018 14:02	WG1189308
(S) Decachlorobiphenyl	*73.4*		*10.0-135*		*11/01/2018 14:02*	WG1189308
(S) Tetrachloro-m-xylene	*82.0*		*10.0-139*		*11/01/2018 14:02*	WG1189308

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		360	10	11/02/2018 07:14	WG1189323
Acenaphthylene	ND		360	10	11/02/2018 07:14	WG1189323
Acetophenone	ND		3630	10	11/02/2018 07:14	WG1189323
Anthracene	ND		360	10	11/02/2018 07:14	WG1189323
Atrazine	ND		3630	10	11/02/2018 07:14	WG1189323
Benzaldehyde	ND		3630	10	11/02/2018 07:14	WG1189323
Benzo(a)anthracene	ND		360	10	11/02/2018 07:14	WG1189323
Benzo(b)fluoranthene	367		360	10	11/02/2018 07:14	WG1189323
Benzo(k)fluoranthene	ND		360	10	11/02/2018 07:14	WG1189323
Benzo(g,h,i)perylene	ND		360	10	11/02/2018 07:14	WG1189323
Benzo(a)pyrene	ND		360	10	11/02/2018 07:14	WG1189323
Biphenyl	ND		3630	10	11/02/2018 07:14	WG1189323
Bis(2-chlorethoxy)methane	ND		3630	10	11/02/2018 07:14	WG1189323
Bis(2-chloroethyl)ether	ND		3630	10	11/02/2018 07:14	WG1189323
Bis(2-chloroisopropyl)ether	ND		3630	10	11/02/2018 07:14	WG1189323
4-Bromophenyl-phenylether	ND		3630	10	11/02/2018 07:14	WG1189323
Caprolactam	ND		3630	10	11/02/2018 07:14	WG1189323
Carbazole	ND		3630	10	11/02/2018 07:14	WG1189323
4-Chloroaniline	ND		3630	10	11/02/2018 07:14	WG1189323
2-Chloronaphthalene	ND		360	10	11/02/2018 07:14	WG1189323
4-Chlorophenyl-phenylether	ND		3630	10	11/02/2018 07:14	WG1189323
Chrysene	ND		360	10	11/02/2018 07:14	WG1189323
Dibenz(a,h)anthracene	ND		360	10	11/02/2018 07:14	WG1189323
Dibenzofuran	ND		3630	10	11/02/2018 07:14	WG1189323
3,3-Dichlorobenzidine	ND		3630	10	11/02/2018 07:14	WG1189323
2,4-Dinitrotoluene	ND		3630	10	11/02/2018 07:14	WG1189323
2,6-Dinitrotoluene	ND		3630	10	11/02/2018 07:14	WG1189323
Fluoranthene	653		360	10	11/02/2018 07:14	WG1189323
Fluorene	ND		360	10	11/02/2018 07:14	WG1189323
Hexachlorobenzene	ND		3630	10	11/02/2018 07:14	WG1189323
Hexachloro-1,3-butadiene	ND		3630	10	11/02/2018 07:14	WG1189323
Hexachlorocyclopentadiene	ND	J0	3630	10	11/02/2018 07:14	WG1189323
Hexachloroethane	ND		3630	10	11/02/2018 07:14	WG1189323
Indeno(1,2,3-cd)pyrene	ND		360	10	11/02/2018 07:14	WG1189323
Isophorone	ND		3630	10	11/02/2018 07:14	WG1189323
2-Methylnaphthalene	ND		360	10	11/02/2018 07:14	WG1189323
Naphthalene	ND		360	10	11/02/2018 07:14	WG1189323
2-Nitroaniline	ND		3630	10	11/02/2018 07:14	WG1189323
3-Nitroaniline	ND		3630	10	11/02/2018 07:14	WG1189323
4-Nitroaniline	ND		3630	10	11/02/2018 07:14	WG1189323
Nitrobenzene	ND		3630	10	11/02/2018 07:14	WG1189323
n-Nitrosodiphenylamine	ND		3630	10	11/02/2018 07:14	WG1189323
n-Nitrosodi-n-propylamine	ND		3630	10	11/02/2018 07:14	WG1189323

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Phenanthrene	ND		360	10	11/02/2018 07:14	WG1189323
Benzylbutyl phthalate	ND		3630	10	11/02/2018 07:14	WG1189323
Bis(2-ethylhexyl)phthalate	ND		3630	10	11/02/2018 07:14	WG1189323
Di-n-butyl phthalate	ND		3630	10	11/02/2018 07:14	WG1189323
Diethyl phthalate	ND		3630	10	11/02/2018 07:14	WG1189323
Dimethyl phthalate	ND		3630	10	11/02/2018 07:14	WG1189323
Di-n-octyl phthalate	ND		3630	10	11/02/2018 07:14	WG1189323
Pyrene	388		360	10	11/02/2018 07:14	WG1189323
1,2,4,5-Tetrachlorobenzene	ND		3630	10	11/02/2018 07:14	WG1189323
4-Chloro-3-methylphenol	ND		3630	10	11/02/2018 07:14	WG1189323
2-Chlorophenol	ND		3630	10	11/02/2018 07:14	WG1189323
2-Methylphenol	ND		3630	10	11/02/2018 07:14	WG1189323
3&4-Methyl Phenol	ND		3630	10	11/02/2018 07:14	WG1189323
2,4-Dichlorophenol	ND		3630	10	11/02/2018 07:14	WG1189323
2,4-Dimethylphenol	ND	J0	3630	10	11/02/2018 07:14	WG1189323
4,6-Dinitro-2-methylphenol	ND		3630	10	11/02/2018 07:14	WG1189323
2,4-Dinitrophenol	ND		3630	10	11/02/2018 07:14	WG1189323
2-Nitrophenol	ND		3630	10	11/02/2018 07:14	WG1189323
4-Nitrophenol	ND		3630	10	11/02/2018 07:14	WG1189323
Pentachlorophenol	ND		3630	10	11/02/2018 07:14	WG1189323
Phenol	ND		3630	10	11/02/2018 07:14	WG1189323
2,4,5-Trichlorophenol	ND		3630	10	11/02/2018 07:14	WG1189323
2,4,6-Trichlorophenol	ND		3630	10	11/02/2018 07:14	WG1189323
(S) 2-Fluorophenol	*58.1*		*12.0-120*		*11/02/2018 07:14*	WG1189323
(S) Phenol-d5	*53.3*		*10.0-120*		*11/02/2018 07:14*	WG1189323
(S) Nitrobenzene-d5	*57.7*		*10.0-122*		*11/02/2018 07:14*	WG1189323
(S) 2-Fluorobiphenyl	*52.9*		*15.0-120*		*11/02/2018 07:14*	WG1189323
(S) 2,4,6-Tribromophenol	*51.1*		*10.0-127*		*11/02/2018 07:14*	WG1189323
(S) p-Terphenyl-d14	*52.6*		*10.0-120*		*11/02/2018 07:14*	WG1189323

Sample Narrative:

L1038877-01 WG1189323: Cannot run at lower dilution due to viscosity of extract

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.7		1	11/01/2018 14:18	WG1189508

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	57.1	B	22.3	1	10/31/2018 14:34	WG1188180

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Aluminum	8120000		11100	1	11/01/2018 09:41	WG1188132
Antimony	ND		2230	1	11/01/2018 09:41	WG1188132
Arsenic	2830		2230	1	11/01/2018 09:41	WG1188132
Barium	41800		557	1	11/01/2018 09:41	WG1188132
Beryllium	373		223	1	11/01/2018 09:41	WG1188132
Cadmium	ND		557	1	11/01/2018 09:41	WG1188132
Calcium	28700000		111000	1	11/01/2018 09:41	WG1188132
Chromium	9860		1110	1	11/01/2018 09:41	WG1188132
Cobalt	5360		1110	1	11/01/2018 09:41	WG1188132
Copper	18000		2230	1	11/01/2018 09:41	WG1188132
Iron	14700000		11100	1	11/01/2018 09:41	WG1188132
Lead	42600		557	1	11/01/2018 09:41	WG1188132
Magnesium	6290000		111000	1	11/01/2018 09:41	WG1188132
Manganese	606000		1110	1	11/01/2018 09:41	WG1188132
Nickel	12300		2230	1	11/01/2018 09:41	WG1188132
Potassium	1430000		111000	1	11/01/2018 09:41	WG1188132
Selenium	ND		2230	1	11/01/2018 09:41	WG1188132
Silver	ND		1110	1	11/01/2018 09:41	WG1188132
Sodium	210000	B	111000	1	11/01/2018 09:41	WG1188132
Thallium	ND		2230	1	11/01/2018 09:41	WG1188132
Vanadium	14100		2230	1	11/01/2018 09:41	WG1188132
Zinc	69600		5570	1	11/01/2018 09:41	WG1188132

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		27.9	1	10/31/2018 11:52	WG1188986
Benzene	ND		1.11	1	10/31/2018 11:52	WG1188986
Bromochloromethane	ND		5.57	1	10/31/2018 11:52	WG1188986
Bromodichloromethane	ND		2.79	1	10/31/2018 11:52	WG1188986
Bromoform	ND		27.9	1	10/31/2018 11:52	WG1188986
Bromomethane	ND		13.9	1	10/31/2018 11:52	WG1188986
Carbon disulfide	ND		13.9	1	10/31/2018 11:52	WG1188986
Carbon tetrachloride	ND		5.57	1	10/31/2018 11:52	WG1188986
Chlorobenzene	ND		2.79	1	10/31/2018 11:52	WG1188986
Chlorodibromomethane	ND		2.79	1	10/31/2018 11:52	WG1188986
Chloroethane	ND		5.57	1	10/31/2018 11:52	WG1188986
Chloroform	ND		2.79	1	10/31/2018 11:52	WG1188986
Chloromethane	ND		13.9	1	10/31/2018 11:52	WG1188986
Cyclohexane	ND		2.79	1	10/31/2018 11:52	WG1188986
1,2-Dibromo-3-Chloropropane	ND		27.9	1	10/31/2018 11:52	WG1188986
1,2-Dibromoethane	ND	J4	2.79	1	10/31/2018 11:52	WG1188986
Dichlorodifluoromethane	ND	Q	2.79	1	11/04/2018 13:56	WG1191199
1,1-Dichloroethane	ND		2.79	1	10/31/2018 11:52	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		2.79	1	10/31/2018 11:52	WG1188986
1,2-Dichlorobenzene	ND		5.57	1	10/31/2018 11:52	WG1188986
1,3-Dichlorobenzene	ND		5.57	1	10/31/2018 11:52	WG1188986
1,4-Dichlorobenzene	ND		5.57	1	10/31/2018 11:52	WG1188986
1,1-Dichloroethene	ND		2.79	1	10/31/2018 11:52	WG1188986
cis-1,2-Dichloroethene	ND		2.79	1	10/31/2018 11:52	WG1188986
trans-1,2-Dichloroethene	ND		5.57	1	10/31/2018 11:52	WG1188986
1,2-Dichloropropane	ND	Q	5.57	1	11/04/2018 13:56	WG1191199
cis-1,3-Dichloropropene	ND		2.79	1	10/31/2018 11:52	WG1188986
trans-1,3-Dichloropropene	ND		5.57	1	10/31/2018 11:52	WG1188986
Ethylbenzene	ND		2.79	1	10/31/2018 11:52	WG1188986
2-Hexanone	ND		27.9	1	10/31/2018 11:52	WG1188986
Isopropylbenzene	ND		2.79	1	10/31/2018 11:52	WG1188986
2-Butanone (MEK)	ND	Q	27.9	1	11/04/2018 13:56	WG1191199
Methyl Acetate	ND		5.57	1	10/31/2018 11:52	WG1188986
Methyl Cyclohexane	ND		5.57	1	10/31/2018 11:52	WG1188986
Methylene Chloride	ND		27.9	1	10/31/2018 11:52	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		27.9	1	10/31/2018 11:52	WG1188986
Methyl tert-butyl ether	ND		1.11	1	10/31/2018 11:52	WG1188986
Naphthalene	ND		13.9	1	10/31/2018 11:52	WG1188986
Styrene	ND		13.9	1	10/31/2018 11:52	WG1188986
1,1,2,2-Tetrachloroethane	ND		2.79	1	10/31/2018 11:52	WG1188986
Tetrachloroethene	ND		2.79	1	10/31/2018 11:52	WG1188986
Toluene	ND		5.57	1	10/31/2018 11:52	WG1188986
1,2,3-Trichlorobenzene	ND		2.79	1	10/31/2018 11:52	WG1188986
1,2,4-Trichlorobenzene	ND		13.9	1	10/31/2018 11:52	WG1188986
1,1,1-Trichloroethane	ND		2.79	1	10/31/2018 11:52	WG1188986
1,1,2-Trichloroethane	ND		2.79	1	10/31/2018 11:52	WG1188986
Trichloroethene	ND	J4	1.11	1	10/31/2018 11:52	WG1188986
Trichlorofluoromethane	ND		2.79	1	10/31/2018 11:52	WG1188986
1,1,2-Trichlorotrifluoroethane	ND		2.79	1	10/31/2018 11:52	WG1188986
Vinyl chloride	ND		2.79	1	10/31/2018 11:52	WG1188986
o-Xylene	ND		2.79	1	10/31/2018 11:52	WG1188986
m&p-Xylenes	ND		4.46	1	10/31/2018 11:52	WG1188986
n-Butylbenzene	ND		13.9	1	10/31/2018 11:52	WG1188986
sec-Butylbenzene	ND		13.9	1	10/31/2018 11:52	WG1188986
tert-Butylbenzene	ND	J4	5.57	1	10/31/2018 11:52	WG1188986
p-Isopropyltoluene	ND		5.57	1	10/31/2018 11:52	WG1188986
n-Propylbenzene	ND		5.57	1	10/31/2018 11:52	WG1188986
1,2,4-Trimethylbenzene	ND		5.57	1	10/31/2018 11:52	WG1188986
1,3,5-Trimethylbenzene	ND		5.57	1	10/31/2018 11:52	WG1188986
(S) Toluene-d8	*110*		*75.0-131*		*10/31/2018 11:52*	WG1188986
(S) Toluene-d8	*98.8*		*75.0-131*		*11/04/2018 13:56*	WG1191199
(S) Dibromofluoromethane	*92.0*		*65.0-129*		*10/31/2018 11:52*	WG1188986
(S) Dibromofluoromethane	*120*		*65.0-129*		*11/04/2018 13:56*	WG1191199
(S) a,a,a-Trifluorotoluene	*105*		*80.0-120*		*10/31/2018 11:52*	WG1188986
(S) a,a,a-Trifluorotoluene	*100*		*80.0-120*		*11/04/2018 13:56*	WG1191199
(S) 4-Bromofluorobenzene	*99.9*		*67.0-138*		*10/31/2018 11:52*	WG1188986
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*11/04/2018 13:56*	WG1191199

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		18.9	1	11/01/2018 14:15	WG1189308
PCB 1221	ND		18.9	1	11/01/2018 14:15	WG1189308
PCB 1232	ND		18.9	1	11/01/2018 14:15	WG1189308
PCB 1242	ND		18.9	1	11/01/2018 14:15	WG1189308
PCB 1248	ND		18.9	1	11/01/2018 14:15	WG1189308
PCB 1254	ND		18.9	1	11/01/2018 14:15	WG1189308
PCB 1260	ND		18.9	1	11/01/2018 14:15	WG1189308
(S) Decachlorobiphenyl	*62.0*		*10.0-135*		*11/01/2018 14:15*	WG1189308
(S) Tetrachloro-m-xylene	*70.1*		*10.0-139*		*11/01/2018 14:15*	WG1189308

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		36.8	1	11/02/2018 04:10	WG1189323
Acenaphthylene	ND		36.8	1	11/02/2018 04:10	WG1189323
Acetophenone	ND		371	1	11/02/2018 04:10	WG1189323
Anthracene	ND		36.8	1	11/02/2018 04:10	WG1189323
Atrazine	ND		371	1	11/02/2018 04:10	WG1189323
Benzaldehyde	ND		371	1	11/02/2018 04:10	WG1189323
Benzo(a)anthracene	ND		36.8	1	11/02/2018 04:10	WG1189323
Benzo(b)fluoranthene	43.2		36.8	1	11/02/2018 04:10	WG1189323
Benzo(k)fluoranthene	ND		36.8	1	11/02/2018 04:10	WG1189323
Benzo(g,h,i)perylene	ND		36.8	1	11/02/2018 04:10	WG1189323
Benzo(a)pyrene	ND		36.8	1	11/02/2018 04:10	WG1189323
Biphenyl	ND		371	1	11/02/2018 04:10	WG1189323
Bis(2-chlorethoxy)methane	ND		371	1	11/02/2018 04:10	WG1189323
Bis(2-chloroethyl)ether	ND		371	1	11/02/2018 04:10	WG1189323
Bis(2-chloroisopropyl)ether	ND		371	1	11/02/2018 04:10	WG1189323
4-Bromophenyl-phenylether	ND		371	1	11/02/2018 04:10	WG1189323
Caprolactam	ND		371	1	11/02/2018 04:10	WG1189323
Carbazole	ND		371	1	11/02/2018 04:10	WG1189323
4-Chloroaniline	ND		371	1	11/02/2018 04:10	WG1189323
2-Chloronaphthalene	ND		36.8	1	11/02/2018 04:10	WG1189323
4-Chlorophenyl-phenylether	ND		371	1	11/02/2018 04:10	WG1189323
Chrysene	ND		36.8	1	11/02/2018 04:10	WG1189323
Dibenz(a,h)anthracene	ND		36.8	1	11/02/2018 04:10	WG1189323
Dibenzofuran	ND		371	1	11/02/2018 04:10	WG1189323
3,3-Dichlorobenzidine	ND		371	1	11/02/2018 04:10	WG1189323
2,4-Dinitrotoluene	ND		371	1	11/02/2018 04:10	WG1189323
2,6-Dinitrotoluene	ND		371	1	11/02/2018 04:10	WG1189323
Fluoranthene	47.8		36.8	1	11/02/2018 04:10	WG1189323
Fluorene	ND		36.8	1	11/02/2018 04:10	WG1189323
Hexachlorobenzene	ND		371	1	11/02/2018 04:10	WG1189323
Hexachloro-1,3-butadiene	ND		371	1	11/02/2018 04:10	WG1189323
Hexachlorocyclopentadiene	ND	J0	371	1	11/02/2018 04:10	WG1189323
Hexachloroethane	ND		371	1	11/02/2018 04:10	WG1189323
Indeno(1,2,3-cd)pyrene	ND		36.8	1	11/02/2018 04:10	WG1189323
Isophorone	ND		371	1	11/02/2018 04:10	WG1189323
2-Methylnaphthalene	ND		36.8	1	11/02/2018 04:10	WG1189323
Naphthalene	ND		36.8	1	11/02/2018 04:10	WG1189323
2-Nitroaniline	ND		371	1	11/02/2018 04:10	WG1189323
3-Nitroaniline	ND		371	1	11/02/2018 04:10	WG1189323
4-Nitroaniline	ND		371	1	11/02/2018 04:10	WG1189323
Nitrobenzene	ND		371	1	11/02/2018 04:10	WG1189323
n-Nitrosodiphenylamine	ND		371	1	11/02/2018 04:10	WG1189323
n-Nitrosodi-n-propylamine	ND		371	1	11/02/2018 04:10	WG1189323

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Phenanthrene	ND		36.8	1	11/02/2018 04:10	WG1189323
Benzylbutyl phthalate	ND		371	1	11/02/2018 04:10	WG1189323
Bis(2-ethylhexyl)phthalate	ND		371	1	11/02/2018 04:10	WG1189323
Di-n-butyl phthalate	ND		371	1	11/02/2018 04:10	WG1189323
Diethyl phthalate	ND		371	1	11/02/2018 04:10	WG1189323
Dimethyl phthalate	ND		371	1	11/02/2018 04:10	WG1189323
Di-n-octyl phthalate	ND		371	1	11/02/2018 04:10	WG1189323
Pyrene	ND		36.8	1	11/02/2018 04:10	WG1189323
1,2,4,5-Tetrachlorobenzene	ND		371	1	11/02/2018 04:10	WG1189323
4-Chloro-3-methylphenol	ND		371	1	11/02/2018 04:10	WG1189323
2-Chlorophenol	ND		371	1	11/02/2018 04:10	WG1189323
2-Methylphenol	ND		371	1	11/02/2018 04:10	WG1189323
3&4-Methyl Phenol	ND		371	1	11/02/2018 04:10	WG1189323
2,4-Dichlorophenol	ND		371	1	11/02/2018 04:10	WG1189323
2,4-Dimethylphenol	ND	J0	371	1	11/02/2018 04:10	WG1189323
4,6-Dinitro-2-methylphenol	ND		371	1	11/02/2018 04:10	WG1189323
2,4-Dinitrophenol	ND		371	1	11/02/2018 04:10	WG1189323
2-Nitrophenol	ND		371	1	11/02/2018 04:10	WG1189323
4-Nitrophenol	ND		371	1	11/02/2018 04:10	WG1189323
Pentachlorophenol	ND		371	1	11/02/2018 04:10	WG1189323
Phenol	ND		371	1	11/02/2018 04:10	WG1189323
2,4,5-Trichlorophenol	ND		371	1	11/02/2018 04:10	WG1189323
2,4,6-Trichlorophenol	ND		371	1	11/02/2018 04:10	WG1189323
(S) 2-Fluorophenol	*66.1*		*12.0-120*		*11/02/2018 04:10*	WG1189323
(S) Phenol-d5	*59.4*		*10.0-120*		*11/02/2018 04:10*	WG1189323
(S) Nitrobenzene-d5	*63.2*		*10.0-122*		*11/02/2018 04:10*	WG1189323
(S) 2-Fluorobiphenyl	*59.5*		*15.0-120*		*11/02/2018 04:10*	WG1189323
(S) 2,4,6-Tribromophenol	*67.2*		*10.0-127*		*11/02/2018 04:10*	WG1189323
(S) p-Terphenyl-d14	*51.8*		*10.0-120*		*11/02/2018 04:10*	WG1189323

Method Blank (MB)

(MB) R3356203-1 11/01/18 14:18

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1038732-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1038732-01 11/01/18 14:18 • (DUP) R3356203-3 11/01/18 14:18

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	78.4	79.4	1	1.22		10

Laboratory Control Sample (LCS)

(LCS) R3356203-2 11/01/18 14:18

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3355653-1 10/31/18 13:57

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Mercury	8.53	J	2.80	20.0

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3355653-2 10/31/18 13:59 • (LCSD) R3355653-3 10/31/18 14:01

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	300	322	320	107	107	80.0-120			0.571	20

L1039044-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1039044-02 10/31/18 14:04 • (MS) R3355653-4 10/31/18 14:06 • (MSD) R3355653-5 10/31/18 14:08

Analyte	Spike Amount ug/kg	Original Result ug/kg	MS Result ug/kg	MSD Result ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	300	13.1	324	337	103	108	1	75.0-125			4.02	20

Method Blank (MB)

(MB) R3356013-1 11/01/18 08:55

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Aluminum	U		3500	10000
Antimony	U		750	2000
Arsenic	U		460	2000
Barium	U		170	500
Beryllium	U		70.0	200
Cadmium	U		70.0	500
Calcium	U		4630	100000
Chromium	U		140	1000
Cobalt	U		230	1000
Copper	U		530	2000
Iron	U		1410	10000
Lead	266	J	190	500
Magnesium	4420	J	1110	100000
Manganese	U		120	1000
Nickel	U		490	2000
Potassium	27000	J	10200	100000
Selenium	U		620	2000
Silver	U		120	1000
Sodium	63900	J	9850	100000
Thallium	U		650	2000
Vanadium	U		240	2000
Zinc	638	J	590	5000

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356013-2 11/01/18 08:58 • (LCSD) R3356013-3 11/01/18 09:00

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Aluminum	1000000	993000	1020000	99.3	102	80.0-120			3.01	20
Antimony	100000	97200	101000	97.2	101	80.0-120			4.22	20
Arsenic	100000	94600	98600	94.6	98.6	80.0-120			4.13	20
Barium	100000	101000	105000	101	105	80.0-120			4.02	20
Beryllium	100000	101000	104000	101	104	80.0-120			3.55	20
Cadmium	100000	95300	99300	95.3	99.3	80.0-120			4.11	20
Calcium	1000000	972000	999000	97.2	99.9	80.0-120			2.69	20
Chromium	100000	95900	99900	95.9	99.9	80.0-120			4.10	20
Cobalt	100000	99100	103000	99.1	103	80.0-120			3.88	20
Copper	100000	98200	103000	98.2	103	80.0-120			4.89	20
Iron	1000000	972000	999000	97.2	99.9	80.0-120			2.70	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356013-2 11/01/18 08:58 • (LCSD) R3356013-3 11/01/18 09:00

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	100000	95100	99100	95.1	99.1	80.0-120			4.10	20
Magnesium	1000000	992000	1020000	99.2	102	80.0-120			3.02	20
Manganese	100000	95500	100000	95.5	100	80.0-120			4.78	20
Nickel	100000	96900	100000	96.9	100	80.0-120			3.53	20
Potassium	1000000	956000	982000	95.6	98.2	80.0-120			2.71	20
Selenium	100000	94100	98500	94.1	98.5	80.0-120			4.57	20
Silver	20000	18200	19200	91.2	95.8	80.0-120			4.97	20
Sodium	1000000	999000	1030000	99.9	103	80.0-120			2.73	20
Thallium	100000	94300	98300	94.3	98.3	80.0-120			4.17	20
Vanadium	100000	98900	102000	98.9	102	80.0-120			3.05	20
Zinc	100000	94400	98100	94.4	98.1	80.0-120			3.83	20

L1038920-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038920-02 11/01/18 09:03 • (MS) R3356013-6 11/01/18 09:11 • (MSD) R3356013-7 11/01/18 09:14

Analyte	Spike Amount ug/kg	Original Result ug/kg	MS Result ug/kg	MSD Result ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	1000000	9720000	7440000	7720000	0.000	0.000	1	75.0-125	V	V	3.64	20
Antimony	100000	U	60600	55200	60.6	55.2	1	75.0-125	J6	J6	9.45	20
Arsenic	100000	3850	100000	100000	96.6	96.5	1	75.0-125			0.127	20
Barium	100000	135000	205000	256000	69.6	121	1	75.0-125	J6	J3	22.2	20
Beryllium	100000	428	100000	98900	99.9	98.5	1	75.0-125			1.37	20
Cadmium	100000	190	99400	98600	99.2	98.4	1	75.0-125			0.834	20
Calcium	1000000	105000000	72100000	83100000	0.000	0.000	1	75.0-125	V	V	14.2	20
Chromium	100000	10800	100000	99600	89.2	88.8	1	75.0-125			0.424	20
Cobalt	100000	5600	107000	106000	101	101	1	75.0-125			0.539	20
Copper	100000	18400	118000	118000	99.6	99.9	1	75.0-125			0.272	20
Iron	1000000	11500000	7950000	8170000	0.000	0.000	1	75.0-125	V	V	2.82	20
Lead	100000	36400	129000	133000	93.0	97.1	1	75.0-125			3.10	20
Magnesium	1000000	13400000	8730000	11300000	0.000	0.000	1	75.0-125	V	J3 V	25.9	20
Manganese	100000	358000	286000	316000	0.000	0.000	1	75.0-125	J6	J6	10.1	20
Nickel	100000	15400	109000	108000	93.7	93.0	1	75.0-125			0.633	20
Potassium	1000000	1690000	2280000	2230000	59.3	54.3	1	75.0-125	J6	J6	2.21	20
Selenium	100000	U	96100	95700	96.1	95.7	1	75.0-125			0.388	20
Silver	20000	U	19800	19700	98.9	98.6	1	75.0-125			0.298	20
Sodium	1000000	462000	1390000	1390000	93.2	92.8	1	75.0-125			0.275	20
Thallium	100000	U	94900	93700	94.9	93.7	1	75.0-125			1.28	20
Vanadium	100000	17200	110000	109000	92.6	91.8	1	75.0-125			0.734	20
Zinc	100000	85700	169000	218000	83.0	132	1	75.0-125		J3 J5	25.5	20

Method Blank (MB)

(MB) R3356687-2 10/31/18 10:18

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Acetone	U		13.7	25.0
Benzene	U		0.400	1.00
Bromodichloromethane	U		0.788	2.50
Bromochloromethane	U		1.13	5.00
Bromoform	U		5.98	25.0
Bromomethane	U		3.70	12.5
n-Butylbenzene	U		3.84	12.5
sec-Butylbenzene	U		2.53	12.5
tert-Butylbenzene	U		1.55	5.00
Carbon disulfide	U		4.06	12.5
Carbon tetrachloride	U		1.08	5.00
Chlorobenzene	U		0.573	2.50
Chlorodibromomethane	U		0.450	2.50
Chloroethane	U		1.08	5.00
Chloroform	U		0.415	2.50
Chloromethane	U		1.39	12.5
Cyclohexane	U		0.508	2.50
1,2-Dibromo-3-Chloropropane	U		5.10	25.0
1,2-Dibromoethane	U		0.525	2.50
1,2-Dichlorobenzene	U		1.45	5.00
1,3-Dichlorobenzene	U		1.70	5.00
1,4-Dichlorobenzene	U		1.97	5.00
1,1-Dichloroethane	U		0.575	2.50
1,2-Dichloroethane	U		0.475	2.50
1,1-Dichloroethene	U		0.500	2.50
cis-1,2-Dichloroethene	U		0.690	2.50
trans-1,2-Dichloroethene	U		1.43	5.00
cis-1,3-Dichloropropene	U		0.678	2.50
trans-1,3-Dichloropropene	U		1.53	5.00
Ethylbenzene	U		0.530	2.50
2-Hexanone	U		10.0	25.0
Isopropylbenzene	U		0.863	2.50
p-Isopropyltoluene	U		2.33	5.00
Methyl Acetate	U		2.10	5.00
Methyl Cyclohexane	U		1.03	5.00
Methylene Chloride	U		6.64	25.0
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0
Methyl tert-butyl ether	U		0.295	1.00
Naphthalene	U		3.12	12.5
n-Propylbenzene	U		1.18	5.00

Method Blank (MB)

(MB) R3356687-2 10/31/18 10:18

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Styrene	U		2.73	12.5
1,1,2,2-Tetrachloroethane	U		0.390	2.50
Tetrachloroethene	U		0.700	2.50
Toluene	U		1.25	5.00
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50
1,2,3-Trichlorobenzene	U		0.625	2.50
1,2,4-Trichlorobenzene	U		4.82	12.5
1,1,1-Trichloroethane	U		0.275	2.50
1,1,2-Trichloroethane	U		0.883	2.50
Trichloroethene	U		0.400	1.00
Trichlorofluoromethane	U		0.500	2.50
1,2,4-Trimethylbenzene	U		1.16	5.00
1,3,5-Trimethylbenzene	U		1.08	5.00
Vinyl chloride	U		0.683	2.50
o-Xylene	U		1.00	2.50
m&p-Xylenes	U		1.50	4.00
(S) Toluene-d8	*107*			*75.0-131*
(S) Dibromofluoromethane	*89.4*			*65.0-129*
(S) a,a,a-Trifluorotoluene	*106*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*67.0-138*

Laboratory Control Sample (LCS)

(LCS) R3356687-1 10/31/18 09:18

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	625	762	122	10.0-160	
Benzene	125	121	97.2	70.0-123	
Bromodichloromethane	125	92.4	74.0	73.0-121	
Bromochloromethane	125	103	82.2	77.0-128	
Bromoform	125	117	93.9	64.0-132	
Bromomethane	125	97.2	77.7	56.0-147	
n-Butylbenzene	125	125	99.7	68.0-135	
sec-Butylbenzene	125	99.4	79.5	74.0-130	
tert-Butylbenzene	125	93.5	74.8	75.0-127	J4
Carbon disulfide	125	103	82.1	56.0-133	
Carbon tetrachloride	125	105	84.1	66.0-128	
Chlorobenzene	125	104	83.6	76.0-128	
Chlorodibromomethane	125	93.0	74.4	74.0-127	

Laboratory Control Sample (LCS)

(LCS) R3356687-1 10/31/18 09:18

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloroethane	125	93.6	74.9	61.0-134	
Chloroform	125	119	95.3	72.0-123	
Chloromethane	125	143	115	51.0-138	
1,2-Dibromo-3-Chloropropane	125	110	87.8	59.0-130	
1,2-Dibromoethane	125	90.7	72.6	74.0-128	J4
1,2-Dichlorobenzene	125	119	95.5	76.0-124	
1,3-Dichlorobenzene	125	103	82.2	76.0-125	
1,4-Dichlorobenzene	125	99.7	79.7	77.0-121	
1,1-Dichloroethane	125	95.8	76.6	70.0-127	
1,2-Dichloroethane	125	107	85.8	65.0-131	
1,1-Dichloroethene	125	99.2	79.3	65.0-131	
cis-1,2-Dichloroethene	125	108	86.6	73.0-125	
trans-1,2-Dichloroethene	125	139	111	71.0-125	
cis-1,3-Dichloropropene	125	104	83.5	76.0-127	
trans-1,3-Dichloropropene	125	105	83.8	73.0-127	
Ethylbenzene	125	98.4	78.7	74.0-126	
2-Hexanone	625	616	98.5	54.0-147	
Isopropylbenzene	125	95.1	76.1	72.0-127	
p-Isopropyltoluene	125	106	84.9	72.0-133	
Methylene Chloride	125	109	87.2	68.0-123	
4-Methyl-2-pentanone (MIBK)	625	724	116	56.0-143	
Methyl tert-butyl ether	125	116	93.0	66.0-132	
Naphthalene	125	129	103	59.0-130	
n-Propylbenzene	125	112	89.8	74.0-126	
Styrene	125	106	84.8	72.0-127	
1,1,2,2-Tetrachloroethane	125	108	86.1	68.0-128	
Tetrachloroethene	125	107	85.6	70.0-136	
Toluene	125	121	97.1	75.0-121	
1,1,2-Trichlorotrifluoroethane	125	101	80.7	61.0-139	
1,2,3-Trichlorobenzene	125	139	111	59.0-139	
1,2,4-Trichlorobenzene	125	120	95.9	62.0-137	
1,1,1-Trichloroethane	125	124	98.9	69.0-126	
1,1,2-Trichloroethane	125	112	89.3	78.0-123	
Trichloroethene	125	94.5	75.6	76.0-126	J4
Trichlorofluoromethane	125	130	104	61.0-142	
1,2,4-Trimethylbenzene	125	103	82.2	70.0-126	
1,3,5-Trimethylbenzene	125	98.8	79.0	73.0-127	
Vinyl chloride	125	127	101	63.0-134	
o-Xylene	125	103	82.6	79.0-124	
m&p-Xylenes	250	204	81.8	76.0-126	

Laboratory Control Sample (LCS)

(LCS) R3356687-1 10/31/18 09:18

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Methyl Acetate	625	701	112	43.0-158	
Cyclohexane	125	127	101	65.0-128	
Methyl Cyclohexane	125	110	87.6	67.0-129	
(S) Toluene-d8			*99.3*	*75.0-131*	
(S) Dibromofluoromethane			*98.6*	*65.0-129*	
(S) a,a,a-Trifluorotoluene			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*96.7*	*67.0-138*	

L1038880-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038880-05 10/31/18 13:13 • (MS) R3356687-3 10/31/18 17:56 • (MSD) R3356687-4 10/31/18 18:17

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	670	ND	264	206	39.5	30.7	1	10.0-160			24.9	40
Benzene	134	ND	100	63.8	75.0	47.6	1	10.0-149		J3	44.6	37
Bromodichloromethane	134	ND	77.0	63.0	57.5	47.0	1	10.0-143			20.0	37
Bromochloromethane	134	ND	90.4	75.3	67.5	56.2	1	10.0-155			18.3	33
Bromoform	134	ND	117	108	87.4	80.9	1	10.0-146			7.77	36
Bromomethane	134	ND	73.6	48.9	54.9	36.5	1	10.0-149		J3	40.3	38
n-Butylbenzene	134	ND	130	80.8	96.9	60.3	1	10.0-160		J3	46.6	40
sec-Butylbenzene	134	ND	103	63.0	76.9	47.0	1	10.0-159		J3	48.3	39
tert-Butylbenzene	134	ND	103	70.7	76.6	52.8	1	10.0-156			36.8	39
Carbon disulfide	134	ND	60.0	33.3	44.8	24.8	1	10.0-145		J3	57.4	39
Carbon tetrachloride	134	ND	85.2	40.6	63.6	30.3	1	10.0-145		J3	70.9	37
Chlorobenzene	134	ND	105	71.2	78.6	53.2	1	10.0-152			38.6	39
Chlorodibromomethane	134	ND	89.8	75.4	67.0	56.3	1	10.0-146			17.5	37
Chloroethane	134	ND	64.1	51.5	47.8	38.5	1	10.0-146			21.7	40
Chloroform	134	ND	99.3	66.6	74.1	49.7	1	10.0-146		J3	39.5	37
Chloromethane	134	ND	95.5	56.0	71.3	41.8	1	10.0-159		J3	52.1	37
1,2-Dibromo-3-Chloropropane	134	ND	95.8	84.7	71.5	63.2	1	10.0-151			12.3	39
1,2-Dibromoethane	134	ND	95.2	77.3	71.0	57.7	1	10.0-148			20.7	34
1,2-Dichlorobenzene	134	ND	111	100	82.7	74.6	1	10.0-155			10.2	37
1,3-Dichlorobenzene	134	ND	106	81.3	78.9	60.6	1	10.0-153			26.2	38
1,4-Dichlorobenzene	134	ND	110	77.6	81.8	57.9	1	10.0-151			34.2	38
1,1-Dichloroethane	134	ND	81.5	51.0	60.9	38.1	1	10.0-147		J3	46.0	37
1,2-Dichloroethane	134	ND	88.7	68.4	66.2	51.0	1	10.0-148			25.9	35
1,1-Dichloroethene	134	ND	76.2	38.2	56.9	28.5	1	10.0-155		J3	66.5	37
cis-1,2-Dichloroethene	134	ND	89.5	60.3	66.8	45.0	1	10.0-149		J3	38.9	37
trans-1,2-Dichloroethene	134	ND	116	70.5	86.2	52.6	1	10.0-150		J3	48.4	37

L1038880-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038880-05 10/31/18 13:13 • (MS) R3356687-3 10/31/18 17:56 • (MSD) R3356687-4 10/31/18 18:17

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	134	ND	101	74.9	75.4	55.9	1	10.0-151			29.7	37
trans-1,3-Dichloropropene	134	ND	117	93.8	87.6	70.0	1	10.0-148			22.4	37
Ethylbenzene	134	ND	96.7	59.1	72.1	44.1	1	10.0-160		J3	48.2	38
2-Hexanone	670	ND	588	520	87.8	77.5	1	10.0-160			12.4	36
Isopropylbenzene	134	ND	96.1	61.3	71.7	45.8	1	10.0-155		J3	44.2	38
p-Isopropyltoluene	134	ND	117	73.8	87.0	55.0	1	10.0-160		J3	45.0	40
Methylene Chloride	134	ND	96.3	70.4	71.9	52.5	1	10.0-141			31.1	37
4-Methyl-2-pentanone (MIBK)	670	ND	623	574	93.0	85.7	1	10.0-160			8.20	35
Methyl tert-butyl ether	134	ND	85.4	81.4	63.7	60.7	1	11.0-147			4.79	35
Naphthalene	134	ND	123	107	91.5	79.6	1	10.0-160			13.9	36
n-Propylbenzene	134	ND	114	71.7	85.4	53.5	1	10.0-158		J3	46.0	38
Styrene	134	ND	117	83.7	87.0	62.5	1	10.0-160			32.8	40
1,1,2,2-Tetrachloroethane	134	ND	97.5	87.8	72.8	65.5	1	10.0-160			10.5	35
Tetrachloroethene	134	ND	96.7	55.3	72.2	41.3	1	10.0-156		J3	54.4	39
Toluene	134	ND	122	77.7	91.2	58.0	1	10.0-156		J3	44.6	38
1,1,2-Trichlorotrifluoroethane	134	ND	89.1	36.8	66.5	27.5	1	10.0-160		J3	83.0	36
1,2,3-Trichlorobenzene	134	ND	131	118	97.6	87.7	1	10.0-160			10.7	40
1,2,4-Trichlorobenzene	134	ND	114	91.9	85.0	68.6	1	10.0-160			21.4	40
1,1,1-Trichloroethane	134	ND	95.0	53.4	70.9	39.8	1	10.0-144		J3	56.0	35
1,1,2-Trichloroethane	134	ND	114	102	85.1	75.9	1	10.0-160			11.5	35
Trichloroethene	134	ND	88.7	52.4	66.2	39.1	1	10.0-156		J3	51.4	38
Trichlorofluoromethane	134	ND	72.1	36.9	53.8	27.5	1	10.0-160		J3	64.6	40
1,2,4-Trimethylbenzene	134	ND	107	75.6	79.5	56.4	1	10.0-160			33.9	36
1,3,5-Trimethylbenzene	134	ND	104	69.1	77.3	51.6	1	10.0-160		J3	40.0	38
Vinyl chloride	134	ND	111	50.4	82.9	37.6	1	10.0-160		J3	75.1	37
o-Xylene	134	ND	101	76.2	75.2	56.8	1	10.0-156			27.8	40
m&p-Xylenes	268	ND	204	126	76.0	47.1	1	10.0-156		J3	46.9	40
Methyl Acetate	670	ND	815	536	122	80.0	1	10.0-160		J3	41.3	40
Cyclohexane	134	ND	86.4	42.1	64.5	31.4	1	10.0-157		J3	68.9	32
Methyl Cyclohexane	134	ND	98.5	56.7	73.5	42.3	1	10.0-160		J3	53.9	33
(S) Toluene-d8					*108*	*104*		*75.0-131*				
(S) Dibromofluoromethane					*88.4*	*87.6*		*65.0-129*				
(S) a,a,a-Trifluorotoluene					*103*	*105*		*80.0-120*				
(S) 4-Bromofluorobenzene					*104*	*105*		*67.0-138*				

Method Blank (MB)

(MB) R3356744-1 11/04/18 10:07

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Dichlorodifluoromethane	U		0.818	2.50
1,2-Dichloropropane	U		1.27	5.00
2-Butanone (MEK)	U		12.5	25.0
(S) Toluene-d8	*98.6*			*75.0-131*
(S) Dibromofluoromethane	*113*			*65.0-129*
(S) a,a,a-Trifluorotoluene	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*

Laboratory Control Sample (LCS)

(LCS) R3356744-2 11/04/18 10:25

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dichlorodifluoromethane	125	172	138	43.0-156	
1,2-Dichloropropane	125	141	113	74.0-125	
2-Butanone (MEK)	625	531	84.9	30.0-160	
(S) Toluene-d8			*98.6*	*75.0-131*	
(S) Dibromofluoromethane			*116*	*65.0-129*	
(S) a,a,a-Trifluorotoluene			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*108*	*67.0-138*	

Method Blank (MB)

(MB) R3356007-1 11/01/18 10:22

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/kg		ug/kg	ug/kg
PCB 1016	U		3.50	17.0
PCB 1221	U		5.37	17.0
PCB 1232	U		4.17	17.0
PCB 1242	U		3.18	17.0
PCB 1248	U		3.15	17.0
PCB 1254	U		4.72	17.0
PCB 1260	U		4.94	17.0
(S) Decachlorobiphenyl	*71.6*			*10.0-135*
(S) Tetrachloro-m-xylene	*79.6*			*10.0-139*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356007-2 11/01/18 10:36 • (LCSD) R3356007-3 11/01/18 10:49

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/kg	ug/kg	ug/kg	%	%	%			%	%
PCB 1260	167	107	137	64.1	82.0	37.0-145			24.6	37
PCB 1016	167	115	141	68.9	84.4	36.0-141			20.3	35
(S) Decachlorobiphenyl				*76.6*	*78.1*	*10.0-135*				
(S) Tetrachloro-m-xylene				*81.8*	*83.6*	*10.0-139*				

Method Blank (MB)

(MB) R3356245-3 11/01/18 23:10

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Acenaphthene	U		6.42	33.0
Acenaphthylene	U		6.71	33.0
Acetophenone	U		75.2	333
Anthracene	U		6.32	33.0
Atrazine	U		93.8	333
Benzaldehyde	U		53.2	333
Benzo(a)anthracene	U		4.28	33.0
Benzo(b)fluoranthene	U		6.95	33.0
Benzo(k)fluoranthene	U		5.82	33.0
Benzo(g,h,i)perylene	U		7.21	33.0
Benzo(a)pyrene	U		5.48	33.0
Biphenyl	U		5.88	333
Bis(2-chlorethoxy)methane	U		7.70	333
Bis(2-chloroethyl)ether	U		8.96	333
Bis(2-chloroisopropyl)ether	U		7.60	333
4-Bromophenyl-phenylether	U		11.4	333
Caprolactam	U		104	333
Carbazole	U		5.24	333
4-Chloroaniline	U		35.2	333
2-Chloronaphthalene	U		6.39	33.0
4-Chlorophenyl-phenylether	U		6.27	333
Chrysene	U		5.55	33.0
Dibenz(a,h)anthracene	U		8.21	33.0
Dibenzofuran	U		5.18	333
3,3-Dichlorobenzidine	U		79.4	333
2,4-Dinitrotoluene	U		6.07	333
2,6-Dinitrotoluene	U		7.37	333
Fluoranthene	U		4.96	33.0
Fluorene	U		6.82	33.0
Hexachlorobenzene	U		8.56	333
Hexachloro-1,3-butadiene	U		10.0	333
Hexachlorocyclopentadiene	U		58.7	333
Hexachloroethane	U		13.4	333
Indeno(1,2,3-cd)pyrene	U		7.72	33.0
Isophorone	U		5.22	333
2-Methylnaphthalene	U		8.61	33.0
Naphthalene	U		8.89	33.0
2-Nitroaniline	U		7.55	333
3-Nitroaniline	U		8.50	333
4-Nitroaniline	U		6.39	333

Method Blank (MB)

(MB) R3356245-3 11/01/18 23:10

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Nitrobenzene	U		6.95	333
n-Nitrosodiphenylamine	U		90.0	333
n-Nitrosodi-n-propylamine	U		9.06	333
Phenanthrene	U		5.28	33.0
Benzylbutyl phthalate	U		10.3	333
Bis(2-ethylhexyl)phthalate	U		12.0	333
Di-n-butyl phthalate	U		10.9	333
Diethyl phthalate	U		6.91	333
Dimethyl phthalate	U		5.40	333
Di-n-octyl phthalate	U		9.07	333
Pyrene	U		12.3	33.0
4-Chloro-3-methylphenol	U		4.77	333
2-Chlorophenol	U		8.31	333
2-Methylphenol	U		9.86	333
3&4-Methyl Phenol	U		7.83	333
2,4-Dichlorophenol	U		7.46	333
2,4-Dimethylphenol	U		47.1	333
4,6-Dinitro-2-methylphenol	U		124	333
2,4-Dinitrophenol	U		98.0	333
2-Nitrophenol	U		13.0	333
4-Nitrophenol	U		52.5	333
Pentachlorophenol	U		48.0	333
Phenol	U		6.95	333
1,2,4,5-Tetrachlorobenzene	U		76.2	333
2,4,5-Trichlorophenol	U		10.4	333
2,4,6-Trichlorophenol	U		7.79	333
(S) Nitrobenzene-d5	*73.6*			*10.0-122*
(S) 2-Fluorobiphenyl	*70.0*			*15.0-120*
(S) p-Terphenyl-d14	*70.6*			*10.0-120*
(S) Phenol-d5	*71.8*			*10.0-120*
(S) 2-Fluorophenol	*79.9*			*12.0-120*
(S) 2,4,6-Tribromophenol	*74.2*			*10.0-127*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356245-1 11/01/18 22:23 • (LCSD) R3356245-2 11/01/18 22:46

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acenaphthene	666	448	459	67.3	68.9	38.0-120			2.43	22
Acenaphthylene	666	454	455	68.2	68.3	40.0-120			0.220	22
Acetophenone	666	431	434	64.7	65.2	29.0-120			0.694	27
Anthracene	666	465	458	69.8	68.8	42.0-120			1.52	20
Atrazine	666	519	498	77.9	74.8	43.0-120			4.13	21
Benzaldehyde	666	555	541	83.3	81.2	10.0-160			2.55	40
Benzo(a)anthracene	666	459	447	68.9	67.1	44.0-120			2.65	20
Benzo(b)fluoranthene	666	477	474	71.6	71.2	43.0-120			0.631	22
Benzo(k)fluoranthene	666	432	419	64.9	62.9	44.0-120			3.06	21
Benzo(g,h,i)perylene	666	501	492	75.2	73.9	43.0-120			1.81	22
Benzo(a)pyrene	666	448	445	67.3	66.8	45.0-120			0.672	20
Biphenyl	666	440	444	66.1	66.7	39.0-120			0.905	24
Bis(2-chlorethoxy)methane	666	422	411	63.4	61.7	20.0-120			2.64	23
Bis(2-chloroethyl)ether	666	433	434	65.0	65.2	16.0-120			0.231	31
Bis(2-chloroisopropyl)ether	666	399	389	59.9	58.4	23.0-120			2.54	30
4-Bromophenyl-phenylether	666	497	488	74.6	73.3	40.0-120			1.83	21
Caprolactam	666	458	429	68.8	64.4	38.0-120			6.54	20
Carbazole	666	463	445	69.5	66.8	48.0-120			3.96	20
4-Chloroaniline	666	377	363	56.6	54.5	18.0-120			3.78	25
2-Chloronaphthalene	666	442	445	66.4	66.8	35.0-120			0.676	24
4-Chlorophenyl-phenylether	666	480	476	72.1	71.5	40.0-120			0.837	22
Chrysene	666	473	468	71.0	70.3	43.0-120			1.06	20
Dibenz(a,h)anthracene	666	472	466	70.9	70.0	44.0-120			1.28	22
Dibenzofuran	666	442	445	66.4	66.8	44.0-120			0.676	21
3,3-Dichlorobenzidine	666	397	393	59.6	59.0	28.0-120			1.01	23
2,4-Dinitrotoluene	666	513	499	77.0	74.9	45.0-120			2.77	21
2,6-Dinitrotoluene	666	490	473	73.6	71.0	42.0-120			3.53	21
Fluoranthene	666	506	489	76.0	73.4	44.0-120			3.42	21
Fluorene	666	465	464	69.8	69.7	41.0-120			0.215	22
Hexachlorobenzene	666	526	515	79.0	77.3	39.0-120			2.11	21
Hexachloro-1,3-butadiene	666	509	494	76.4	74.2	15.0-120			2.99	28
Hexachlorocyclopentadiene	666	457	481	68.6	72.2	15.0-120			5.12	31
Hexachloroethane	666	417	424	62.6	63.7	17.0-120			1.66	31
Indeno(1,2,3-cd)pyrene	666	478	470	71.8	70.6	45.0-120			1.69	21
Isophorone	666	453	444	68.0	66.7	23.0-120			2.01	23
2-Methylnaphthalene	666	426	425	64.0	63.8	34.0-120			0.235	22
Naphthalene	666	441	471	66.2	70.7	18.0-120			6.58	24
2-Nitroaniline	666	471	468	70.7	70.3	46.0-120			0.639	22
3-Nitroaniline	666	414	398	62.2	59.8	36.0-120			3.94	22
4-Nitroaniline	666	478	448	71.8	67.3	36.0-120			6.48	23

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356245-1 11/01/18 22:23 • (LCSD) R3356245-2 11/01/18 22:46

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Nitrobenzene	666	467	460	70.1	69.1	17.0-120			1.51	26
n-Nitrosodiphenylamine	666	437	439	65.6	65.9	40.0-120			0.457	21
n-Nitrosodi-n-propylamine	666	434	435	65.2	65.3	26.0-120			0.230	27
Phenanthrene	666	458	447	68.8	67.1	42.0-120			2.43	20
Benzylbutyl phthalate	666	465	451	69.8	67.7	40.0-120			3.06	21
Bis(2-ethylhexyl)phthalate	666	479	455	71.9	68.3	41.0-120			5.14	21
Di-n-butyl phthalate	666	533	498	80.0	74.8	43.0-120			6.79	20
Diethyl phthalate	666	505	481	75.8	72.2	43.0-120			4.87	21
Dimethyl phthalate	666	486	478	73.0	71.8	43.0-120			1.66	22
Di-n-octyl phthalate	666	523	495	78.5	74.3	40.0-120			5.50	21
Pyrene	666	446	444	67.0	66.7	41.0-120			0.449	21
4-Chloro-3-methylphenol	666	506	490	76.0	73.6	28.0-120			3.21	20
2-Chlorophenol	666	445	461	66.8	69.2	28.0-120			3.53	28
2-Methylphenol	666	454	469	68.2	70.4	35.0-120			3.25	24
3&4-Methyl Phenol	666	490	498	73.6	74.8	42.0-120			1.62	25
2,4-Dichlorophenol	666	490	481	73.6	72.2	25.0-120			1.85	21
2,4-Dimethylphenol	666	477	469	71.6	70.4	15.0-120			1.69	26
4,6-Dinitro-2-methylphenol	666	432	417	64.9	62.6	16.0-120			3.53	33
2,4-Dinitrophenol	666	360	362	54.1	54.4	10.0-120			0.554	40
2-Nitrophenol	666	477	481	71.6	72.2	20.0-120			0.835	25
4-Nitrophenol	666	367	353	55.1	53.0	27.0-120			3.89	24
Pentachlorophenol	666	472	455	70.9	68.3	29.0-120			3.67	25
Phenol	666	459	462	68.9	69.4	28.0-120			0.651	27
1,2,4,5-Tetrachlorobenzene	666	464	465	69.7	69.8	30.0-120			0.215	23
2,4,5-Trichlorophenol	666	490	494	73.6	74.2	38.0-120			0.813	24
2,4,6-Trichlorophenol	666	475	479	71.3	71.9	37.0-120			0.839	24
(S) Nitrobenzene-d5				*72.7*	*71.5*	*10.0-122*				
(S) 2-Fluorobiphenyl				*66.4*	*69.1*	*15.0-120*				
(S) p-Terphenyl-d14				*68.5*	*69.4*	*10.0-120*				
(S) Phenol-d5				*68.5*	*69.2*	*10.0-120*				
(S) 2-Fluorophenol				*76.1*	*78.1*	*12.0-120*				
(S) 2,4,6-Tribromophenol				*78.1*	*80.6*	*10.0-127*				

L1038384-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038384-02 11/02/18 04:33 • (MS) R3356245-4 11/02/18 04:57 • (MSD) R3356245-5 11/02/18 05:19

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	816	U	456	468	55.9	59.0	10	18.0-120			2.66	32
Acenaphthylene	816	U	424	406	52.0	51.1	10	25.0-120			4.44	32
Acetophenone	816	U	ND	ND	0.000	0.000	10	10.0-120	J6	J6	0.000	37
Anthracene	816	U	473	500	58.0	63.0	10	22.0-120			5.56	29
Atrazine	816	U	ND	ND	0.000	0.000	10	20.0-131	J6	J6	0.000	28
Benzaldehyde	816	U	ND	ND	0.000	0.000	10	10.0-160	J6	J6	0.000	40
Benzo(a)anthracene	816	U	509	631	62.3	79.4	10	25.0-120			21.4	29
Benzo(b)fluoranthene	816	U	564	762	69.1	96.0	10	19.0-122			29.8	31
Benzo(k)fluoranthene	816	U	478	595	58.6	74.9	10	23.0-120			21.8	30
Benzo(g,h,i)perylene	816	U	322	360	39.5	45.4	10	10.0-120			11.2	33
Benzo(a)pyrene	816	U	495	612	60.7	77.1	10	24.0-120			21.1	30
Biphenyl	816	U	422	407	51.7	51.2	10	15.0-120			3.56	33
Bis(2-chlorethoxy)methane	816	U	337	328	41.3	41.3	10	10.0-120			2.59	34
Bis(2-chloroethyl)ether	816	U	337	366	41.3	46.1	10	10.0-120			8.39	40
Bis(2-chloroisopropyl)ether	816	U	321	329	39.3	41.5	10	10.0-120			2.65	40
4-Bromophenyl-phenylether	816	U	506	475	62.0	59.8	10	27.0-120			6.52	30
Caprolactam	816	U	ND	ND	0.000	0.000	10	11.0-141	J6	J6	0.000	31
Carbazole	816	U	473	482	58.0	60.7	10	31.0-120			1.80	24
4-Chloroaniline	816	U	ND	ND	0.000	0.000	10	10.0-120	J6	J6	0.000	36
2-Chloronaphthalene	816	U	418	404	51.2	50.9	10	20.0-120			3.29	32
4-Chlorophenyl-phenylether	816	U	500	454	61.3	57.1	10	24.0-120			9.79	29
Chrysene	816	U	524	690	64.2	86.8	10	21.0-120			27.4	29
Dibenz(a,h)anthracene	816	U	369	343	45.2	43.2	10	10.0-120			7.25	32
Dibenzofuran	816	U	443	433	54.2	54.5	10	24.0-120			2.25	30
3,3-Dichlorobenzidine	816	U	ND	ND	0.000	0.000	10	10.0-120	J6	J6	0.000	34
2,4-Dinitrotoluene	816	U	486	433	59.5	54.5	10	30.0-120			11.5	31
2,6-Dinitrotoluene	816	U	465	392	56.9	49.4	10	25.0-120			16.9	31
Fluoranthene	816	130	591	997	56.5	109	10	18.0-126		J3	51.1	32
Fluorene	816	U	472	498	57.8	62.7	10	25.0-120			5.32	30
Hexachlorobenzene	816	U	585	498	71.7	62.7	10	27.0-120			16.1	28
Hexachloro-1,3-butadiene	816	U	447	456	54.8	57.4	10	10.0-120			1.90	38
Hexachlorocyclopentadiene	816	U	ND	ND	0.000	0.000	10	10.0-120	J6	J6	0.000	40
Hexachloroethane	816	U	343	359	42.0	45.2	10	10.0-120			4.55	40
Indeno(1,2,3-cd)pyrene	816	U	361	388	44.3	48.9	10	10.0-120			7.21	32
Isophorone	816	U	332	365	40.7	46.0	10	13.0-120			9.52	34
2-Methylnaphthalene	816	U	369	372	45.2	46.9	10	10.0-120			0.995	37
Naphthalene	816	167	370	391	24.8	28.2	10	10.0-120			5.49	35
2-Nitroaniline	816	U	430	414	52.7	52.2	10	24.0-120			3.78	30
3-Nitroaniline	816	U	416	361	50.9	45.5	10	11.0-120			13.9	32

L1038384-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038384-02 11/02/18 04:33 • (MS) R3356245-4 11/02/18 04:57 • (MSD) R3356245-5 11/02/18 05:19

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
4-Nitroaniline	816	U	456	417	55.9	52.5	10	15.0-120			9.01	31
Nitrobenzene	816	U	371	372	45.5	46.9	10	10.0-120			0.331	36
n-Nitrosodiphenylamine	816	U	ND	ND	0.000	0.000	10	17.0-120	J6	J6	0.000	29
n-Nitrosodi-n-propylamine	816	U	344	336	42.2	42.3	10	10.0-120			2.53	37
Phenanthrene	816	66.8	494	731	52.4	83.7	10	17.0-120		J3	38.7	31
Benzylbutyl phthalate	816	U	417	393	51.1	49.5	10	23.0-120			5.77	30
Bis(2-ethylhexyl)phthalate	816	U	456	434	55.9	54.6	10	17.0-126			4.97	30
Di-n-butyl phthalate	816	U	524	487	64.2	61.3	10	30.0-120			7.30	29
Diethyl phthalate	816	U	506	478	62.0	60.2	10	26.0-120			5.74	28
Dimethyl phthalate	816	U	468	434	57.4	54.6	10	25.0-120			7.63	29
Di-n-octyl phthalate	816	U	520	475	63.7	59.8	10	21.0-123			9.15	29
Pyrene	816	U	444	684	54.4	86.1	10	16.0-121		J3	42.5	32
4-Chloro-3-methylphenol	816	U	441	427	54.1	53.7	10	15.0-120			3.40	30
2-Chlorophenol	816	U	390	404	47.7	50.9	10	15.0-120			3.72	37
2-Methylphenol	816	U	434	406	53.2	51.1	10	11.0-120			6.73	40
3&4-Methyl Phenol	816	U	418	403	51.2	50.8	10	12.0-123			3.59	38
2,4-Dichlorophenol	816	U	444	445	54.4	56.0	10	20.0-120			0.277	31
2,4-Dimethylphenol	816	U	ND	ND	0.000	0.000	10	10.0-120	J6	J6	0.000	33
4,6-Dinitro-2-methylphenol	816	U	ND	ND	0.000	0.000	10	10.0-120	J6	J6	0.000	39
2,4-Dinitrophenol	816	U	1390	1360	170	172	10	10.0-121	J5	J5	1.79	40
2-Nitrophenol	816	U	357	409	43.7	51.5	10	12.0-120			13.8	39
4-Nitrophenol	816	U	ND	ND	0.000	0.000	10	10.0-137	J6	J6	0.000	32
Pentachlorophenol	816	U	1240	1210	152	152	10	10.0-160			2.81	31
Phenol	816	U	388	429	47.6	54.0	10	12.0-120			9.92	38
1,2,4,5-Tetrachlorobenzene	816	U	ND	ND	0.000	0.000	10	14.0-120	J6	J6	0.000	36
2,4,5-Trichlorophenol	816	U	471	392	57.7	49.4	10	20.0-120			18.2	30
2,4,6-Trichlorophenol	816	U	444	441	54.4	55.6	10	19.0-120			0.556	32
(S) Nitrobenzene-d5					*46.4*	*51.7*		*10.0-122*				
(S) 2-Fluorobiphenyl					*51.5*	*54.2*		*15.0-120*				
(S) p-Terphenyl-d14					*54.5*	*48.6*		*10.0-120*				
(S) Phenol-d5					*46.4*	*52.0*		*10.0-120*				
(S) 2-Fluorophenol					*47.9*	*55.6*		*12.0-120*				
(S) 2,4,6-Tribromophenol					*61.3*	*61.0*		*10.0-127*				

Sample Narrative:

OS: Dilution due to matrix impact during extract concentration procedure

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
Q	Sample was prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.

LaBella Associates, D.P.C. 300 State Street, Suite 201 Rochester, NY 14614	Billing Information: SAME	Pres Chk
Report to: Mike Marrash	Email To: mmarrash@labellapc.com	
Project Description: East Main and Laura Street	City/State Collected: Rochester NY	
Phone: 585 402 7078 Fax:	Client Project # 2182815	Lab Project #
Collected by (print): Mike Marrash	Site/Facility ID #	P.O. # 2182815
Collected by (signature): Immediately Packed on Ice N ____ Y ___X___	***Rush?*** (Lab MUST Be Notified) ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day	**Quote #** Date Results Needed STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TCL and CP51 VOCs 8260	TCL and CP51 SVOCs 8270	TAL Metals 6010	PCBs 8082	~~Pesticides~~							Remarks	Sample # (lab only)
C-1	Comp	SS		10/18/18	1200	23	X	X	X	X	X								-6'
C-2	Comp	SS		10/18/18	1218	23	X	X	X	X	X								02

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L1638877
G025

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date: 10/26/18	Time: 1336	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.8+0.1=2.9 °C Bottles Received: 6
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 10/27/18 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 05, 2018

LaBella Associates, P.C.

Sample Delivery Group:	L1038880
Samples Received:	10/27/2018
Project Number:	2182815
Description:	East Main and Laura Street

Report To: Mr. Mike Marrash
300 State Street, Suite 201
Rochester, NY 14614

Entire Report Reviewed By:

T. Alan Harvill
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

SS-01 L1038880-01 Solid

Collected by: Mike Marrash | Collected date/time: 10/22/18 09:37 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189678	1	11/02/18 14:13	11/02/18 14:23	JD
Mercury by Method 7471B	WG1188180	1	10/30/18 13:00	10/31/18 14:37	ABL
Metals (ICP) by Method 6010C	WG1188132	1	10/30/18 11:29	11/01/18 09:43	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 13:09	10/31/18 12:12	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 13:09	11/04/18 14:14	JHH
Pesticides (GC) by Method 8081B	WG1190055	1	11/01/18 17:35	11/02/18 22:59	TD
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1190055	1	11/01/18 17:35	11/02/18 08:34	RP
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1190289	5	11/04/18 07:18	11/04/18 22:30	MEC

SS-02 L1038880-02 Solid

Collected by: Mike Marrash | Collected date/time: 10/22/18 10:13 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189680	1	11/01/18 15:17	11/01/18 15:27	JD
Mercury by Method 7471B	WG1188180	1	10/30/18 13:00	10/31/18 14:39	ABL
Metals (ICP) by Method 6010C	WG1188132	1	10/30/18 11:29	11/01/18 09:46	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 13:09	10/31/18 12:32	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 13:09	11/04/18 14:33	JHH
Pesticides (GC) by Method 8081B	WG1190055	1	11/01/18 17:35	11/02/18 23:11	TD
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1190055	1	11/01/18 17:35	11/02/18 08:48	RP
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1190289	5	11/04/18 07:18	11/04/18 22:54	MEC

SS-03 L1038880-04 Solid

Collected by: Mike Marrash | Collected date/time: 10/22/18 10:26 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189680	1	11/01/18 15:17	11/01/18 15:27	JD
Mercury by Method 7471B	WG1188180	1	10/30/18 13:00	10/31/18 14:41	ABL
Metals (ICP) by Method 6010C	WG1188132	1	10/30/18 11:29	11/01/18 09:48	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 13:09	10/31/18 12:52	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 13:09	11/04/18 14:51	JHH
Pesticides (GC) by Method 8081B	WG1190055	1	11/01/18 17:35	11/02/18 23:23	TD
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1190055	1	11/01/18 17:35	11/02/18 09:02	RP
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1190289	5	11/04/18 07:18	11/04/18 23:41	MEC

SS-04 L1038880-05 Solid

Collected by: Mike Marrash | Collected date/time: 10/22/18 10:40 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189680	1	11/01/18 15:17	11/01/18 15:27	JD
Mercury by Method 7471B	WG1188180	1	10/30/18 13:00	10/31/18 14:43	ABL
Metals (ICP) by Method 6010C	WG1188132	1	10/30/18 11:29	11/01/18 09:51	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 13:09	10/31/18 13:13	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 13:09	11/04/18 15:09	JHH
Pesticides (GC) by Method 8081B	WG1190055	1	11/01/18 17:35	11/02/18 23:36	ADF
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1190055	1	11/01/18 17:35	11/02/18 09:16	RP
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1190289	5	11/04/18 07:18	11/05/18 00:03	MEC

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

T. Alan Harvill
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.9		1	11/02/2018 14:23	WG1189678

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	277		25.0	1	10/31/2018 14:37	WG1188180

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Aluminum	8550000		12500	1	11/01/2018 09:43	WG1188132
Antimony	ND		2500	1	11/01/2018 09:43	WG1188132
Arsenic	5010		2500	1	11/01/2018 09:43	WG1188132
Barium	58700		626	1	11/01/2018 09:43	WG1188132
Beryllium	430		250	1	11/01/2018 09:43	WG1188132
Cadmium	ND		626	1	11/01/2018 09:43	WG1188132
Calcium	5570000		125000	1	11/01/2018 09:43	WG1188132
Chromium	18800		1250	1	11/01/2018 09:43	WG1188132
Cobalt	4760		1250	1	11/01/2018 09:43	WG1188132
Copper	34900		2500	1	11/01/2018 09:43	WG1188132
Iron	13900000		12500	1	11/01/2018 09:43	WG1188132
Lead	158000		626	1	11/01/2018 09:43	WG1188132
Magnesium	2950000		125000	1	11/01/2018 09:43	WG1188132
Manganese	385000		1250	1	11/01/2018 09:43	WG1188132
Nickel	11200		2500	1	11/01/2018 09:43	WG1188132
Potassium	1150000		125000	1	11/01/2018 09:43	WG1188132
Selenium	ND		2500	1	11/01/2018 09:43	WG1188132
Silver	ND		1250	1	11/01/2018 09:43	WG1188132
Sodium	130000	B	125000	1	11/01/2018 09:43	WG1188132
Thallium	ND		2500	1	11/01/2018 09:43	WG1188132
Vanadium	16200		2500	1	11/01/2018 09:43	WG1188132
Zinc	108000		6260	1	11/01/2018 09:43	WG1188132

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		31.3	1	10/31/2018 12:12	WG1188986
Benzene	ND		1.25	1	10/31/2018 12:12	WG1188986
Bromochloromethane	ND		6.26	1	10/31/2018 12:12	WG1188986
Bromodichloromethane	ND		3.13	1	10/31/2018 12:12	WG1188986
Bromoform	ND		31.3	1	10/31/2018 12:12	WG1188986
Bromomethane	ND		15.6	1	10/31/2018 12:12	WG1188986
Carbon disulfide	ND		15.6	1	10/31/2018 12:12	WG1188986
Carbon tetrachloride	ND		6.26	1	10/31/2018 12:12	WG1188986
Chlorobenzene	ND		3.13	1	10/31/2018 12:12	WG1188986
Chlorodibromomethane	ND		3.13	1	10/31/2018 12:12	WG1188986
Chloroethane	ND		6.26	1	10/31/2018 12:12	WG1188986
Chloroform	ND		3.13	1	10/31/2018 12:12	WG1188986
Chloromethane	ND		15.6	1	10/31/2018 12:12	WG1188986
Cyclohexane	ND		3.13	1	10/31/2018 12:12	WG1188986
1,2-Dibromo-3-Chloropropane	ND		31.3	1	10/31/2018 12:12	WG1188986
1,2-Dibromoethane	ND	J4	3.13	1	10/31/2018 12:12	WG1188986
Dichlorodifluoromethane	ND		3.13	1	11/04/2018 14:14	WG1191199
1,1-Dichloroethane	ND		3.13	1	10/31/2018 12:12	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		3.13	1	10/31/2018 12:12	WG1188986
1,2-Dichlorobenzene	ND		6.26	1	10/31/2018 12:12	WG1188986
1,3-Dichlorobenzene	ND		6.26	1	10/31/2018 12:12	WG1188986
1,4-Dichlorobenzene	ND		6.26	1	10/31/2018 12:12	WG1188986
1,1-Dichloroethene	ND		3.13	1	10/31/2018 12:12	WG1188986
cis-1,2-Dichloroethene	ND		3.13	1	10/31/2018 12:12	WG1188986
trans-1,2-Dichloroethene	ND		6.26	1	10/31/2018 12:12	WG1188986
1,2-Dichloropropane	ND		6.26	1	11/04/2018 14:14	WG1191199
cis-1,3-Dichloropropene	ND		3.13	1	10/31/2018 12:12	WG1188986
trans-1,3-Dichloropropene	ND		6.26	1	10/31/2018 12:12	WG1188986
Ethylbenzene	ND		3.13	1	10/31/2018 12:12	WG1188986
2-Hexanone	ND		31.3	1	10/31/2018 12:12	WG1188986
Isopropylbenzene	ND		3.13	1	10/31/2018 12:12	WG1188986
2-Butanone (MEK)	ND		31.3	1	11/04/2018 14:14	WG1191199
Methyl Acetate	ND		6.26	1	10/31/2018 12:12	WG1188986
Methyl Cyclohexane	ND		6.26	1	10/31/2018 12:12	WG1188986
Methylene Chloride	ND		31.3	1	10/31/2018 12:12	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		31.3	1	10/31/2018 12:12	WG1188986
Methyl tert-butyl ether	ND		1.25	1	10/31/2018 12:12	WG1188986
Naphthalene	ND		15.6	1	10/31/2018 12:12	WG1188986
Styrene	ND		15.6	1	10/31/2018 12:12	WG1188986
1,1,2,2-Tetrachloroethane	ND		3.13	1	10/31/2018 12:12	WG1188986
Tetrachloroethene	ND		3.13	1	10/31/2018 12:12	WG1188986
Toluene	ND		6.26	1	10/31/2018 12:12	WG1188986
1,2,3-Trichlorobenzene	ND		3.13	1	10/31/2018 12:12	WG1188986
1,2,4-Trichlorobenzene	ND		15.6	1	10/31/2018 12:12	WG1188986
1,1,1-Trichloroethane	ND		3.13	1	10/31/2018 12:12	WG1188986
1,1,2-Trichloroethane	ND		3.13	1	10/31/2018 12:12	WG1188986
Trichloroethene	ND	J4	1.25	1	10/31/2018 12:12	WG1188986
Trichlorofluoromethane	ND		3.13	1	10/31/2018 12:12	WG1188986
1,1,2-Trichlorotrifluoroethane	ND		3.13	1	10/31/2018 12:12	WG1188986
Vinyl chloride	ND		3.13	1	10/31/2018 12:12	WG1188986
o-Xylene	ND		3.13	1	10/31/2018 12:12	WG1188986
m&p-Xylenes	ND		5.00	1	10/31/2018 12:12	WG1188986
n-Butylbenzene	ND		15.6	1	10/31/2018 12:12	WG1188986
sec-Butylbenzene	ND		15.6	1	10/31/2018 12:12	WG1188986
tert-Butylbenzene	ND	J4	6.26	1	10/31/2018 12:12	WG1188986
p-Isopropyltoluene	ND		6.26	1	10/31/2018 12:12	WG1188986
n-Propylbenzene	ND		6.26	1	10/31/2018 12:12	WG1188986
1,2,4-Trimethylbenzene	ND		6.26	1	10/31/2018 12:12	WG1188986
1,3,5-Trimethylbenzene	ND		6.26	1	10/31/2018 12:12	WG1188986
(S) Toluene-d8	*106*		*75.0-131*		*10/31/2018 12:12*	WG1188986
(S) Toluene-d8	*100*		*75.0-131*		*11/04/2018 14:14*	WG1191199
(S) Dibromofluoromethane	*89.0*		*65.0-129*		*10/31/2018 12:12*	WG1188986
(S) Dibromofluoromethane	*118*		*65.0-129*		*11/04/2018 14:14*	WG1191199
(S) a,a,a-Trifluorotoluene	*104*		*80.0-120*		*10/31/2018 12:12*	WG1188986
(S) a,a,a-Trifluorotoluene	*102*		*80.0-120*		*11/04/2018 14:14*	WG1191199
(S) 4-Bromofluorobenzene	*101*		*67.0-138*		*10/31/2018 12:12*	WG1188986
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*11/04/2018 14:14*	WG1191199

Pesticides (GC) by Method 8081B

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		25.0	1	11/02/2018 22:59	WG1190055
Alpha BHC	ND		25.0	1	11/02/2018 22:59	WG1190055
Beta BHC	ND		25.0	1	11/02/2018 22:59	WG1190055
Delta BHC	ND		25.0	1	11/02/2018 22:59	WG1190055
Gamma BHC	ND		25.0	1	11/02/2018 22:59	WG1190055
Chlordane	ND		250	1	11/02/2018 22:59	WG1190055
4,4-DDD	ND		25.0	1	11/02/2018 22:59	WG1190055
4,4-DDE	ND		25.0	1	11/02/2018 22:59	WG1190055
4,4-DDT	ND		25.0	1	11/02/2018 22:59	WG1190055
Dieldrin	ND		25.0	1	11/02/2018 22:59	WG1190055
Endosulfan I	ND		25.0	1	11/02/2018 22:59	WG1190055
Endosulfan II	ND		25.0	1	11/02/2018 22:59	WG1190055
Endosulfan sulfate	ND		25.0	1	11/02/2018 22:59	WG1190055
Endrin	ND		25.0	1	11/02/2018 22:59	WG1190055
Endrin aldehyde	ND		25.0	1	11/02/2018 22:59	WG1190055
Endrin ketone	ND		25.0	1	11/02/2018 22:59	WG1190055
Heptachlor	ND		25.0	1	11/02/2018 22:59	WG1190055
Heptachlor epoxide	ND		25.0	1	11/02/2018 22:59	WG1190055
Hexachlorobenzene	ND		25.0	1	11/02/2018 22:59	WG1190055
Methoxychlor	ND		25.0	1	11/02/2018 22:59	WG1190055
Toxaphene	ND		500	1	11/02/2018 22:59	WG1190055
(S) Decachlorobiphenyl	*100*		*10.0-135*		*11/02/2018 22:59*	WG1190055
(S) Tetrachloro-m-xylene	*76.5*		*10.0-139*		*11/02/2018 22:59*	WG1190055

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		21.3	1	11/02/2018 08:34	WG1190055
PCB 1221	ND		21.3	1	11/02/2018 08:34	WG1190055
PCB 1232	ND		21.3	1	11/02/2018 08:34	WG1190055
PCB 1242	ND		21.3	1	11/02/2018 08:34	WG1190055
PCB 1248	ND		21.3	1	11/02/2018 08:34	WG1190055
PCB 1254	ND		21.3	1	11/02/2018 08:34	WG1190055
PCB 1260	ND		21.3	1	11/02/2018 08:34	WG1190055
(S) Decachlorobiphenyl	*70.9*		*10.0-135*		*11/02/2018 08:34*	WG1190055
(S) Tetrachloro-m-xylene	*74.2*		*10.0-139*		*11/02/2018 08:34*	WG1190055

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		206	5	11/04/2018 22:30	WG1190289
Acenaphthylene	ND		206	5	11/04/2018 22:30	WG1190289
Acetophenone	ND		2090	5	11/04/2018 22:30	WG1190289
Anthracene	ND		206	5	11/04/2018 22:30	WG1190289
Atrazine	ND		2090	5	11/04/2018 22:30	WG1190289
Benzaldehyde	ND	J3	2090	5	11/04/2018 22:30	WG1190289
Benzo(a)anthracene	672		206	5	11/04/2018 22:30	WG1190289
Benzo(b)fluoranthene	1120		206	5	11/04/2018 22:30	WG1190289
Benzo(k)fluoranthene	286		206	5	11/04/2018 22:30	WG1190289
Benzo(g,h,i)perylene	408		206	5	11/04/2018 22:30	WG1190289
Benzo(a)pyrene	687		206	5	11/04/2018 22:30	WG1190289
Biphenyl	ND		2090	5	11/04/2018 22:30	WG1190289
Bis(2-chlorethoxy)methane	ND		2090	5	11/04/2018 22:30	WG1190289
Bis(2-chloroethyl)ether	ND		2090	5	11/04/2018 22:30	WG1190289
Bis(2-chloroisopropyl)ether	ND		2090	5	11/04/2018 22:30	WG1190289

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
4-Bromophenyl-phenylether	ND		2090	5	11/04/2018 22:30	WG1190289
Caprolactam	ND		2090	5	11/04/2018 22:30	WG1190289
Carbazole	ND		2090	5	11/04/2018 22:30	WG1190289
4-Chloroaniline	ND		2090	5	11/04/2018 22:30	WG1190289
2-Chloronaphthalene	ND		206	5	11/04/2018 22:30	WG1190289
4-Chlorophenyl-phenylether	ND		2090	5	11/04/2018 22:30	WG1190289
Chrysene	777		206	5	11/04/2018 22:30	WG1190289
Dibenz(a,h)anthracene	ND		206	5	11/04/2018 22:30	WG1190289
Dibenzofuran	ND		2090	5	11/04/2018 22:30	WG1190289
3,3-Dichlorobenzidine	ND		2090	5	11/04/2018 22:30	WG1190289
2,4-Dinitrotoluene	ND		2090	5	11/04/2018 22:30	WG1190289
2,6-Dinitrotoluene	ND		2090	5	11/04/2018 22:30	WG1190289
Fluoranthene	1600		206	5	11/04/2018 22:30	WG1190289
Fluorene	ND		206	5	11/04/2018 22:30	WG1190289
Hexachlorobenzene	ND		2090	5	11/04/2018 22:30	WG1190289
Hexachloro-1,3-butadiene	ND		2090	5	11/04/2018 22:30	WG1190289
Hexachlorocyclopentadiene	ND	J0	2090	5	11/04/2018 22:30	WG1190289
Hexachloroethane	ND		2090	5	11/04/2018 22:30	WG1190289
Indeno(1,2,3-cd)pyrene	389		206	5	11/04/2018 22:30	WG1190289
Isophorone	ND		2090	5	11/04/2018 22:30	WG1190289
2-Methylnaphthalene	ND		206	5	11/04/2018 22:30	WG1190289
Naphthalene	ND		206	5	11/04/2018 22:30	WG1190289
2-Nitroaniline	ND		2090	5	11/04/2018 22:30	WG1190289
3-Nitroaniline	ND		2090	5	11/04/2018 22:30	WG1190289
4-Nitroaniline	ND		2090	5	11/04/2018 22:30	WG1190289
Nitrobenzene	ND		2090	5	11/04/2018 22:30	WG1190289
n-Nitrosodiphenylamine	ND		2090	5	11/04/2018 22:30	WG1190289
n-Nitrosodi-n-propylamine	ND		2090	5	11/04/2018 22:30	WG1190289
Phenanthrene	648		206	5	11/04/2018 22:30	WG1190289
Benzylbutyl phthalate	ND		2090	5	11/04/2018 22:30	WG1190289
Bis(2-ethylhexyl)phthalate	ND		2090	5	11/04/2018 22:30	WG1190289
Di-n-butyl phthalate	ND		2090	5	11/04/2018 22:30	WG1190289
Diethyl phthalate	ND		2090	5	11/04/2018 22:30	WG1190289
Dimethyl phthalate	ND		2090	5	11/04/2018 22:30	WG1190289
Di-n-octyl phthalate	ND		2090	5	11/04/2018 22:30	WG1190289
Pyrene	1170		206	5	11/04/2018 22:30	WG1190289
1,2,4,5-Tetrachlorobenzene	ND		2090	5	11/04/2018 22:30	WG1190289
4-Chloro-3-methylphenol	ND		2090	5	11/04/2018 22:30	WG1190289
2-Chlorophenol	ND		2090	5	11/04/2018 22:30	WG1190289
2-Methylphenol	ND		2090	5	11/04/2018 22:30	WG1190289
3&4-Methyl Phenol	ND		2090	5	11/04/2018 22:30	WG1190289
2,4-Dichlorophenol	ND		2090	5	11/04/2018 22:30	WG1190289
2,4-Dimethylphenol	ND	J0	2090	5	11/04/2018 22:30	WG1190289
4,6-Dinitro-2-methylphenol	ND		2090	5	11/04/2018 22:30	WG1190289
2,4-Dinitrophenol	ND		2090	5	11/04/2018 22:30	WG1190289
2-Nitrophenol	ND		2090	5	11/04/2018 22:30	WG1190289
4-Nitrophenol	ND		2090	5	11/04/2018 22:30	WG1190289
Pentachlorophenol	ND		2090	5	11/04/2018 22:30	WG1190289
Phenol	ND		2090	5	11/04/2018 22:30	WG1190289
2,4,5-Trichlorophenol	ND		2090	5	11/04/2018 22:30	WG1190289
2,4,6-Trichlorophenol	ND		2090	5	11/04/2018 22:30	WG1190289
(S) 2-Fluorophenol	*58.5*		*12.0-120*		*11/04/2018 22:30*	WG1190289
(S) Phenol-d5	*55.6*		*10.0-120*		*11/04/2018 22:30*	WG1190289
(S) Nitrobenzene-d5	*48.8*		*10.0-122*		*11/04/2018 22:30*	WG1190289
(S) 2-Fluorobiphenyl	*63.9*		*15.0-120*		*11/04/2018 22:30*	WG1190289
(S) 2,4,6-Tribromophenol	*68.5*		*10.0-127*		*11/04/2018 22:30*	WG1190289

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*76.4*		*10.0-120*		*11/04/2018 22:30*	WG1190289

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.1		1	11/01/2018 15:27	WG1189680

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	134		22.2	1	10/31/2018 14:39	WG1188180

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Aluminum	9620000		11100	1	11/01/2018 09:46	WG1188132
Antimony	ND		2220	1	11/01/2018 09:46	WG1188132
Arsenic	2970		2220	1	11/01/2018 09:46	WG1188132
Barium	73800		555	1	11/01/2018 09:46	WG1188132
Beryllium	433		222	1	11/01/2018 09:46	WG1188132
Cadmium	ND		555	1	11/01/2018 09:46	WG1188132
Calcium	33400000		111000	1	11/01/2018 09:46	WG1188132
Chromium	13500		1110	1	11/01/2018 09:46	WG1188132
Cobalt	5670		1110	1	11/01/2018 09:46	WG1188132
Copper	20500		2220	1	11/01/2018 09:46	WG1188132
Iron	15000000		11100	1	11/01/2018 09:46	WG1188132
Lead	125000		555	1	11/01/2018 09:46	WG1188132
Magnesium	13600000		111000	1	11/01/2018 09:46	WG1188132
Manganese	350000		1110	1	11/01/2018 09:46	WG1188132
Nickel	14700		2220	1	11/01/2018 09:46	WG1188132
Potassium	1730000		111000	1	11/01/2018 09:46	WG1188132
Selenium	ND		2220	1	11/01/2018 09:46	WG1188132
Silver	ND		1110	1	11/01/2018 09:46	WG1188132
Sodium	165000	B	111000	1	11/01/2018 09:46	WG1188132
Thallium	ND		2220	1	11/01/2018 09:46	WG1188132
Vanadium	17600		2220	1	11/01/2018 09:46	WG1188132
Zinc	107000		5550	1	11/01/2018 09:46	WG1188132

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		27.7	1	10/31/2018 12:32	WG1188986
Benzene	ND		1.11	1	10/31/2018 12:32	WG1188986
Bromochloromethane	ND		5.55	1	10/31/2018 12:32	WG1188986
Bromodichloromethane	ND		2.77	1	10/31/2018 12:32	WG1188986
Bromoform	ND		27.7	1	10/31/2018 12:32	WG1188986
Bromomethane	ND		13.9	1	10/31/2018 12:32	WG1188986
Carbon disulfide	ND		13.9	1	10/31/2018 12:32	WG1188986
Carbon tetrachloride	ND		5.55	1	10/31/2018 12:32	WG1188986
Chlorobenzene	ND		2.77	1	10/31/2018 12:32	WG1188986
Chlorodibromomethane	ND		2.77	1	10/31/2018 12:32	WG1188986
Chloroethane	ND		5.55	1	10/31/2018 12:32	WG1188986
Chloroform	ND		2.77	1	10/31/2018 12:32	WG1188986
Chloromethane	ND		13.9	1	10/31/2018 12:32	WG1188986
Cyclohexane	ND		2.77	1	10/31/2018 12:32	WG1188986
1,2-Dibromo-3-Chloropropane	ND		27.7	1	10/31/2018 12:32	WG1188986
1,2-Dibromoethane	ND	J4	2.77	1	10/31/2018 12:32	WG1188986
Dichlorodifluoromethane	ND		2.77	1	11/04/2018 14:33	WG1191199
1,1-Dichloroethane	ND		2.77	1	10/31/2018 12:32	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		2.77	1	10/31/2018 12:32	WG1188986
1,2-Dichlorobenzene	ND		5.55	1	10/31/2018 12:32	WG1188986
1,3-Dichlorobenzene	ND		5.55	1	10/31/2018 12:32	WG1188986
1,4-Dichlorobenzene	ND		5.55	1	10/31/2018 12:32	WG1188986
1,1-Dichloroethene	ND		2.77	1	10/31/2018 12:32	WG1188986
cis-1,2-Dichloroethene	ND		2.77	1	10/31/2018 12:32	WG1188986
trans-1,2-Dichloroethene	ND		5.55	1	10/31/2018 12:32	WG1188986
1,2-Dichloropropane	ND		5.55	1	11/04/2018 14:33	WG1191199
cis-1,3-Dichloropropene	ND		2.77	1	10/31/2018 12:32	WG1188986
trans-1,3-Dichloropropene	ND		5.55	1	10/31/2018 12:32	WG1188986
Ethylbenzene	ND		2.77	1	10/31/2018 12:32	WG1188986
2-Hexanone	ND		27.7	1	10/31/2018 12:32	WG1188986
Isopropylbenzene	ND		2.77	1	10/31/2018 12:32	WG1188986
2-Butanone (MEK)	ND		27.7	1	11/04/2018 14:33	WG1191199
Methyl Acetate	ND		5.55	1	10/31/2018 12:32	WG1188986
Methyl Cyclohexane	ND		5.55	1	10/31/2018 12:32	WG1188986
Methylene Chloride	ND		27.7	1	10/31/2018 12:32	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		27.7	1	10/31/2018 12:32	WG1188986
Methyl tert-butyl ether	ND		1.11	1	10/31/2018 12:32	WG1188986
Naphthalene	ND		13.9	1	10/31/2018 12:32	WG1188986
Styrene	ND		13.9	1	10/31/2018 12:32	WG1188986
1,1,2,2-Tetrachloroethane	ND		2.77	1	10/31/2018 12:32	WG1188986
Tetrachloroethene	ND		2.77	1	10/31/2018 12:32	WG1188986
Toluene	ND		5.55	1	10/31/2018 12:32	WG1188986
1,2,3-Trichlorobenzene	ND		2.77	1	10/31/2018 12:32	WG1188986
1,2,4-Trichlorobenzene	ND		13.9	1	10/31/2018 12:32	WG1188986
1,1,1-Trichloroethane	ND		2.77	1	10/31/2018 12:32	WG1188986
1,1,2-Trichloroethane	ND		2.77	1	10/31/2018 12:32	WG1188986
Trichloroethene	ND	J4	1.11	1	10/31/2018 12:32	WG1188986
Trichlorofluoromethane	ND		2.77	1	10/31/2018 12:32	WG1188986
1,1,2-Trichlorotrifluoroethane	ND		2.77	1	10/31/2018 12:32	WG1188986
Vinyl chloride	ND		2.77	1	10/31/2018 12:32	WG1188986
o-Xylene	ND		2.77	1	10/31/2018 12:32	WG1188986
m&p-Xylenes	ND		4.44	1	10/31/2018 12:32	WG1188986
n-Butylbenzene	ND		13.9	1	10/31/2018 12:32	WG1188986
sec-Butylbenzene	ND		13.9	1	10/31/2018 12:32	WG1188986
tert-Butylbenzene	ND	J4	5.55	1	10/31/2018 12:32	WG1188986
p-Isopropyltoluene	ND		5.55	1	10/31/2018 12:32	WG1188986
n-Propylbenzene	ND		5.55	1	10/31/2018 12:32	WG1188986
1,2,4-Trimethylbenzene	ND		5.55	1	10/31/2018 12:32	WG1188986
1,3,5-Trimethylbenzene	ND		5.55	1	10/31/2018 12:32	WG1188986
(S) Toluene-d8	*105*		*75.0-131*		*10/31/2018 12:32*	WG1188986
(S) Toluene-d8	*100*		*75.0-131*		*11/04/2018 14:33*	WG1191199
(S) Dibromofluoromethane	*88.5*		*65.0-129*		*10/31/2018 12:32*	WG1188986
(S) Dibromofluoromethane	*117*		*65.0-129*		*11/04/2018 14:33*	WG1191199
(S) a,a,a-Trifluorotoluene	*104*		*80.0-120*		*10/31/2018 12:32*	WG1188986
(S) a,a,a-Trifluorotoluene	*101*		*80.0-120*		*11/04/2018 14:33*	WG1191199
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*10/31/2018 12:32*	WG1188986
(S) 4-Bromofluorobenzene	*107*		*67.0-138*		*11/04/2018 14:33*	WG1191199

Pesticides (GC) by Method 8081B

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		22.2	1	11/02/2018 23:11	WG1190055
Alpha BHC	ND		22.2	1	11/02/2018 23:11	WG1190055
Beta BHC	ND		22.2	1	11/02/2018 23:11	WG1190055
Delta BHC	ND		22.2	1	11/02/2018 23:11	WG1190055
Gamma BHC	ND		22.2	1	11/02/2018 23:11	WG1190055
Chlordane	ND		222	1	11/02/2018 23:11	WG1190055
4,4-DDD	ND		22.2	1	11/02/2018 23:11	WG1190055
4,4-DDE	ND	P	22.2	1	11/02/2018 23:11	WG1190055
4,4-DDT	ND		22.2	1	11/02/2018 23:11	WG1190055
Dieldrin	ND	P	22.2	1	11/02/2018 23:11	WG1190055
Endosulfan I	ND		22.2	1	11/02/2018 23:11	WG1190055
Endosulfan II	ND		22.2	1	11/02/2018 23:11	WG1190055
Endosulfan sulfate	ND		22.2	1	11/02/2018 23:11	WG1190055
Endrin	ND		22.2	1	11/02/2018 23:11	WG1190055
Endrin aldehyde	ND		22.2	1	11/02/2018 23:11	WG1190055
Endrin ketone	ND		22.2	1	11/02/2018 23:11	WG1190055
Heptachlor	ND		22.2	1	11/02/2018 23:11	WG1190055
Heptachlor epoxide	ND		22.2	1	11/02/2018 23:11	WG1190055
Hexachlorobenzene	ND		22.2	1	11/02/2018 23:11	WG1190055
Methoxychlor	ND		22.2	1	11/02/2018 23:11	WG1190055
Toxaphene	ND		444	1	11/02/2018 23:11	WG1190055
(S) Decachlorobiphenyl	*132*		*10.0-135*		*11/02/2018 23:11*	WG1190055
(S) Tetrachloro-m-xylene	*75.3*		*10.0-139*		*11/02/2018 23:11*	WG1190055

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		18.9	1	11/02/2018 08:48	WG1190055
PCB 1221	ND		18.9	1	11/02/2018 08:48	WG1190055
PCB 1232	ND		18.9	1	11/02/2018 08:48	WG1190055
PCB 1242	ND		18.9	1	11/02/2018 08:48	WG1190055
PCB 1248	ND		18.9	1	11/02/2018 08:48	WG1190055
PCB 1254	ND		18.9	1	11/02/2018 08:48	WG1190055
PCB 1260	ND		18.9	1	11/02/2018 08:48	WG1190055
(S) Decachlorobiphenyl	*67.7*		*10.0-135*		*11/02/2018 08:48*	WG1190055
(S) Tetrachloro-m-xylene	*68.3*		*10.0-139*		*11/02/2018 08:48*	WG1190055

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		183	5	11/04/2018 22:54	WG1190289
Acenaphthylene	ND		183	5	11/04/2018 22:54	WG1190289
Acetophenone	ND		1850	5	11/04/2018 22:54	WG1190289
Anthracene	ND		183	5	11/04/2018 22:54	WG1190289
Atrazine	ND		1850	5	11/04/2018 22:54	WG1190289
Benzaldehyde	ND	J3	1850	5	11/04/2018 22:54	WG1190289
Benzo(a)anthracene	434		183	5	11/04/2018 22:54	WG1190289
Benzo(b)fluoranthene	630		183	5	11/04/2018 22:54	WG1190289
Benzo(k)fluoranthene	195		183	5	11/04/2018 22:54	WG1190289
Benzo(g,h,i)perylene	203		183	5	11/04/2018 22:54	WG1190289
Benzo(a)pyrene	409		183	5	11/04/2018 22:54	WG1190289
Biphenyl	ND		1850	5	11/04/2018 22:54	WG1190289
Bis(2-chlorethoxy)methane	ND		1850	5	11/04/2018 22:54	WG1190289
Bis(2-chloroethyl)ether	ND		1850	5	11/04/2018 22:54	WG1190289
Bis(2-chloroisopropyl)ether	ND		1850	5	11/04/2018 22:54	WG1190289

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
4-Bromophenyl-phenylether	ND		1850	5	11/04/2018 22:54	WG1190289
Caprolactam	ND		1850	5	11/04/2018 22:54	WG1190289
Carbazole	ND		1850	5	11/04/2018 22:54	WG1190289
4-Chloroaniline	ND		1850	5	11/04/2018 22:54	WG1190289
2-Chloronaphthalene	ND		183	5	11/04/2018 22:54	WG1190289
4-Chlorophenyl-phenylether	ND		1850	5	11/04/2018 22:54	WG1190289
Chrysene	439		183	5	11/04/2018 22:54	WG1190289
Dibenz(a,h)anthracene	ND		183	5	11/04/2018 22:54	WG1190289
Dibenzofuran	ND		1850	5	11/04/2018 22:54	WG1190289
3,3-Dichlorobenzidine	ND		1850	5	11/04/2018 22:54	WG1190289
2,4-Dinitrotoluene	ND		1850	5	11/04/2018 22:54	WG1190289
2,6-Dinitrotoluene	ND		1850	5	11/04/2018 22:54	WG1190289
Fluoranthene	988		183	5	11/04/2018 22:54	WG1190289
Fluorene	ND		183	5	11/04/2018 22:54	WG1190289
Hexachlorobenzene	ND		1850	5	11/04/2018 22:54	WG1190289
Hexachloro-1,3-butadiene	ND		1850	5	11/04/2018 22:54	WG1190289
Hexachlorocyclopentadiene	ND	J0	1850	5	11/04/2018 22:54	WG1190289
Hexachloroethane	ND		1850	5	11/04/2018 22:54	WG1190289
Indeno(1,2,3-cd)pyrene	190		183	5	11/04/2018 22:54	WG1190289
Isophorone	ND		1850	5	11/04/2018 22:54	WG1190289
2-Methylnaphthalene	ND		183	5	11/04/2018 22:54	WG1190289
Naphthalene	ND		183	5	11/04/2018 22:54	WG1190289
2-Nitroaniline	ND		1850	5	11/04/2018 22:54	WG1190289
3-Nitroaniline	ND		1850	5	11/04/2018 22:54	WG1190289
4-Nitroaniline	ND		1850	5	11/04/2018 22:54	WG1190289
Nitrobenzene	ND		1850	5	11/04/2018 22:54	WG1190289
n-Nitrosodiphenylamine	ND		1850	5	11/04/2018 22:54	WG1190289
n-Nitrosodi-n-propylamine	ND		1850	5	11/04/2018 22:54	WG1190289
Phenanthrene	445		183	5	11/04/2018 22:54	WG1190289
Benzylbutyl phthalate	ND		1850	5	11/04/2018 22:54	WG1190289
Bis(2-ethylhexyl)phthalate	ND		1850	5	11/04/2018 22:54	WG1190289
Di-n-butyl phthalate	ND		1850	5	11/04/2018 22:54	WG1190289
Diethyl phthalate	ND		1850	5	11/04/2018 22:54	WG1190289
Dimethyl phthalate	ND		1850	5	11/04/2018 22:54	WG1190289
Di-n-octyl phthalate	ND		1850	5	11/04/2018 22:54	WG1190289
Pyrene	718		183	5	11/04/2018 22:54	WG1190289
1,2,4,5-Tetrachlorobenzene	ND		1850	5	11/04/2018 22:54	WG1190289
4-Chloro-3-methylphenol	ND		1850	5	11/04/2018 22:54	WG1190289
2-Chlorophenol	ND		1850	5	11/04/2018 22:54	WG1190289
2-Methylphenol	ND		1850	5	11/04/2018 22:54	WG1190289
3&4-Methyl Phenol	ND		1850	5	11/04/2018 22:54	WG1190289
2,4-Dichlorophenol	ND		1850	5	11/04/2018 22:54	WG1190289
2,4-Dimethylphenol	ND	J0	1850	5	11/04/2018 22:54	WG1190289
4,6-Dinitro-2-methylphenol	ND		1850	5	11/04/2018 22:54	WG1190289
2,4-Dinitrophenol	ND		1850	5	11/04/2018 22:54	WG1190289
2-Nitrophenol	ND		1850	5	11/04/2018 22:54	WG1190289
4-Nitrophenol	ND		1850	5	11/04/2018 22:54	WG1190289
Pentachlorophenol	ND		1850	5	11/04/2018 22:54	WG1190289
Phenol	ND		1850	5	11/04/2018 22:54	WG1190289
2,4,5-Trichlorophenol	ND		1850	5	11/04/2018 22:54	WG1190289
2,4,6-Trichlorophenol	ND		1850	5	11/04/2018 22:54	WG1190289
(S) 2-Fluorophenol	*62.2*		*12.0-120*		*11/04/2018 22:54*	WG1190289
(S) Phenol-d5	*62.5*		*10.0-120*		*11/04/2018 22:54*	WG1190289
(S) Nitrobenzene-d5	*51.8*		*10.0-122*		*11/04/2018 22:54*	WG1190289
(S) 2-Fluorobiphenyl	*69.8*		*15.0-120*		*11/04/2018 22:54*	WG1190289
(S) 2,4,6-Tribromophenol	*81.4*		*10.0-127*		*11/04/2018 22:54*	WG1190289

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*87.8*		*10.0-120*		*11/04/2018 22:54*	WG1190289

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.7		1	11/01/2018 15:27	WG1189680

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	147		22.5	1	10/31/2018 14:41	WG1188180

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Aluminum	10100000		11300	1	11/01/2018 09:48	WG1188132
Antimony	ND		2250	1	11/01/2018 09:48	WG1188132
Arsenic	2910		2250	1	11/01/2018 09:48	WG1188132
Barium	73300		564	1	11/01/2018 09:48	WG1188132
Beryllium	450		225	1	11/01/2018 09:48	WG1188132
Cadmium	ND		564	1	11/01/2018 09:48	WG1188132
Calcium	40100000		113000	1	11/01/2018 09:48	WG1188132
Chromium	12900		1130	1	11/01/2018 09:48	WG1188132
Cobalt	5860		1130	1	11/01/2018 09:48	WG1188132
Copper	19200		2250	1	11/01/2018 09:48	WG1188132
Iron	15000000		11300	1	11/01/2018 09:48	WG1188132
Lead	113000		564	1	11/01/2018 09:48	WG1188132
Magnesium	14400000		113000	1	11/01/2018 09:48	WG1188132
Manganese	381000		1130	1	11/01/2018 09:48	WG1188132
Nickel	13400		2250	1	11/01/2018 09:48	WG1188132
Potassium	1520000		113000	1	11/01/2018 09:48	WG1188132
Selenium	ND		2250	1	11/01/2018 09:48	WG1188132
Silver	ND		1130	1	11/01/2018 09:48	WG1188132
Sodium	163000	B	113000	1	11/01/2018 09:48	WG1188132
Thallium	ND		2250	1	11/01/2018 09:48	WG1188132
Vanadium	18100		2250	1	11/01/2018 09:48	WG1188132
Zinc	93900		5640	1	11/01/2018 09:48	WG1188132

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		28.2	1	10/31/2018 12:52	WG1188986
Benzene	ND		1.13	1	10/31/2018 12:52	WG1188986
Bromochloromethane	ND		5.64	1	10/31/2018 12:52	WG1188986
Bromodichloromethane	ND		2.82	1	10/31/2018 12:52	WG1188986
Bromoform	ND		28.2	1	10/31/2018 12:52	WG1188986
Bromomethane	ND		14.1	1	10/31/2018 12:52	WG1188986
Carbon disulfide	ND		14.1	1	10/31/2018 12:52	WG1188986
Carbon tetrachloride	ND		5.64	1	10/31/2018 12:52	WG1188986
Chlorobenzene	ND		2.82	1	10/31/2018 12:52	WG1188986
Chlorodibromomethane	ND		2.82	1	10/31/2018 12:52	WG1188986
Chloroethane	ND		5.64	1	10/31/2018 12:52	WG1188986
Chloroform	ND		2.82	1	10/31/2018 12:52	WG1188986
Chloromethane	ND		14.1	1	10/31/2018 12:52	WG1188986
Cyclohexane	ND		2.82	1	10/31/2018 12:52	WG1188986
1,2-Dibromo-3-Chloropropane	ND		28.2	1	10/31/2018 12:52	WG1188986
1,2-Dibromoethane	ND	J4	2.82	1	10/31/2018 12:52	WG1188986
Dichlorodifluoromethane	ND		2.82	1	11/04/2018 14:51	WG1191199
1,1-Dichloroethane	ND		2.82	1	10/31/2018 12:52	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		2.82	1	10/31/2018 12:52	WG1188986
1,2-Dichlorobenzene	ND		5.64	1	10/31/2018 12:52	WG1188986
1,3-Dichlorobenzene	ND		5.64	1	10/31/2018 12:52	WG1188986
1,4-Dichlorobenzene	ND		5.64	1	10/31/2018 12:52	WG1188986
1,1-Dichloroethene	ND		2.82	1	10/31/2018 12:52	WG1188986
cis-1,2-Dichloroethene	ND		2.82	1	10/31/2018 12:52	WG1188986
trans-1,2-Dichloroethene	ND		5.64	1	10/31/2018 12:52	WG1188986
1,2-Dichloropropane	ND		5.64	1	11/04/2018 14:51	WG1191199
cis-1,3-Dichloropropene	ND		2.82	1	10/31/2018 12:52	WG1188986
trans-1,3-Dichloropropene	ND		5.64	1	10/31/2018 12:52	WG1188986
Ethylbenzene	ND		2.82	1	10/31/2018 12:52	WG1188986
2-Hexanone	ND		28.2	1	10/31/2018 12:52	WG1188986
Isopropylbenzene	ND		2.82	1	10/31/2018 12:52	WG1188986
2-Butanone (MEK)	ND		28.2	1	11/04/2018 14:51	WG1191199
Methyl Acetate	ND		5.64	1	10/31/2018 12:52	WG1188986
Methyl Cyclohexane	ND		5.64	1	10/31/2018 12:52	WG1188986
Methylene Chloride	ND		28.2	1	10/31/2018 12:52	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		28.2	1	10/31/2018 12:52	WG1188986
Methyl tert-butyl ether	ND		1.13	1	10/31/2018 12:52	WG1188986
Naphthalene	ND		14.1	1	10/31/2018 12:52	WG1188986
Styrene	ND		14.1	1	10/31/2018 12:52	WG1188986
1,1,2,2-Tetrachloroethane	ND		2.82	1	10/31/2018 12:52	WG1188986
Tetrachloroethene	ND		2.82	1	10/31/2018 12:52	WG1188986
Toluene	ND		5.64	1	10/31/2018 12:52	WG1188986
1,2,3-Trichlorobenzene	ND		2.82	1	10/31/2018 12:52	WG1188986
1,2,4-Trichlorobenzene	ND		14.1	1	10/31/2018 12:52	WG1188986
1,1,1-Trichloroethane	ND		2.82	1	10/31/2018 12:52	WG1188986
1,1,2-Trichloroethane	ND		2.82	1	10/31/2018 12:52	WG1188986
Trichloroethene	ND	J4	1.13	1	10/31/2018 12:52	WG1188986
Trichlorofluoromethane	ND		2.82	1	10/31/2018 12:52	WG1188986
1,1,2-Trichlorotrifluoroethane	ND		2.82	1	10/31/2018 12:52	WG1188986
Vinyl chloride	ND		2.82	1	10/31/2018 12:52	WG1188986
o-Xylene	ND		2.82	1	10/31/2018 12:52	WG1188986
m&p-Xylenes	ND		4.51	1	10/31/2018 12:52	WG1188986
n-Butylbenzene	ND		14.1	1	10/31/2018 12:52	WG1188986
sec-Butylbenzene	ND		14.1	1	10/31/2018 12:52	WG1188986
tert-Butylbenzene	ND	J4	5.64	1	10/31/2018 12:52	WG1188986
p-Isopropyltoluene	ND		5.64	1	10/31/2018 12:52	WG1188986
n-Propylbenzene	ND		5.64	1	10/31/2018 12:52	WG1188986
1,2,4-Trimethylbenzene	ND		5.64	1	10/31/2018 12:52	WG1188986
1,3,5-Trimethylbenzene	ND		5.64	1	10/31/2018 12:52	WG1188986
(S) Toluene-d8	*105*		*75.0-131*		*10/31/2018 12:52*	WG1188986
(S) Toluene-d8	*98.9*		*75.0-131*		*11/04/2018 14:51*	WG1191199
(S) Dibromofluoromethane	*91.9*		*65.0-129*		*10/31/2018 12:52*	WG1188986
(S) Dibromofluoromethane	*118*		*65.0-129*		*11/04/2018 14:51*	WG1191199
(S) a,a,a-Trifluorotoluene	*104*		*80.0-120*		*10/31/2018 12:52*	WG1188986
(S) a,a,a-Trifluorotoluene	*101*		*80.0-120*		*11/04/2018 14:51*	WG1191199
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*10/31/2018 12:52*	WG1188986
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*11/04/2018 14:51*	WG1191199

Pesticides (GC) by Method 8081B

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		22.5	1	11/02/2018 23:23	WG1190055
Alpha BHC	ND		22.5	1	11/02/2018 23:23	WG1190055
Beta BHC	ND		22.5	1	11/02/2018 23:23	WG1190055
Delta BHC	ND		22.5	1	11/02/2018 23:23	WG1190055
Gamma BHC	ND		22.5	1	11/02/2018 23:23	WG1190055
Chlordane	ND		225	1	11/02/2018 23:23	WG1190055
4,4-DDD	ND		22.5	1	11/02/2018 23:23	WG1190055
4,4-DDE	ND	P	22.5	1	11/02/2018 23:23	WG1190055
4,4-DDT	ND		22.5	1	11/02/2018 23:23	WG1190055
Dieldrin	ND		22.5	1	11/02/2018 23:23	WG1190055
Endosulfan I	ND		22.5	1	11/02/2018 23:23	WG1190055
Endosulfan II	ND		22.5	1	11/02/2018 23:23	WG1190055
Endosulfan sulfate	ND		22.5	1	11/02/2018 23:23	WG1190055
Endrin	ND		22.5	1	11/02/2018 23:23	WG1190055
Endrin aldehyde	ND		22.5	1	11/02/2018 23:23	WG1190055
Endrin ketone	ND		22.5	1	11/02/2018 23:23	WG1190055
Heptachlor	ND		22.5	1	11/02/2018 23:23	WG1190055
Heptachlor epoxide	ND		22.5	1	11/02/2018 23:23	WG1190055
Hexachlorobenzene	ND		22.5	1	11/02/2018 23:23	WG1190055
Methoxychlor	ND		22.5	1	11/02/2018 23:23	WG1190055
Toxaphene	ND		451	1	11/02/2018 23:23	WG1190055
(S) Decachlorobiphenyl	*121*		*10.0-135*		*11/02/2018 23:23*	WG1190055
(S) Tetrachloro-m-xylene	*77.4*		*10.0-139*		*11/02/2018 23:23*	WG1190055

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		19.2	1	11/02/2018 09:02	WG1190055
PCB 1221	ND		19.2	1	11/02/2018 09:02	WG1190055
PCB 1232	ND		19.2	1	11/02/2018 09:02	WG1190055
PCB 1242	ND		19.2	1	11/02/2018 09:02	WG1190055
PCB 1248	ND		19.2	1	11/02/2018 09:02	WG1190055
PCB 1254	ND		19.2	1	11/02/2018 09:02	WG1190055
PCB 1260	ND		19.2	1	11/02/2018 09:02	WG1190055
(S) Decachlorobiphenyl	*66.6*		*10.0-135*		*11/02/2018 09:02*	WG1190055
(S) Tetrachloro-m-xylene	*70.4*		*10.0-139*		*11/02/2018 09:02*	WG1190055

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		186	5	11/04/2018 23:41	WG1190289
Acenaphthylene	ND		186	5	11/04/2018 23:41	WG1190289
Acetophenone	ND		1880	5	11/04/2018 23:41	WG1190289
Anthracene	ND		186	5	11/04/2018 23:41	WG1190289
Atrazine	ND		1880	5	11/04/2018 23:41	WG1190289
Benzaldehyde	ND	J3	1880	5	11/04/2018 23:41	WG1190289
Benzo(a)anthracene	387		186	5	11/04/2018 23:41	WG1190289
Benzo(b)fluoranthene	629		186	5	11/04/2018 23:41	WG1190289
Benzo(k)fluoranthene	230		186	5	11/04/2018 23:41	WG1190289
Benzo(g,h,i)perylene	197		186	5	11/04/2018 23:41	WG1190289
Benzo(a)pyrene	414		186	5	11/04/2018 23:41	WG1190289
Biphenyl	ND		1880	5	11/04/2018 23:41	WG1190289
Bis(2-chlorethoxy)methane	ND		1880	5	11/04/2018 23:41	WG1190289
Bis(2-chloroethyl)ether	ND		1880	5	11/04/2018 23:41	WG1190289
Bis(2-chloroisopropyl)ether	ND		1880	5	11/04/2018 23:41	WG1190289

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
4-Bromophenyl-phenylether	ND		1880	5	11/04/2018 23:41	WG1190289
Caprolactam	ND		1880	5	11/04/2018 23:41	WG1190289
Carbazole	ND		1880	5	11/04/2018 23:41	WG1190289
4-Chloroaniline	ND		1880	5	11/04/2018 23:41	WG1190289
2-Chloronaphthalene	ND		186	5	11/04/2018 23:41	WG1190289
4-Chlorophenyl-phenylether	ND		1880	5	11/04/2018 23:41	WG1190289
Chrysene	450		186	5	11/04/2018 23:41	WG1190289
Dibenz(a,h)anthracene	ND		186	5	11/04/2018 23:41	WG1190289
Dibenzofuran	ND		1880	5	11/04/2018 23:41	WG1190289
3,3-Dichlorobenzidine	ND		1880	5	11/04/2018 23:41	WG1190289
2,4-Dinitrotoluene	ND		1880	5	11/04/2018 23:41	WG1190289
2,6-Dinitrotoluene	ND		1880	5	11/04/2018 23:41	WG1190289
Fluoranthene	968		186	5	11/04/2018 23:41	WG1190289
Fluorene	ND		186	5	11/04/2018 23:41	WG1190289
Hexachlorobenzene	ND		1880	5	11/04/2018 23:41	WG1190289
Hexachloro-1,3-butadiene	ND		1880	5	11/04/2018 23:41	WG1190289
Hexachlorocyclopentadiene	ND	J0	1880	5	11/04/2018 23:41	WG1190289
Hexachloroethane	ND		1880	5	11/04/2018 23:41	WG1190289
Indeno(1,2,3-cd)pyrene	189		186	5	11/04/2018 23:41	WG1190289
Isophorone	ND		1880	5	11/04/2018 23:41	WG1190289
2-Methylnaphthalene	ND		186	5	11/04/2018 23:41	WG1190289
Naphthalene	ND		186	5	11/04/2018 23:41	WG1190289
2-Nitroaniline	ND		1880	5	11/04/2018 23:41	WG1190289
3-Nitroaniline	ND		1880	5	11/04/2018 23:41	WG1190289
4-Nitroaniline	ND		1880	5	11/04/2018 23:41	WG1190289
Nitrobenzene	ND		1880	5	11/04/2018 23:41	WG1190289
n-Nitrosodiphenylamine	ND		1880	5	11/04/2018 23:41	WG1190289
n-Nitrosodi-n-propylamine	ND		1880	5	11/04/2018 23:41	WG1190289
Phenanthrene	394		186	5	11/04/2018 23:41	WG1190289
Benzylbutyl phthalate	ND		1880	5	11/04/2018 23:41	WG1190289
Bis(2-ethylhexyl)phthalate	ND		1880	5	11/04/2018 23:41	WG1190289
Di-n-butyl phthalate	ND		1880	5	11/04/2018 23:41	WG1190289
Diethyl phthalate	ND		1880	5	11/04/2018 23:41	WG1190289
Dimethyl phthalate	ND		1880	5	11/04/2018 23:41	WG1190289
Di-n-octyl phthalate	ND		1880	5	11/04/2018 23:41	WG1190289
Pyrene	713		186	5	11/04/2018 23:41	WG1190289
1,2,4,5-Tetrachlorobenzene	ND		1880	5	11/04/2018 23:41	WG1190289
4-Chloro-3-methylphenol	ND		1880	5	11/04/2018 23:41	WG1190289
2-Chlorophenol	ND		1880	5	11/04/2018 23:41	WG1190289
2-Methylphenol	ND		1880	5	11/04/2018 23:41	WG1190289
3&4-Methyl Phenol	ND		1880	5	11/04/2018 23:41	WG1190289
2,4-Dichlorophenol	ND		1880	5	11/04/2018 23:41	WG1190289
2,4-Dimethylphenol	ND	J0	1880	5	11/04/2018 23:41	WG1190289
4,6-Dinitro-2-methylphenol	ND		1880	5	11/04/2018 23:41	WG1190289
2,4-Dinitrophenol	ND		1880	5	11/04/2018 23:41	WG1190289
2-Nitrophenol	ND		1880	5	11/04/2018 23:41	WG1190289
4-Nitrophenol	ND		1880	5	11/04/2018 23:41	WG1190289
Pentachlorophenol	ND		1880	5	11/04/2018 23:41	WG1190289
Phenol	ND		1880	5	11/04/2018 23:41	WG1190289
2,4,5-Trichlorophenol	ND		1880	5	11/04/2018 23:41	WG1190289
2,4,6-Trichlorophenol	ND		1880	5	11/04/2018 23:41	WG1190289
(S) 2-Fluorophenol	*68.7*		*12.0-120*		*11/04/2018 23:41*	WG1190289
(S) Phenol-d5	*65.8*		*10.0-120*		*11/04/2018 23:41*	WG1190289
(S) Nitrobenzene-d5	*59.6*		*10.0-122*		*11/04/2018 23:41*	WG1190289
(S) 2-Fluorobiphenyl	*76.0*		*15.0-120*		*11/04/2018 23:41*	WG1190289
(S) 2,4,6-Tribromophenol	*77.7*		*10.0-127*		*11/04/2018 23:41*	WG1190289

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*85.4*		*10.0-120*		*11/04/2018 23:41*	WG1190289

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.3		1	11/01/2018 15:27	WG1189680

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	153		21.4	1	10/31/2018 14:43	WG1188180

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Aluminum	7020000		10700	1	11/01/2018 09:51	WG1188132
Antimony	ND		2140	1	11/01/2018 09:51	WG1188132
Arsenic	2960		2140	1	11/01/2018 09:51	WG1188132
Barium	48500		536	1	11/01/2018 09:51	WG1188132
Beryllium	369		214	1	11/01/2018 09:51	WG1188132
Cadmium	ND		536	1	11/01/2018 09:51	WG1188132
Calcium	49500000		107000	1	11/01/2018 09:51	WG1188132
Chromium	10100		1070	1	11/01/2018 09:51	WG1188132
Cobalt	4690		1070	1	11/01/2018 09:51	WG1188132
Copper	22900		2140	1	11/01/2018 09:51	WG1188132
Iron	13600000		10700	1	11/01/2018 09:51	WG1188132
Lead	100000		536	1	11/01/2018 09:51	WG1188132
Magnesium	23900000		107000	1	11/01/2018 09:51	WG1188132
Manganese	368000		1070	1	11/01/2018 09:51	WG1188132
Nickel	12200		2140	1	11/01/2018 09:51	WG1188132
Potassium	1790000		107000	1	11/01/2018 09:51	WG1188132
Selenium	ND		2140	1	11/01/2018 09:51	WG1188132
Silver	ND		1070	1	11/01/2018 09:51	WG1188132
Sodium	210000	B	107000	1	11/01/2018 09:51	WG1188132
Thallium	ND		2140	1	11/01/2018 09:51	WG1188132
Vanadium	12200		2140	1	11/01/2018 09:51	WG1188132
Zinc	115000		5360	1	11/01/2018 09:51	WG1188132

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		26.8	1	10/31/2018 13:13	WG1188986
Benzene	ND	J3	1.07	1	10/31/2018 13:13	WG1188986
Bromochloromethane	ND		5.36	1	10/31/2018 13:13	WG1188986
Bromodichloromethane	ND		2.68	1	10/31/2018 13:13	WG1188986
Bromoform	ND		26.8	1	10/31/2018 13:13	WG1188986
Bromomethane	ND	J3	13.4	1	10/31/2018 13:13	WG1188986
Carbon disulfide	ND	J3	13.4	1	10/31/2018 13:13	WG1188986
Carbon tetrachloride	ND	J3	5.36	1	10/31/2018 13:13	WG1188986
Chlorobenzene	ND		2.68	1	10/31/2018 13:13	WG1188986
Chlorodibromomethane	ND		2.68	1	10/31/2018 13:13	WG1188986
Chloroethane	ND		5.36	1	10/31/2018 13:13	WG1188986
Chloroform	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
Chloromethane	ND	J3	13.4	1	10/31/2018 13:13	WG1188986
Cyclohexane	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
1,2-Dibromo-3-Chloropropane	ND		26.8	1	10/31/2018 13:13	WG1188986
1,2-Dibromoethane	ND	J4	2.68	1	10/31/2018 13:13	WG1188986
Dichlorodifluoromethane	ND		2.68	1	11/04/2018 15:09	WG1191199
1,1-Dichloroethane	ND	J3	2.68	1	10/31/2018 13:13	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		2.68	1	10/31/2018 13:13	WG1188986
1,2-Dichlorobenzene	ND		5.36	1	10/31/2018 13:13	WG1188986
1,3-Dichlorobenzene	ND		5.36	1	10/31/2018 13:13	WG1188986
1,4-Dichlorobenzene	ND		5.36	1	10/31/2018 13:13	WG1188986
1,1-Dichloroethene	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
cis-1,2-Dichloroethene	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
trans-1,2-Dichloroethene	ND	J3	5.36	1	10/31/2018 13:13	WG1188986
1,2-Dichloropropane	ND		5.36	1	11/04/2018 15:09	WG1191199
cis-1,3-Dichloropropene	ND		2.68	1	10/31/2018 13:13	WG1188986
trans-1,3-Dichloropropene	ND		5.36	1	10/31/2018 13:13	WG1188986
Ethylbenzene	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
2-Hexanone	ND		26.8	1	10/31/2018 13:13	WG1188986
Isopropylbenzene	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
2-Butanone (MEK)	ND		26.8	1	11/04/2018 15:09	WG1191199
Methyl Acetate	ND	J3	5.36	1	10/31/2018 13:13	WG1188986
Methyl Cyclohexane	ND	J3	5.36	1	10/31/2018 13:13	WG1188986
Methylene Chloride	ND		26.8	1	10/31/2018 13:13	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		26.8	1	10/31/2018 13:13	WG1188986
Methyl tert-butyl ether	ND		1.07	1	10/31/2018 13:13	WG1188986
Naphthalene	ND		13.4	1	10/31/2018 13:13	WG1188986
Styrene	ND		13.4	1	10/31/2018 13:13	WG1188986
1,1,2,2-Tetrachloroethane	ND		2.68	1	10/31/2018 13:13	WG1188986
Tetrachloroethene	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
Toluene	ND	J3	5.36	1	10/31/2018 13:13	WG1188986
1,2,3-Trichlorobenzene	ND		2.68	1	10/31/2018 13:13	WG1188986
1,2,4-Trichlorobenzene	ND		13.4	1	10/31/2018 13:13	WG1188986
1,1,1-Trichloroethane	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
1,1,2-Trichloroethane	ND		2.68	1	10/31/2018 13:13	WG1188986
Trichloroethene	ND	J3 J4	1.07	1	10/31/2018 13:13	WG1188986
Trichlorofluoromethane	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
1,1,2-Trichlorotrifluoroethane	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
Vinyl chloride	ND	J3	2.68	1	10/31/2018 13:13	WG1188986
o-Xylene	ND		2.68	1	10/31/2018 13:13	WG1188986
m&p-Xylenes	ND	J3	4.29	1	10/31/2018 13:13	WG1188986
n-Butylbenzene	ND	J3	13.4	1	10/31/2018 13:13	WG1188986
sec-Butylbenzene	ND	J3	13.4	1	10/31/2018 13:13	WG1188986
tert-Butylbenzene	ND	J4	5.36	1	10/31/2018 13:13	WG1188986
p-Isopropyltoluene	ND	J3	5.36	1	10/31/2018 13:13	WG1188986
n-Propylbenzene	ND	J3	5.36	1	10/31/2018 13:13	WG1188986
1,2,4-Trimethylbenzene	ND		5.36	1	10/31/2018 13:13	WG1188986
1,3,5-Trimethylbenzene	ND	J3	5.36	1	10/31/2018 13:13	WG1188986
(S) Toluene-d8	*110*		*75.0-131*		*10/31/2018 13:13*	WG1188986
(S) Toluene-d8	*100*		*75.0-131*		*11/04/2018 15:09*	WG1191199
(S) Dibromofluoromethane	*86.7*		*65.0-129*		*10/31/2018 13:13*	WG1188986
(S) Dibromofluoromethane	*118*		*65.0-129*		*11/04/2018 15:09*	WG1191199
(S) a,a,a-Trifluorotoluene	*107*		*80.0-120*		*10/31/2018 13:13*	WG1188986
(S) a,a,a-Trifluorotoluene	*101*		*80.0-120*		*11/04/2018 15:09*	WG1191199
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*10/31/2018 13:13*	WG1188986
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*11/04/2018 15:09*	WG1191199

Pesticides (GC) by Method 8081B

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Aldrin	ND		21.4	1	11/02/2018 23:36	WG1190055
Alpha BHC	ND		21.4	1	11/02/2018 23:36	WG1190055
Beta BHC	ND		21.4	1	11/02/2018 23:36	WG1190055
Delta BHC	ND		21.4	1	11/02/2018 23:36	WG1190055
Gamma BHC	ND		21.4	1	11/02/2018 23:36	WG1190055
Chlordane	ND	P	214	1	11/02/2018 23:36	WG1190055
4,4-DDD	ND		21.4	1	11/02/2018 23:36	WG1190055
4,4-DDE	25.7		21.4	1	11/02/2018 23:36	WG1190055
4,4-DDT	24.5		21.4	1	11/02/2018 23:36	WG1190055
Dieldrin	ND		21.4	1	11/02/2018 23:36	WG1190055
Endosulfan I	ND		21.4	1	11/02/2018 23:36	WG1190055
Endosulfan II	ND		21.4	1	11/02/2018 23:36	WG1190055
Endosulfan sulfate	ND		21.4	1	11/02/2018 23:36	WG1190055
Endrin	ND		21.4	1	11/02/2018 23:36	WG1190055
Endrin aldehyde	ND		21.4	1	11/02/2018 23:36	WG1190055
Endrin ketone	ND		21.4	1	11/02/2018 23:36	WG1190055
Heptachlor	ND		21.4	1	11/02/2018 23:36	WG1190055
Heptachlor epoxide	ND	P	21.4	1	11/02/2018 23:36	WG1190055
Hexachlorobenzene	ND		21.4	1	11/02/2018 23:36	WG1190055
Methoxychlor	ND		21.4	1	11/02/2018 23:36	WG1190055
Toxaphene	ND		429	1	11/02/2018 23:36	WG1190055
(S) Decachlorobiphenyl	*89.3*		*10.0-135*		*11/02/2018 23:36*	WG1190055
(S) Tetrachloro-m-xylene	*59.3*		*10.0-139*		*11/02/2018 23:36*	WG1190055

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		18.2	1	11/02/2018 09:16	WG1190055
PCB 1221	ND		18.2	1	11/02/2018 09:16	WG1190055
PCB 1232	ND		18.2	1	11/02/2018 09:16	WG1190055
PCB 1242	ND		18.2	1	11/02/2018 09:16	WG1190055
PCB 1248	ND		18.2	1	11/02/2018 09:16	WG1190055
PCB 1254	ND		18.2	1	11/02/2018 09:16	WG1190055
PCB 1260	ND		18.2	1	11/02/2018 09:16	WG1190055
(S) Decachlorobiphenyl	*50.3*		*10.0-135*		*11/02/2018 09:16*	WG1190055
(S) Tetrachloro-m-xylene	*60.7*		*10.0-139*		*11/02/2018 09:16*	WG1190055

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Acenaphthene	ND		177	5	11/05/2018 00:03	WG1190289
Acenaphthylene	ND		177	5	11/05/2018 00:03	WG1190289
Acetophenone	ND		1790	5	11/05/2018 00:03	WG1190289
Anthracene	ND		177	5	11/05/2018 00:03	WG1190289
Atrazine	ND		1790	5	11/05/2018 00:03	WG1190289
Benzaldehyde	ND	J3	1790	5	11/05/2018 00:03	WG1190289
Benzo(a)anthracene	485		177	5	11/05/2018 00:03	WG1190289
Benzo(b)fluoranthene	714		177	5	11/05/2018 00:03	WG1190289
Benzo(k)fluoranthene	233		177	5	11/05/2018 00:03	WG1190289
Benzo(g,h,i)perylene	219		177	5	11/05/2018 00:03	WG1190289
Benzo(a)pyrene	476		177	5	11/05/2018 00:03	WG1190289
Biphenyl	ND		1790	5	11/05/2018 00:03	WG1190289
Bis(2-chlorethoxy)methane	ND		1790	5	11/05/2018 00:03	WG1190289
Bis(2-chloroethyl)ether	ND		1790	5	11/05/2018 00:03	WG1190289
Bis(2-chloroisopropyl)ether	ND		1790	5	11/05/2018 00:03	WG1190289

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
4-Bromophenyl-phenylether	ND		1790	5	11/05/2018 00:03	WG1190289
Caprolactam	ND		1790	5	11/05/2018 00:03	WG1190289
Carbazole	ND		1790	5	11/05/2018 00:03	WG1190289
4-Chloroaniline	ND		1790	5	11/05/2018 00:03	WG1190289
2-Chloronaphthalene	ND		177	5	11/05/2018 00:03	WG1190289
4-Chlorophenyl-phenylether	ND		1790	5	11/05/2018 00:03	WG1190289
Chrysene	535		177	5	11/05/2018 00:03	WG1190289
Dibenz(a,h)anthracene	ND		177	5	11/05/2018 00:03	WG1190289
Dibenzofuran	ND		1790	5	11/05/2018 00:03	WG1190289
3,3-Dichlorobenzidine	ND		1790	5	11/05/2018 00:03	WG1190289
2,4-Dinitrotoluene	ND		1790	5	11/05/2018 00:03	WG1190289
2,6-Dinitrotoluene	ND		1790	5	11/05/2018 00:03	WG1190289
Fluoranthene	1010		177	5	11/05/2018 00:03	WG1190289
Fluorene	ND		177	5	11/05/2018 00:03	WG1190289
Hexachlorobenzene	ND		1790	5	11/05/2018 00:03	WG1190289
Hexachloro-1,3-butadiene	ND		1790	5	11/05/2018 00:03	WG1190289
Hexachlorocyclopentadiene	ND	J0	1790	5	11/05/2018 00:03	WG1190289
Hexachloroethane	ND		1790	5	11/05/2018 00:03	WG1190289
Indeno(1,2,3-cd)pyrene	210		177	5	11/05/2018 00:03	WG1190289
Isophorone	ND		1790	5	11/05/2018 00:03	WG1190289
2-Methylnaphthalene	ND		177	5	11/05/2018 00:03	WG1190289
Naphthalene	ND		177	5	11/05/2018 00:03	WG1190289
2-Nitroaniline	ND		1790	5	11/05/2018 00:03	WG1190289
3-Nitroaniline	ND		1790	5	11/05/2018 00:03	WG1190289
4-Nitroaniline	ND		1790	5	11/05/2018 00:03	WG1190289
Nitrobenzene	ND		1790	5	11/05/2018 00:03	WG1190289
n-Nitrosodiphenylamine	ND		1790	5	11/05/2018 00:03	WG1190289
n-Nitrosodi-n-propylamine	ND		1790	5	11/05/2018 00:03	WG1190289
Phenanthrene	465		177	5	11/05/2018 00:03	WG1190289
Benzylbutyl phthalate	ND		1790	5	11/05/2018 00:03	WG1190289
Bis(2-ethylhexyl)phthalate	ND		1790	5	11/05/2018 00:03	WG1190289
Di-n-butyl phthalate	ND		1790	5	11/05/2018 00:03	WG1190289
Diethyl phthalate	ND		1790	5	11/05/2018 00:03	WG1190289
Dimethyl phthalate	ND		1790	5	11/05/2018 00:03	WG1190289
Di-n-octyl phthalate	ND		1790	5	11/05/2018 00:03	WG1190289
Pyrene	805		177	5	11/05/2018 00:03	WG1190289
1,2,4,5-Tetrachlorobenzene	ND		1790	5	11/05/2018 00:03	WG1190289
4-Chloro-3-methylphenol	ND		1790	5	11/05/2018 00:03	WG1190289
2-Chlorophenol	ND		1790	5	11/05/2018 00:03	WG1190289
2-Methylphenol	ND		1790	5	11/05/2018 00:03	WG1190289
3&4-Methyl Phenol	ND		1790	5	11/05/2018 00:03	WG1190289
2,4-Dichlorophenol	ND		1790	5	11/05/2018 00:03	WG1190289
2,4-Dimethylphenol	ND	J0	1790	5	11/05/2018 00:03	WG1190289
4,6-Dinitro-2-methylphenol	ND		1790	5	11/05/2018 00:03	WG1190289
2,4-Dinitrophenol	ND		1790	5	11/05/2018 00:03	WG1190289
2-Nitrophenol	ND		1790	5	11/05/2018 00:03	WG1190289
4-Nitrophenol	ND		1790	5	11/05/2018 00:03	WG1190289
Pentachlorophenol	ND		1790	5	11/05/2018 00:03	WG1190289
Phenol	ND		1790	5	11/05/2018 00:03	WG1190289
2,4,5-Trichlorophenol	ND		1790	5	11/05/2018 00:03	WG1190289
2,4,6-Trichlorophenol	ND		1790	5	11/05/2018 00:03	WG1190289
(S) 2-Fluorophenol	*55.9*		*12.0-120*		*11/05/2018 00:03*	WG1190289
(S) Phenol-d5	*53.3*		*10.0-120*		*11/05/2018 00:03*	WG1190289
(S) Nitrobenzene-d5	*53.2*		*10.0-122*		*11/05/2018 00:03*	WG1190289
(S) 2-Fluorobiphenyl	*61.7*		*15.0-120*		*11/05/2018 00:03*	WG1190289
(S) 2,4,6-Tribromophenol	*63.7*		*10.0-127*		*11/05/2018 00:03*	WG1190289

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
(S) p-Terphenyl-d14	*66.3*		*10.0-120*		*11/05/2018 00:03*	WG1190289

Method Blank (MB)

(MB) R3356536-1 11/02/18 14:23

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1038859-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1038859-02 11/02/18 14:23 • (DUP) R3356536-3 11/02/18 14:23

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	88.9	88.8	1	0.194		10

Laboratory Control Sample (LCS)

(LCS) R3356536-2 11/02/18 14:23

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3356207-1 11/01/18 15:27

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1038886-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1038886-04 11/01/18 15:27 • (DUP) R3356207-3 11/01/18 15:27

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.9	88.7	1	1.35		10

Laboratory Control Sample (LCS)

(LCS) R3356207-2 11/01/18 15:27

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3355653-1 10/31/18 13:57

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Mercury	8.53	J	2.80	20.0

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3355653-2 10/31/18 13:59 • (LCSD) R3355653-3 10/31/18 14:01

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	300	322	320	107	107	80.0-120			0.571	20

L1039044-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1039044-02 10/31/18 14:04 • (MS) R3355653-4 10/31/18 14:06 • (MSD) R3355653-5 10/31/18 14:08

Analyte	Spike Amount ug/kg	Original Result ug/kg	MS Result ug/kg	MSD Result ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	300	13.1	324	337	103	108	1	75.0-125			4.02	20

Method Blank (MB)

(MB) R3356013-1 11/01/18 08:55

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Aluminum	U		3500	10000
Antimony	U		750	2000
Arsenic	U		460	2000
Barium	U		170	500
Beryllium	U		70.0	200
Cadmium	U		70.0	500
Calcium	U		4630	100000
Chromium	U		140	1000
Cobalt	U		230	1000
Copper	U		530	2000
Iron	U		1410	10000
Lead	266	J	190	500
Magnesium	4420	J	1110	100000
Manganese	U		120	1000
Nickel	U		490	2000
Potassium	27000	J	10200	100000
Selenium	U		620	2000
Silver	U		120	1000
Sodium	63900	J	9850	100000
Thallium	U		650	2000
Vanadium	U		240	2000
Zinc	638	J	590	5000

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356013-2 11/01/18 08:58 • (LCSD) R3356013-3 11/01/18 09:00

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Aluminum	1000000	993000	1020000	99.3	102	80.0-120			3.01	20
Antimony	100000	97200	101000	97.2	101	80.0-120			4.22	20
Arsenic	100000	94600	98600	94.6	98.6	80.0-120			4.13	20
Barium	100000	101000	105000	101	105	80.0-120			4.02	20
Beryllium	100000	101000	104000	101	104	80.0-120			3.55	20
Cadmium	100000	95300	99300	95.3	99.3	80.0-120			4.11	20
Calcium	1000000	972000	999000	97.2	99.9	80.0-120			2.69	20
Chromium	100000	95900	99900	95.9	99.9	80.0-120			4.10	20
Cobalt	100000	99100	103000	99.1	103	80.0-120			3.88	20
Copper	100000	98200	103000	98.2	103	80.0-120			4.89	20
Iron	1000000	972000	999000	97.2	99.9	80.0-120			2.70	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356013-2 11/01/18 08:58 • (LCSD) R3356013-3 11/01/18 09:00

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	100000	95100	99100	95.1	99.1	80.0-120			4.10	20
Magnesium	1000000	992000	1020000	99.2	102	80.0-120			3.02	20
Manganese	100000	95500	100000	95.5	100	80.0-120			4.78	20
Nickel	100000	96900	100000	96.9	100	80.0-120			3.53	20
Potassium	1000000	956000	982000	95.6	98.2	80.0-120			2.71	20
Selenium	100000	94100	98500	94.1	98.5	80.0-120			4.57	20
Silver	20000	18200	19200	91.2	95.8	80.0-120			4.97	20
Sodium	1000000	999000	1030000	99.9	103	80.0-120			2.73	20
Thallium	100000	94300	98300	94.3	98.3	80.0-120			4.17	20
Vanadium	100000	98900	102000	98.9	102	80.0-120			3.05	20
Zinc	100000	94400	98100	94.4	98.1	80.0-120			3.83	20

L1038920-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038920-02 11/01/18 09:03 • (MS) R3356013-6 11/01/18 09:11 • (MSD) R3356013-7 11/01/18 09:14

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	1160000	11300000	8670000	8990000	0.000	0.000	1	75.0-125	V	V	3.64	20
Antimony	116000	U	70600	64200	60.6	55.2	1	75.0-125	J6	J6	9.45	20
Arsenic	116000	4480	117000	117000	96.6	96.5	1	75.0-125			0.127	20
Barium	116000	157000	238000	298000	69.6	121	1	75.0-125	J6	J3	22.2	20
Beryllium	116000	499	117000	115000	99.9	98.5	1	75.0-125			1.37	20
Cadmium	116000	222	116000	115000	99.2	98.4	1	75.0-125			0.834	20
Calcium	1160000	122000000	83900000	96800000	0.000	0.000	1	75.0-125	V	V	14.2	20
Chromium	116000	12600	116000	116000	89.2	88.8	1	75.0-125			0.424	20
Cobalt	116000	6520	124000	124000	101	101	1	75.0-125			0.539	20
Copper	116000	21400	137000	138000	99.6	99.9	1	75.0-125			0.272	20
Iron	1160000	13400000	9250000	9520000	0.000	0.000	1	75.0-125	V	V	2.82	20
Lead	116000	42400	151000	155000	93.0	97.1	1	75.0-125			3.10	20
Magnesium	1160000	15600000	10200000	13200000	0.000	0.000	1	75.0-125	V	J3 V	25.9	20
Manganese	116000	417000	332000	368000	0.000	0.000	1	75.0-125	J6	J6	10.1	20
Nickel	116000	18000	127000	126000	93.7	93.0	1	75.0-125			0.633	20
Potassium	1160000	1960000	2650000	2600000	59.3	54.3	1	75.0-125	J6	J6	2.21	20
Selenium	116000	U	112000	111000	96.1	95.7	1	75.0-125			0.388	20
Silver	23300	U	23000	23000	98.9	98.6	1	75.0-125			0.298	20
Sodium	1160000	538000	1620000	1620000	93.2	92.8	1	75.0-125			0.275	20
Thallium	116000	U	111000	109000	94.9	93.7	1	75.0-125			1.28	20
Vanadium	116000	20000	128000	127000	92.6	91.8	1	75.0-125			0.734	20
Zinc	116000	99800	196000	254000	83.0	132	1	75.0-125		J3 J5	25.5	20

Method Blank (MB)

(MB) R3356687-2 10/31/18 10:18

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Acetone	U		13.7	25.0
Benzene	U		0.400	1.00
Bromodichloromethane	U		0.788	2.50
Bromochloromethane	U		1.13	5.00
Bromoform	U		5.98	25.0
Bromomethane	U		3.70	12.5
n-Butylbenzene	U		3.84	12.5
sec-Butylbenzene	U		2.53	12.5
tert-Butylbenzene	U		1.55	5.00
Carbon disulfide	U		4.06	12.5
Carbon tetrachloride	U		1.08	5.00
Chlorobenzene	U		0.573	2.50
Chlorodibromomethane	U		0.450	2.50
Chloroethane	U		1.08	5.00
Chloroform	U		0.415	2.50
Chloromethane	U		1.39	12.5
Cyclohexane	U		0.508	2.50
1,2-Dibromo-3-Chloropropane	U		5.10	25.0
1,2-Dibromoethane	U		0.525	2.50
1,2-Dichlorobenzene	U		1.45	5.00
1,3-Dichlorobenzene	U		1.70	5.00
1,4-Dichlorobenzene	U		1.97	5.00
1,1-Dichloroethane	U		0.575	2.50
1,2-Dichloroethane	U		0.475	2.50
1,1-Dichloroethene	U		0.500	2.50
cis-1,2-Dichloroethene	U		0.690	2.50
trans-1,2-Dichloroethene	U		1.43	5.00
cis-1,3-Dichloropropene	U		0.678	2.50
trans-1,3-Dichloropropene	U		1.53	5.00
Ethylbenzene	U		0.530	2.50
2-Hexanone	U		10.0	25.0
Isopropylbenzene	U		0.863	2.50
p-Isopropyltoluene	U		2.33	5.00
Methyl Acetate	U		2.10	5.00
Methyl Cyclohexane	U		1.03	5.00
Methylene Chloride	U		6.64	25.0
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0
Methyl tert-butyl ether	U		0.295	1.00
Naphthalene	U		3.12	12.5
n-Propylbenzene	U		1.18	5.00

Method Blank (MB)

(MB) R3356687-2 10/31/18 10:18

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Styrene	U		2.73	12.5
1,1,2,2-Tetrachloroethane	U		0.390	2.50
Tetrachloroethene	U		0.700	2.50
Toluene	U		1.25	5.00
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50
1,2,3-Trichlorobenzene	U		0.625	2.50
1,2,4-Trichlorobenzene	U		4.82	12.5
1,1,1-Trichloroethane	U		0.275	2.50
1,1,2-Trichloroethane	U		0.883	2.50
Trichloroethene	U		0.400	1.00
Trichlorofluoromethane	U		0.500	2.50
1,2,4-Trimethylbenzene	U		1.16	5.00
1,3,5-Trimethylbenzene	U		1.08	5.00
Vinyl chloride	U		0.683	2.50
o-Xylene	U		1.00	2.50
m&p-Xylenes	U		1.50	4.00
(S) Toluene-d8	*107*			*75.0-131*
(S) Dibromofluoromethane	*89.4*			*65.0-129*
(S) a,a,a-Trifluorotoluene	*106*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*67.0-138*

Laboratory Control Sample (LCS)

(LCS) R3356687-1 10/31/18 09:18

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	625	762	122	10.0-160	
Benzene	125	121	97.2	70.0-123	
Bromodichloromethane	125	92.4	74.0	73.0-121	
Bromochloromethane	125	103	82.2	77.0-128	
Bromoform	125	117	93.9	64.0-132	
Bromomethane	125	97.2	77.7	56.0-147	
n-Butylbenzene	125	125	99.7	68.0-135	
sec-Butylbenzene	125	99.4	79.5	74.0-130	
tert-Butylbenzene	125	93.5	74.8	75.0-127	J4
Carbon disulfide	125	103	82.1	56.0-133	
Carbon tetrachloride	125	105	84.1	66.0-128	
Chlorobenzene	125	104	83.6	76.0-128	
Chlorodibromomethane	125	93.0	74.4	74.0-127	

Laboratory Control Sample (LCS)

(LCS) R3356687-1 10/31/18 09:18

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloroethane	125	93.6	74.9	61.0-134	
Chloroform	125	119	95.3	72.0-123	
Chloromethane	125	143	115	51.0-138	
1,2-Dibromo-3-Chloropropane	125	110	87.8	59.0-130	
1,2-Dibromoethane	125	90.7	72.6	74.0-128	J4
1,2-Dichlorobenzene	125	119	95.5	76.0-124	
1,3-Dichlorobenzene	125	103	82.2	76.0-125	
1,4-Dichlorobenzene	125	99.7	79.7	77.0-121	
1,1-Dichloroethane	125	95.8	76.6	70.0-127	
1,2-Dichloroethane	125	107	85.8	65.0-131	
1,1-Dichloroethene	125	99.2	79.3	65.0-131	
cis-1,2-Dichloroethene	125	108	86.6	73.0-125	
trans-1,2-Dichloroethene	125	139	111	71.0-125	
cis-1,3-Dichloropropene	125	104	83.5	76.0-127	
trans-1,3-Dichloropropene	125	105	83.8	73.0-127	
Ethylbenzene	125	98.4	78.7	74.0-126	
2-Hexanone	625	616	98.5	54.0-147	
Isopropylbenzene	125	95.1	76.1	72.0-127	
p-Isopropyltoluene	125	106	84.9	72.0-133	
Methylene Chloride	125	109	87.2	68.0-123	
4-Methyl-2-pentanone (MIBK)	625	724	116	56.0-143	
Methyl tert-butyl ether	125	116	93.0	66.0-132	
Naphthalene	125	129	103	59.0-130	
n-Propylbenzene	125	112	89.8	74.0-126	
Styrene	125	106	84.8	72.0-127	
1,1,2,2-Tetrachloroethane	125	108	86.1	68.0-128	
Tetrachloroethene	125	107	85.6	70.0-136	
Toluene	125	121	97.1	75.0-121	
1,1,2-Trichlorotrifluoroethane	125	101	80.7	61.0-139	
1,2,3-Trichlorobenzene	125	139	111	59.0-139	
1,2,4-Trichlorobenzene	125	120	95.9	62.0-137	
1,1,1-Trichloroethane	125	124	98.9	69.0-126	
1,1,2-Trichloroethane	125	112	89.3	78.0-123	
Trichloroethene	125	94.5	75.6	76.0-126	J4
Trichlorofluoromethane	125	130	104	61.0-142	
1,2,4-Trimethylbenzene	125	103	82.2	70.0-126	
1,3,5-Trimethylbenzene	125	98.8	79.0	73.0-127	
Vinyl chloride	125	127	101	63.0-134	
o-Xylene	125	103	82.6	79.0-124	
m&p-Xylenes	250	204	81.8	76.0-126	

Laboratory Control Sample (LCS)

(LCS) R3356687-1 10/31/18 09:18

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Methyl Acetate	625	701	112	43.0-158	
Cyclohexane	125	127	101	65.0-128	
Methyl Cyclohexane	125	110	87.6	67.0-129	
(S) Toluene-d8			*99.3*	*75.0-131*	
(S) Dibromofluoromethane			*98.6*	*65.0-129*	
(S) a,a,a-Trifluorotoluene			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*96.7*	*67.0-138*	

L1038880-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038880-05 10/31/18 13:13 • (MS) R3356687-3 10/31/18 17:56 • (MSD) R3356687-4 10/31/18 18:17

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	670	ND	264	206	39.5	30.7	1	10.0-160			24.9	40
Benzene	134	ND	100	63.8	75.0	47.6	1	10.0-149		J3	44.6	37
Bromodichloromethane	134	ND	77.0	63.0	57.5	47.0	1	10.0-143			20.0	37
Bromochloromethane	134	ND	90.4	75.3	67.5	56.2	1	10.0-155			18.3	33
Bromoform	134	ND	117	108	87.4	80.9	1	10.0-146			7.77	36
Bromomethane	134	ND	73.6	48.9	54.9	36.5	1	10.0-149		J3	40.3	38
n-Butylbenzene	134	ND	130	80.8	96.9	60.3	1	10.0-160		J3	46.6	40
sec-Butylbenzene	134	ND	103	63.0	76.9	47.0	1	10.0-159		J3	48.3	39
tert-Butylbenzene	134	ND	103	70.7	76.6	52.8	1	10.0-156			36.8	39
Carbon disulfide	134	ND	60.0	33.3	44.8	24.8	1	10.0-145		J3	57.4	39
Carbon tetrachloride	134	ND	85.2	40.6	63.6	30.3	1	10.0-145		J3	70.9	37
Chlorobenzene	134	ND	105	71.2	78.6	53.2	1	10.0-152			38.6	39
Chlorodibromomethane	134	ND	89.8	75.4	67.0	56.3	1	10.0-146			17.5	37
Chloroethane	134	ND	64.1	51.5	47.8	38.5	1	10.0-146			21.7	40
Chloroform	134	ND	99.3	66.6	74.1	49.7	1	10.0-146		J3	39.5	37
Chloromethane	134	ND	95.5	56.0	71.3	41.8	1	10.0-159		J3	52.1	37
1,2-Dibromo-3-Chloropropane	134	ND	95.8	84.7	71.5	63.2	1	10.0-151			12.3	39
1,2-Dibromoethane	134	ND	95.2	77.3	71.0	57.7	1	10.0-148			20.7	34
1,2-Dichlorobenzene	134	ND	111	100	82.7	74.6	1	10.0-155			10.2	37
1,3-Dichlorobenzene	134	ND	106	81.3	78.9	60.6	1	10.0-153			26.2	38
1,4-Dichlorobenzene	134	ND	110	77.6	81.8	57.9	1	10.0-151			34.2	38
1,1-Dichloroethane	134	ND	81.5	51.0	60.9	38.1	1	10.0-147		J3	46.0	37
1,2-Dichloroethane	134	ND	88.7	68.4	66.2	51.0	1	10.0-148			25.9	35
1,1-Dichloroethene	134	ND	76.2	38.2	56.9	28.5	1	10.0-155		J3	66.5	37
cis-1,2-Dichloroethene	134	ND	89.5	60.3	66.8	45.0	1	10.0-149		J3	38.9	37
trans-1,2-Dichloroethene	134	ND	116	70.5	86.2	52.6	1	10.0-150		J3	48.4	37

L1038880-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038880-05 10/31/18 13:13 • (MS) R3356687-3 10/31/18 17:56 • (MSD) R3356687-4 10/31/18 18:17

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	134	ND	101	74.9	75.4	55.9	1	10.0-151			29.7	37
trans-1,3-Dichloropropene	134	ND	117	93.8	87.6	70.0	1	10.0-148			22.4	37
Ethylbenzene	134	ND	96.7	59.1	72.1	44.1	1	10.0-160		J3	48.2	38
2-Hexanone	670	ND	588	520	87.8	77.5	1	10.0-160			12.4	36
Isopropylbenzene	134	ND	96.1	61.3	71.7	45.8	1	10.0-155		J3	44.2	38
p-Isopropyltoluene	134	ND	117	73.8	87.0	55.0	1	10.0-160		J3	45.0	40
Methylene Chloride	134	ND	96.3	70.4	71.9	52.5	1	10.0-141			31.1	37
4-Methyl-2-pentanone (MIBK)	670	ND	623	574	93.0	85.7	1	10.0-160			8.20	35
Methyl tert-butyl ether	134	ND	85.4	81.4	63.7	60.7	1	11.0-147			4.79	35
Naphthalene	134	ND	123	107	91.5	79.6	1	10.0-160			13.9	36
n-Propylbenzene	134	ND	114	71.7	85.4	53.5	1	10.0-158		J3	46.0	38
Styrene	134	ND	117	83.7	87.0	62.5	1	10.0-160			32.8	40
1,1,2,2-Tetrachloroethane	134	ND	97.5	87.8	72.8	65.5	1	10.0-160			10.5	35
Tetrachloroethene	134	ND	96.7	55.3	72.2	41.3	1	10.0-156		J3	54.4	39
Toluene	134	ND	122	77.7	91.2	58.0	1	10.0-156		J3	44.6	38
1,1,2-Trichlorotrifluoroethane	134	ND	89.1	36.8	66.5	27.5	1	10.0-160		J3	83.0	36
1,2,3-Trichlorobenzene	134	ND	131	118	97.6	87.7	1	10.0-160			10.7	40
1,2,4-Trichlorobenzene	134	ND	114	91.9	85.0	68.6	1	10.0-160			21.4	40
1,1,1-Trichloroethane	134	ND	95.0	53.4	70.9	39.8	1	10.0-144		J3	56.0	35
1,1,2-Trichloroethane	134	ND	114	102	85.1	75.9	1	10.0-160			11.5	35
Trichloroethene	134	ND	88.7	52.4	66.2	39.1	1	10.0-156		J3	51.4	38
Trichlorofluoromethane	134	ND	72.1	36.9	53.8	27.5	1	10.0-160		J3	64.6	40
1,2,4-Trimethylbenzene	134	ND	107	75.6	79.5	56.4	1	10.0-160			33.9	36
1,3,5-Trimethylbenzene	134	ND	104	69.1	77.3	51.6	1	10.0-160		J3	40.0	38
Vinyl chloride	134	ND	111	50.4	82.9	37.6	1	10.0-160		J3	75.1	37
o-Xylene	134	ND	101	76.2	75.2	56.8	1	10.0-156			27.8	40
m&p-Xylenes	268	ND	204	126	76.0	47.1	1	10.0-156		J3	46.9	40
Methyl Acetate	670	ND	815	536	122	80.0	1	10.0-160		J3	41.3	40
Cyclohexane	134	ND	86.4	42.1	64.5	31.4	1	10.0-157		J3	68.9	32
Methyl Cyclohexane	134	ND	98.5	56.7	73.5	42.3	1	10.0-160		J3	53.9	33
(S) Toluene-d8					*108*	*104*		*75.0-131*				
(S) Dibromofluoromethane					*88.4*	*87.6*		*65.0-129*				
(S) a,a,a-Trifluorotoluene					*103*	*105*		*80.0-120*				
(S) 4-Bromofluorobenzene					*104*	*105*		*67.0-138*				

Method Blank (MB)

(MB) R3356744-1 11/04/18 10:07

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Dichlorodifluoromethane	U		0.818	2.50
1,2-Dichloropropane	U		1.27	5.00
2-Butanone (MEK)	U		12.5	25.0
(S) Toluene-d8	*98.6*			*75.0-131*
(S) Dibromofluoromethane	*113*			*65.0-129*
(S) a,a,a-Trifluorotoluene	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*

Laboratory Control Sample (LCS)

(LCS) R3356744-2 11/04/18 10:25

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dichlorodifluoromethane	125	172	138	43.0-156	
1,2-Dichloropropane	125	141	113	74.0-125	
2-Butanone (MEK)	625	531	84.9	30.0-160	
(S) Toluene-d8			*98.6*	*75.0-131*	
(S) Dibromofluoromethane			*116*	*65.0-129*	
(S) a,a,a-Trifluorotoluene			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*108*	*67.0-138*	

Method Blank (MB)

(MB) R3356413-1 11/02/18 10:50

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Aldrin	U		1.35	20.0
Alpha BHC	U		1.36	20.0
Beta BHC	U		1.60	20.0
Delta BHC	U		1.43	20.0
Gamma BHC	U		1.45	20.0
4,4-DDD	U		1.56	20.0
4,4-DDE	U		1.54	20.0
4,4-DDT	U		2.00	20.0
Dieldrin	U		1.52	20.0
Endosulfan I	U		1.49	20.0
Endosulfan II	U		1.60	20.0
Endosulfan sulfate	U		1.51	20.0
Endrin	U		1.57	20.0
Endrin aldehyde	U		1.29	20.0
Endrin ketone	U		1.65	20.0
Heptachlor	U		1.54	20.0
Heptachlor epoxide	U		1.61	20.0
Hexachlorobenzene	U		1.24	20.0
Methoxychlor	U		1.78	20.0
Chlordane	U		39.0	200
Toxaphene	U		36.0	400
(S) Decachlorobiphenyl	*83.0*			*10.0-135*
(S) Tetrachloro-m-xylene	*74.6*			*10.0-139*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356413-2 11/02/18 11:02 • (LCSD) R3356413-3 11/02/18 11:15

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Aldrin	66.6	51.3	43.3	77.0	65.0	34.0-136			16.9	38
Alpha BHC	66.6	50.6	42.3	76.0	63.5	34.0-139			17.9	38
Beta BHC	66.6	48.0	40.7	72.1	61.1	34.0-133			16.5	37
Delta BHC	66.6	51.1	42.8	76.7	64.3	34.0-135			17.7	38
Gamma BHC	66.6	50.5	42.2	75.8	63.4	34.0-136			17.9	38
4,4-DDD	66.6	52.7	44.1	79.1	66.2	33.0-141			17.8	39
4,4-DDE	66.6	51.3	43.1	77.0	64.7	34.0-134			17.4	38
4,4-DDT	66.6	51.8	43.3	77.8	65.0	30.0-143			17.9	40
Dieldrin	66.6	54.7	45.8	82.1	68.8	35.0-137			17.7	37
Endosulfan I	66.6	51.3	43.4	77.0	65.2	34.0-134			16.7	37

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356413-2 11/02/18 11:02 • (LCSD) R3356413-3 11/02/18 11:15

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Endosulfan II	66.6	48.8	41.2	73.3	61.9	35.0-132			16.9	38
Endosulfan sulfate	66.6	56.1	47.2	84.2	70.9	35.0-132			17.2	37
Endrin	66.6	55.8	47.1	83.8	70.7	34.0-137			16.9	37
Endrin aldehyde	66.6	49.1	42.6	73.7	64.0	23.0-121			14.2	39
Endrin ketone	66.6	57.3	48.4	86.0	72.7	35.0-144			16.8	37
Heptachlor	66.6	59.5	49.5	89.3	74.3	36.0-141			18.3	37
Heptachlor epoxide	66.6	54.0	45.2	81.1	67.9	36.0-134			17.7	37
Hexachlorobenzene	66.6	45.9	38.9	68.9	58.4	33.0-129			16.5	37
Methoxychlor	66.6	52.2	44.1	78.4	66.2	28.0-150			16.8	38
(S) Decachlorobiphenyl				*86.2*	*78.4*	*10.0-135*				
(S) Tetrachloro-m-xylene				*75.1*	*69.2*	*10.0-139*				

L1038891-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038891-04 11/02/18 23:48 • (MS) R3356538-1 11/03/18 00:01 • (MSD) R3356538-2 11/03/18 00:13

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aldrin	80.3	U	44.0	54.3	54.8	67.7	1	20.0-135			21.1	37
Alpha BHC	80.3	U	62.2	68.1	77.5	84.8	1	27.0-140			9.07	35
Beta BHC	80.3	U	66.8	73.4	83.2	91.4	1	23.0-141			9.46	37
Delta BHC	80.3	U	64.8	72.8	80.8	90.7	1	21.0-138			11.6	35
Gamma BHC	80.3	U	61.5	68.0	76.6	84.7	1	27.0-137			10.1	36
4,4-DDD	80.3	U	68.8	86.4	85.7	108	1	15.0-152		P	22.7	39
4,4-DDE	80.3	U	50.1	61.1	62.5	76.1	1	10.0-152			19.7	40
4,4-DDT	80.3	U	36.9	37.5	45.9	46.7	1	10.0-151	P	P	1.62	40
Dieldrin	80.3	U	53.6	64.3	66.8	80.2	1	17.0-145			18.2	37
Endosulfan I	80.3	U	51.5	61.6	64.1	76.7	1	20.0-137			17.9	36
Endosulfan II	80.3	U	54.8	66.9	68.3	83.3	1	15.0-141		P	19.8	37
Endosulfan sulfate	80.3	U	59.9	70.9	74.6	88.3	1	15.0-143			16.8	38
Endrin	80.3	U	57.4	69.2	71.5	86.2	1	19.0-143			18.7	37
Endrin aldehyde	80.3	U	60.5	73.6	75.4	91.7	1	10.0-139	P	P	19.6	40
Endrin ketone	80.3	U	55.5	64.0	69.2	79.7	1	17.0-149			14.1	38
Heptachlor	80.3	U	44.3	52.4	55.3	65.3	1	22.0-138			16.7	37
Heptachlor epoxide	80.3	U	52.4	63.0	65.3	78.5	1	22.0-138			18.4	36
Hexachlorobenzene	80.3	U	48.2	55.7	60.1	69.4	1	25.0-126			14.4	35
Methoxychlor	80.3	U	44.6	47.5	55.6	59.2	1	10.0-159	P	P	6.28	40
(S) Decachlorobiphenyl					*85.3*	*92.2*		*10.0-135*				
(S) Tetrachloro-m-xylene					*75.1*	*73.4*		*10.0-139*				

Method Blank (MB)

(MB) R3356381-1 11/02/18 07:38

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/kg		ug/kg	ug/kg
PCB 1016	U		3.50	17.0
PCB 1221	U		5.37	17.0
PCB 1232	U		4.17	17.0
PCB 1242	U		3.18	17.0
PCB 1248	U		3.15	17.0
PCB 1254	U		4.72	17.0
PCB 1260	U		4.94	17.0
(S) Decachlorobiphenyl	*70.1*			*10.0-135*
(S) Tetrachloro-m-xylene	*70.6*			*10.0-139*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356381-2 11/02/18 07:52 • (LCSD) R3356381-3 11/02/18 08:06

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/kg	ug/kg	ug/kg	%	%	%			%	%
PCB 1260	167	119	113	71.3	67.7	37.0-145			5.17	37
PCB 1016	167	112	105	67.1	62.9	36.0-141			6.45	35
(S) Decachlorobiphenyl				*68.3*	*65.2*	*10.0-135*				
(S) Tetrachloro-m-xylene				*68.3*	*63.5*	*10.0-139*				

L1038920-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038920-01 11/02/18 09:45 • (MS) R3356381-4 11/02/18 09:59 • (MSD) R3356381-5 11/02/18 10:13

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/kg	ug/kg	ug/kg	ug/kg	%	%		%			%	%
PCB 1260	191	214	355	350	73.7	70.7	1	10.0-160			1.63	38
PCB 1016	191	U	139	151	72.5	79.0	1	10.0-160			8.70	37
(S) Decachlorobiphenyl					*55.9*	*56.5*		*10.0-135*				
(S) Tetrachloro-m-xylene					*62.8*	*63.1*		*10.0-139*				

Method Blank (MB)

(MB) R3356898-3 11/04/18 16:19

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Acenaphthene	U		6.42	33.0
Acenaphthylene	U		6.71	33.0
Acetophenone	U		75.2	333
Anthracene	U		6.32	33.0
Atrazine	U		93.8	333
Benzaldehyde	U		53.2	333
Benzo(a)anthracene	U		4.28	33.0
Benzo(b)fluoranthene	U		6.95	33.0
Benzo(k)fluoranthene	U		5.82	33.0
Benzo(g,h,i)perylene	U		7.21	33.0
Benzo(a)pyrene	U		5.48	33.0
Biphenyl	U		5.88	333
Bis(2-chlorethoxy)methane	U		7.70	333
Bis(2-chloroethyl)ether	U		8.96	333
Bis(2-chloroisopropyl)ether	U		7.60	333
4-Bromophenyl-phenylether	U		11.4	333
Caprolactam	U		104	333
Carbazole	U		5.24	333
4-Chloroaniline	U		35.2	333
2-Chloronaphthalene	U		6.39	33.0
4-Chlorophenyl-phenylether	U		6.27	333
Chrysene	U		5.55	33.0
Dibenz(a,h)anthracene	U		8.21	33.0
Dibenzofuran	U		5.18	333
3,3-Dichlorobenzidine	U		79.4	333
2,4-Dinitrotoluene	U		6.07	333
2,6-Dinitrotoluene	U		7.37	333
Fluoranthene	U		4.96	33.0
Fluorene	U		6.82	33.0
Hexachlorobenzene	U		8.56	333
Hexachloro-1,3-butadiene	U		10.0	333
Hexachlorocyclopentadiene	U		58.7	333
Hexachloroethane	U		13.4	333
Indeno(1,2,3-cd)pyrene	U		7.72	33.0
Isophorone	U		5.22	333
2-Methylnaphthalene	U		8.61	33.0
Naphthalene	U		8.89	33.0
2-Nitroaniline	U		7.55	333
3-Nitroaniline	U		8.50	333
4-Nitroaniline	U		6.39	333

Method Blank (MB)

(MB) R3356898-3 11/04/18 16:19

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Nitrobenzene	U		6.95	333
n-Nitrosodiphenylamine	U		90.0	333
n-Nitrosodi-n-propylamine	U		9.06	333
Phenanthrene	U		5.28	33.0
Benzylbutyl phthalate	U		10.3	333
Bis(2-ethylhexyl)phthalate	U		12.0	333
Di-n-butyl phthalate	U		10.9	333
Diethyl phthalate	U		6.91	333
Dimethyl phthalate	U		5.40	333
Di-n-octyl phthalate	U		9.07	333
Pyrene	U		12.3	33.0
4-Chloro-3-methylphenol	U		4.77	333
2-Chlorophenol	U		8.31	333
2-Methylphenol	U		9.86	333
3&4-Methyl Phenol	U		7.83	333
2,4-Dichlorophenol	U		7.46	333
2,4-Dimethylphenol	U		47.1	333
4,6-Dinitro-2-methylphenol	U		124	333
2,4-Dinitrophenol	U		98.0	333
2-Nitrophenol	U		13.0	333
4-Nitrophenol	U		52.5	333
Pentachlorophenol	U		48.0	333
Phenol	U		6.95	333
1,2,4,5-Tetrachlorobenzene	U		76.2	333
2,4,5-Trichlorophenol	U		10.4	333
2,4,6-Trichlorophenol	U		7.79	333
(S) Nitrobenzene-d5	*85.3*			*10.0-122*
(S) 2-Fluorobiphenyl	*88.0*			*15.0-120*
(S) p-Terphenyl-d14	*103*			*10.0-120*
(S) Phenol-d5	*81.7*			*10.0-120*
(S) 2-Fluorophenol	*94.1*			*12.0-120*
(S) 2,4,6-Tribromophenol	*72.1*			*10.0-127*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356898-1 11/04/18 15:33 • (LCSD) R3356898-2 11/04/18 15:56

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetophenone	666	595	572	89.3	85.9	29.0-120			3.94	27
Acenaphthene	666	635	622	95.3	93.4	38.0-120			2.07	22
Atrazine	666	757	745	114	112	43.0-120			1.60	21
Acenaphthylene	666	674	643	101	96.5	40.0-120			4.71	22
Benzaldehyde	666	627	301	94.1	45.2	10.0-160		J3	70.3	40
Anthracene	666	675	637	101	95.6	42.0-120			5.79	20
Biphenyl	666	604	583	90.7	87.5	39.0-120			3.54	24
Benzo(a)anthracene	666	706	676	106	102	44.0-120			4.34	20
Benzo(b)fluoranthene	666	715	703	107	106	43.0-120			1.69	22
Benzo(k)fluoranthene	666	719	666	108	100	44.0-120			7.65	21
Benzo(g,h,i)perylene	666	733	698	110	105	43.0-120			4.89	22
Benzo(a)pyrene	666	711	678	107	102	45.0-120			4.75	20
Caprolactam	666	749	730	112	110	38.0-120			2.57	20
Carbazole	666	692	660	104	99.1	48.0-120			4.73	20
4-Chloroaniline	666	392	363	58.9	54.5	18.0-120			7.68	25
Bis(2-chlorethoxy)methane	666	418	413	62.8	62.0	20.0-120			1.20	23
Bis(2-chloroethyl)ether	666	537	500	80.6	75.1	16.0-120			7.14	31
Bis(2-chloroisopropyl)ether	666	554	549	83.2	82.4	23.0-120			0.907	30
4-Bromophenyl-phenylether	666	648	620	97.3	93.1	40.0-120			4.42	21
Dibenzofuran	666	657	632	98.6	94.9	44.0-120			3.88	21
2-Chloronaphthalene	666	597	580	89.6	87.1	35.0-120			2.89	24
4-Chlorophenyl-phenylether	666	653	631	98.0	94.7	40.0-120			3.43	22
Chrysene	666	707	679	106	102	43.0-120			4.04	20
Dibenz(a,h)anthracene	666	708	679	106	102	44.0-120			4.18	22
3,3-Dichlorobenzidine	666	610	514	91.6	77.2	28.0-120			17.1	23
2,4-Dinitrotoluene	666	655	620	98.3	93.1	45.0-120			5.49	21
2,6-Dinitrotoluene	666	679	656	102	98.5	42.0-120			3.45	21
Fluoranthene	666	723	694	109	104	44.0-120			4.09	21
Fluorene	666	661	637	99.2	95.6	41.0-120			3.70	22
Hexachlorobenzene	666	674	632	101	94.9	39.0-120			6.43	21
Hexachloro-1,3-butadiene	666	547	544	82.1	81.7	15.0-120			0.550	28
Hexachlorocyclopentadiene	666	609	601	91.4	90.2	15.0-120			1.32	31
2-Nitroaniline	666	630	611	94.6	91.7	46.0-120			3.06	22
Hexachloroethane	666	573	570	86.0	85.6	17.0-120			0.525	31
3-Nitroaniline	666	616	572	92.5	85.9	36.0-120			7.41	22
Indeno(1,2,3-cd)pyrene	666	703	672	106	101	45.0-120			4.51	21
4-Nitroaniline	666	765	633	115	95.0	36.0-120			18.9	23
Isophorone	666	456	449	68.5	67.4	23.0-120			1.55	23
2-Methylnaphthalene	666	503	492	75.5	73.9	34.0-120			2.21	22
Naphthalene	666	475	474	71.3	71.2	18.0-120			0.211	24

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356898-1 11/04/18 15:33 • (LCSD) R3356898-2 11/04/18 15:56

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Nitrobenzene	666	451	448	67.7	67.3	17.0-120			0.667	26
n-Nitrosodiphenylamine	666	607	574	91.1	86.2	40.0-120			5.59	21
n-Nitrosodi-n-propylamine	666	570	555	85.6	83.3	26.0-120			2.67	27
Phenanthrene	666	669	624	100	93.7	42.0-120			6.96	20
Benzylbutyl phthalate	666	699	677	105	102	40.0-120			3.20	21
Bis(2-ethylhexyl)phthalate	666	711	691	107	104	41.0-120			2.85	21
Di-n-butyl phthalate	666	747	711	112	107	43.0-120			4.94	20
Diethyl phthalate	666	696	663	105	99.5	43.0-120			4.86	21
Dimethyl phthalate	666	671	643	101	96.5	43.0-120			4.26	22
Di-n-octyl phthalate	666	752	724	113	109	40.0-120			3.79	21
Pyrene	666	719	682	108	102	41.0-120			5.28	21
4-Chloro-3-methylphenol	666	510	479	76.6	71.9	28.0-120			6.27	20
2-Chlorophenol	666	613	594	92.0	89.2	28.0-120			3.15	28
2-Methylphenol	666	652	628	97.9	94.3	35.0-120			3.75	24
3&4-Methyl Phenol	666	683	650	103	97.6	42.0-120			4.95	25
2,4-Dichlorophenol	666	502	495	75.4	74.3	25.0-120			1.40	21
2,4-Dimethylphenol	666	477	384	71.6	57.7	15.0-120			21.6	26
1,2,4,5-Tetrachlorobenzene	666	634	630	95.2	94.6	30.0-120			0.633	23
4,6-Dinitro-2-methylphenol	666	575	539	86.3	80.9	16.0-120			6.46	33
2,4,5-Trichlorophenol	666	580	531	87.1	79.7	38.0-120			8.82	24
2,4-Dinitrophenol	666	426	417	64.0	62.6	10.0-120			2.14	40
2-Nitrophenol	666	536	534	80.5	80.2	20.0-120			0.374	25
4-Nitrophenol	666	584	560	87.7	84.1	27.0-120			4.20	24
Pentachlorophenol	666	553	452	83.0	67.9	29.0-120			20.1	25
Phenol	666	529	515	79.4	77.3	28.0-120			2.68	27
2,4,6-Trichlorophenol	666	574	546	86.2	82.0	37.0-120			5.00	24
(S) Nitrobenzene-d5				*73.0*	*73.0*	*10.0-122*				
(S) 2-Fluorobiphenyl				*96.7*	*93.7*	*15.0-120*				
(S) p-Terphenyl-d14				*111*	*105*	*10.0-120*				
(S) Phenol-d5				*85.6*	*83.9*	*10.0-120*				
(S) 2-Fluorophenol				*99.1*	*96.5*	*12.0-120*				
(S) 2,4,6-Tribromophenol				*86.5*	*80.8*	*10.0-127*				

L1038832-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038832-09 11/04/18 19:02 • (MS) R3356898-4 11/04/18 19:26 • (MSD) R3356898-5 11/04/18 19:48

Analyte	Spike Amount ug/kg	Original Result ug/kg	MS Result ug/kg	MSD Result ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetophenone	666	ND	288	352	43.2	52.9	1	10.0-120			20.0	37
Atrazine	666	ND	730	665	110	99.8	1	20.0-131			9.32	28
Benzaldehyde	666	ND	315	424	47.3	63.7	1	10.0-160			29.5	40
Acenaphthene	666	ND	503	478	75.5	71.8	1	18.0-120			5.10	32
Acenaphthylene	666	ND	500	478	75.1	71.8	1	25.0-120			4.50	32
Biphenyl	666	ND	405	412	60.8	61.9	1	15.0-120			1.71	33
Anthracene	666	ND	599	579	89.9	86.9	1	22.0-120			3.40	29
Caprolactam	666	ND	733	627	110	94.1	1	11.0-141			15.6	31
Carbazole	666	ND	616	605	92.5	90.8	1	31.0-120			1.80	24
4-Chloroaniline	666	ND	293	213	44.0	32.0	1	10.0-120			31.6	36
Benzo(a)anthracene	666	ND	617	594	92.6	89.2	1	25.0-120			3.80	29
Benzo(b)fluoranthene	666	ND	586	597	88.0	89.6	1	19.0-122			1.86	31
Benzo(k)fluoranthene	666	ND	624	563	93.7	84.5	1	23.0-120			10.3	30
Benzo(g,h,i)perylene	666	ND	623	609	93.5	91.4	1	10.0-120			2.27	33
Benzo(a)pyrene	666	ND	599	577	89.9	86.6	1	24.0-120			3.74	30
Dibenzofuran	666	ND	533	493	80.0	74.0	1	24.0-120			7.80	30
Bis(2-chlorethoxy)methane	666	ND	304	277	45.6	41.6	1	10.0-120			9.29	34
Bis(2-chloroethyl)ether	666	ND	213	294	32.0	44.1	1	10.0-120			32.0	40
Bis(2-chloroisopropyl)ether	666	ND	246	370	36.9	55.6	1	10.0-120		J3	40.3	40
4-Bromophenyl-phenylether	666	ND	550	552	82.6	82.9	1	27.0-120			0.363	30
2-Chloronaphthalene	666	ND	410	443	61.6	66.5	1	20.0-120			7.74	32
4-Chlorophenyl-phenylether	666	ND	563	531	84.5	79.7	1	24.0-120			5.85	29
Chrysene	666	ND	626	601	94.0	90.2	1	21.0-120			4.07	29
Dibenz(a,h)anthracene	666	ND	597	589	89.6	88.4	1	10.0-120			1.35	32
3,3-Dichlorobenzidine	666	ND	211	267	31.7	40.1	1	10.0-120			23.4	34
2,4-Dinitrotoluene	666	ND	576	541	86.5	81.2	1	30.0-120			6.27	31
2-Nitroaniline	666	ND	423	398	63.5	59.8	1	24.0-120			6.09	30
2,6-Dinitrotoluene	666	ND	550	522	82.6	78.4	1	25.0-120			5.22	31
3-Nitroaniline	666	ND	472	491	70.9	73.7	1	11.0-120			3.95	32
4-Nitroaniline	666	ND	647	633	97.1	95.0	1	15.0-120			2.19	31
Fluoranthene	666	ND	650	641	97.6	96.2	1	18.0-126			1.39	32
Fluorene	666	ND	573	534	86.0	80.2	1	25.0-120			7.05	30
Hexachlorobenzene	666	ND	596	580	89.5	87.1	1	27.0-120			2.72	28
Hexachloro-1,3-butadiene	666	ND	465	389	69.8	58.4	1	10.0-120			17.8	38
Hexachlorocyclopentadiene	666	ND	386	353	58.0	53.0	1	10.0-120			8.93	40
Hexachloroethane	666	ND	356	367	53.5	55.1	1	10.0-120			3.04	40
Indeno(1,2,3-cd)pyrene	666	ND	598	587	89.8	88.1	1	10.0-120			1.86	32
Isophorone	666	ND	327	316	49.1	47.4	1	13.0-120			3.42	34
2-Methylnaphthalene	666	ND	368	377	55.3	56.6	1	10.0-120			2.42	37
Naphthalene	666	ND	324	358	48.6	53.8	1	10.0-120			9.97	35

L1038832-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038832-09 11/04/18 19:02 • (MS) R3356898-4 11/04/18 19:26 • (MSD) R3356898-5 11/04/18 19:48

Analyte	Spike Amount ug/kg	Original Result ug/kg	MS Result ug/kg	MSD Result ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrobenzene	666	ND	296	288	44.4	43.2	1	10.0-120			2.74	36
n-Nitrosodiphenylamine	666	ND	414	436	62.2	65.5	1	17.0-120			5.18	29
n-Nitrosodi-n-propylamine	666	ND	284	339	42.6	50.9	1	10.0-120			17.7	37
Phenanthrene	666	ND	592	567	88.9	85.1	1	17.0-120			4.31	31
Benzylbutyl phthalate	666	ND	620	595	93.1	89.3	1	23.0-120			4.12	30
Bis(2-ethylhexyl)phthalate	666	ND	642	614	96.4	92.2	1	17.0-126			4.46	30
Di-n-butyl phthalate	666	ND	667	663	100	99.5	1	30.0-120			0.602	29
Diethyl phthalate	666	ND	610	570	91.6	85.6	1	26.0-120			6.78	28
Dimethyl phthalate	666	ND	494	497	74.2	74.6	1	25.0-120			0.605	29
Di-n-octyl phthalate	666	ND	686	658	103	98.8	1	21.0-123			4.17	29
Pyrene	666	ND	637	609	95.6	91.4	1	16.0-121			4.49	32
1,2,4,5-Tetrachlorobenzene	666	ND	593	480	89.0	72.1	1	14.0-120			21.1	36
2,4,5-Trichlorophenol	666	ND	451	415	67.7	62.3	1	20.0-120			8.31	30
4-Chloro-3-methylphenol	666	ND	377	159	56.6	23.9	1	15.0-120		J3	81.3	30
2-Chlorophenol	666	ND	250	374	37.5	56.2	1	15.0-120		J3	39.7	37
2-Methylphenol	666	ND	229	223	34.4	33.5	1	11.0-120			2.65	40
3&4-Methyl Phenol	666	ND	272	85.8	40.8	12.9	1	12.0-123		J3	104	38
2,4-Dichlorophenol	666	ND	396	338	59.5	50.8	1	20.0-120			15.8	31
2,4-Dimethylphenol	666	ND	388	274	58.3	41.1	1	10.0-120		J3	34.4	33
4,6-Dinitro-2-methylphenol	666	ND	472	420	70.9	63.1	1	10.0-120			11.7	39
2,4-Dinitrophenol	666	ND	361	285	54.2	42.8	1	10.0-121			23.5	40
2-Nitrophenol	666	ND	383	362	57.5	54.4	1	12.0-120			5.64	39
4-Nitrophenol	666	ND	421	436	63.2	65.5	1	10.0-137			3.50	32
Pentachlorophenol	666	ND	504	477	75.7	71.6	1	10.0-160			5.50	31
Phenol	666	ND	224	45.7	33.6	6.86	1	12.0-120		J3 J6	132	38
2,4,6-Trichlorophenol	666	ND	390	406	58.6	61.0	1	19.0-120			4.02	32
(S) Nitrobenzene-d5					*45.3*	*46.8*		*10.0-122*				
(S) 2-Fluorobiphenyl					*61.9*	*64.0*		*15.0-120*				
(S) p-Terphenyl-d14					*95.2*	*92.5*		*10.0-120*				
(S) Phenol-d5					*29.3*	*10.2*		*10.0-120*				
(S) 2-Fluorophenol					*64.4*	*59.6*		*12.0-120*				
(S) 2,4,6-Tribromophenol					*69.7*	*72.8*		*10.0-127*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P	RPD between the primary and confirmatory analysis exceeded 40%.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.

LaBella Associates, D.P.C.
300 State Street, Suite 201
Rochester, NY 14614

Billing Information: SAME

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L # L1638880
G026

Report to: Mike Marrash

Email To: mmarrash@labellapc.com

Project Description: East Main and Laura Street

City/State Collected: Rochester NY

Phone: 585 402 7078
Fax:

Client Project # 2182815

Lab Project #

Collected by (print): Mike Marrash

Site/Facility ID #

P.O. # 2182815

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: STD

Acctnum:
Template:
Prelogin:
TSR:
PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TCL and CP51 VOCs 8260	TCL and CP51 SVOCs 8270	TAL Metals 6010	PCBs 8082	Pesticides	Remarks	Sample # (lab only)
SS-01	Grab	SS	0.5	10/22/18	0937	2	X	X	X	X	X		-01
SS-02	Grab	SS	0.35	10/22/18	1013	2	X	X	X	X	X		02
SS-03	Grab	SS	1	10/22/18	1026	2	X	X	X	X	X		03
SS-04	Grab	SS	0.5	10/22/18	1040	2	X	X	X	X	X		04

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP ✓Y __N
COC Signed/Accurate: ✓ __N
Bottles arrive intact: ✓ __N
Correct bottles used: ✓ __N
Sufficient volume sent: ✓ __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Mike Marrash	10/26/18	1330			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.8+0.1=2.9 °C Bottles Received: EMR 8	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 10/27/18 Time: 8:45	Hold: Condition: NCF / OK

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

November 05, 2018

LaBella Associates, P.C.

Sample Delivery Group:	L1038886
Samples Received:	10/27/2018
Project Number:	2182815
Description:	East Main and laura Street

Report To: Mr. Mike Marrash
300 State Street, Suite 201
Rochester, NY 14614

Entire Report Reviewed By:

T. Alan Harvill
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

SB-01 L1038886-01 Solid

Collected by: Mike Marrash | Collected date/time: 10/22/18 13:30 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189680	1	11/01/18 15:17	11/01/18 15:27	JD
Mercury by Method 7471B	WG1188180	1	10/30/18 13:00	10/31/18 14:50	ABL
Metals (ICP) by Method 6010C	WG1188132	1	10/30/18 11:29	11/01/18 09:54	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 13:17	10/31/18 13:33	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 13:17	11/04/18 15:28	JHH
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1189308	1	10/31/18 20:06	11/01/18 14:43	TD
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1188204	1	10/30/18 08:28	10/31/18 13:51	DMG

SB-02 L1038886-02 Solid

Collected by: Mike Marrash | Collected date/time: 10/22/18 13:48 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189680	1	11/01/18 15:17	11/01/18 15:27	JD
Mercury by Method 7471B	WG1188180	1	10/30/18 13:00	10/31/18 14:52	ABL
Metals (ICP) by Method 6010C	WG1188132	1	10/30/18 11:29	11/01/18 09:57	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 13:17	10/31/18 13:53	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 13:17	11/04/18 15:46	JHH
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1189308	1	10/31/18 20:06	11/01/18 14:56	TD
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1188204	1	10/30/18 08:28	10/31/18 14:16	DMG

SB-04 L1038886-03 Solid

Collected by: Mike Marrash | Collected date/time: 10/22/18 14:15 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189680	1	11/01/18 15:17	11/01/18 15:27	JD
Mercury by Method 7471B	WG1188180	1	10/30/18 13:00	10/31/18 14:54	ABL
Metals (ICP) by Method 6010C	WG1188132	1	10/30/18 11:29	11/01/18 09:59	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 13:17	10/31/18 14:13	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 13:17	11/04/18 16:32	DWR
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1188204	1	10/30/18 08:28	10/31/18 16:20	LEA

SB-05 L1038886-04 Solid

Collected by: Mike Marrash | Collected date/time: 10/22/18 14:40 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189680	1	11/01/18 15:17	11/01/18 15:27	JD
Mercury by Method 7471B	WG1188180	1	10/30/18 13:00	10/31/18 14:56	ABL
Metals (ICP) by Method 6010C	WG1188132	1	10/30/18 11:29	11/01/18 10:02	CCE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 13:17	10/31/18 14:34	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 13:17	11/04/18 16:50	DWR
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1188204	1	10/30/18 08:28	10/31/18 14:41	LEA

SBGT-06 L1038886-05 Solid

Collected by: Mike Marrash | Collected date/time: 10/22/18 15:10 | Received date/time: 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1189680	1	11/01/18 15:17	11/01/18 15:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188986	1	10/30/18 13:17	10/31/18 14:54	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191199	1	10/30/18 13:17	11/04/18 17:09	DWR
Polychlorinated Biphenyls (GC) by Method 8082 A	WG1189308	1	10/31/18 20:06	11/01/18 15:10	ADF
Semi Volatile Organic Compounds (GC/MS) by Method 8270D	WG1188204	1	10/30/18 08:28	10/31/18 15:05	LEA

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

T. Alan Harvill
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.7		1	11/01/2018 15:27	WG1189680

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	99.9		22.0	1	10/31/2018 14:50	WG1188180

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Aluminum	8060000		11000	1	11/01/2018 09:54	WG1188132
Antimony	ND		2200	1	11/01/2018 09:54	WG1188132
Arsenic	4380		2200	1	11/01/2018 09:54	WG1188132
Barium	45000		551	1	11/01/2018 09:54	WG1188132
Beryllium	354		220	1	11/01/2018 09:54	WG1188132
Cadmium	ND		551	1	11/01/2018 09:54	WG1188132
Calcium	30100000		110000	1	11/01/2018 09:54	WG1188132
Chromium	8210		1100	1	11/01/2018 09:54	WG1188132
Cobalt	4310		1100	1	11/01/2018 09:54	WG1188132
Copper	19200		2200	1	11/01/2018 09:54	WG1188132
Iron	11000000		11000	1	11/01/2018 09:54	WG1188132
Lead	41800		551	1	11/01/2018 09:54	WG1188132
Magnesium	7450000		110000	1	11/01/2018 09:54	WG1188132
Manganese	312000		1100	1	11/01/2018 09:54	WG1188132
Nickel	9950		2200	1	11/01/2018 09:54	WG1188132
Potassium	1450000		110000	1	11/01/2018 09:54	WG1188132
Selenium	ND		2200	1	11/01/2018 09:54	WG1188132
Silver	ND		1100	1	11/01/2018 09:54	WG1188132
Sodium	397000	B	110000	1	11/01/2018 09:54	WG1188132
Thallium	ND		2200	1	11/01/2018 09:54	WG1188132
Vanadium	10800		2200	1	11/01/2018 09:54	WG1188132
Zinc	47100		5510	1	11/01/2018 09:54	WG1188132

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		27.6	1	10/31/2018 13:33	WG1188986
Benzene	ND		1.10	1	10/31/2018 13:33	WG1188986
Bromochloromethane	ND		5.51	1	10/31/2018 13:33	WG1188986
Bromodichloromethane	ND		2.76	1	10/31/2018 13:33	WG1188986
Bromoform	ND		27.6	1	10/31/2018 13:33	WG1188986
Bromomethane	ND		13.8	1	10/31/2018 13:33	WG1188986
Carbon disulfide	ND		13.8	1	10/31/2018 13:33	WG1188986
Carbon tetrachloride	ND		5.51	1	10/31/2018 13:33	WG1188986
Chlorobenzene	ND		2.76	1	10/31/2018 13:33	WG1188986
Chlorodibromomethane	ND		2.76	1	10/31/2018 13:33	WG1188986
Chloroethane	ND		5.51	1	10/31/2018 13:33	WG1188986
Chloroform	ND		2.76	1	10/31/2018 13:33	WG1188986
Chloromethane	ND		13.8	1	10/31/2018 13:33	WG1188986
Cyclohexane	ND		2.76	1	10/31/2018 13:33	WG1188986
1,2-Dibromo-3-Chloropropane	ND		27.6	1	10/31/2018 13:33	WG1188986
1,2-Dibromoethane	ND	J4	2.76	1	10/31/2018 13:33	WG1188986
Dichlorodifluoromethane	ND		2.76	1	11/04/2018 15:28	WG1191199
1,1-Dichloroethane	ND		2.76	1	10/31/2018 13:33	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		2.76	1	10/31/2018 13:33	WG1188986
1,2-Dichlorobenzene	ND		5.51	1	10/31/2018 13:33	WG1188986
1,3-Dichlorobenzene	ND		5.51	1	10/31/2018 13:33	WG1188986
1,4-Dichlorobenzene	ND		5.51	1	10/31/2018 13:33	WG1188986
1,1-Dichloroethene	ND		2.76	1	10/31/2018 13:33	WG1188986
cis-1,2-Dichloroethene	ND		2.76	1	10/31/2018 13:33	WG1188986
trans-1,2-Dichloroethene	ND		5.51	1	10/31/2018 13:33	WG1188986
1,2-Dichloropropane	ND		5.51	1	11/04/2018 15:28	WG1191199
cis-1,3-Dichloropropene	ND		2.76	1	10/31/2018 13:33	WG1188986
trans-1,3-Dichloropropene	ND		5.51	1	10/31/2018 13:33	WG1188986
Ethylbenzene	ND		2.76	1	10/31/2018 13:33	WG1188986
2-Hexanone	ND		27.6	1	10/31/2018 13:33	WG1188986
Isopropylbenzene	ND		2.76	1	10/31/2018 13:33	WG1188986
2-Butanone (MEK)	ND		27.6	1	11/04/2018 15:28	WG1191199
Methyl Acetate	ND		5.51	1	10/31/2018 13:33	WG1188986
Methyl Cyclohexane	ND		5.51	1	10/31/2018 13:33	WG1188986
Methylene Chloride	ND		27.6	1	10/31/2018 13:33	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		27.6	1	10/31/2018 13:33	WG1188986
Methyl tert-butyl ether	ND		1.10	1	10/31/2018 13:33	WG1188986
Naphthalene	ND		13.8	1	10/31/2018 13:33	WG1188986
Styrene	ND		13.8	1	10/31/2018 13:33	WG1188986
1,1,2,2-Tetrachloroethane	ND		2.76	1	10/31/2018 13:33	WG1188986
Tetrachloroethene	ND		2.76	1	10/31/2018 13:33	WG1188986
Toluene	ND		5.51	1	10/31/2018 13:33	WG1188986
1,2,3-Trichlorobenzene	ND		2.76	1	10/31/2018 13:33	WG1188986
1,2,4-Trichlorobenzene	ND		13.8	1	10/31/2018 13:33	WG1188986
1,1,1-Trichloroethane	ND		2.76	1	10/31/2018 13:33	WG1188986
1,1,2-Trichloroethane	ND		2.76	1	10/31/2018 13:33	WG1188986
Trichloroethene	ND	J4	1.10	1	10/31/2018 13:33	WG1188986
Trichlorofluoromethane	ND		2.76	1	10/31/2018 13:33	WG1188986
1,1,2-Trichlorotrifluoroethane	ND		2.76	1	10/31/2018 13:33	WG1188986
Vinyl chloride	ND		2.76	1	10/31/2018 13:33	WG1188986
o-Xylene	ND		2.76	1	10/31/2018 13:33	WG1188986
m&p-Xylenes	ND		4.41	1	10/31/2018 13:33	WG1188986
n-Butylbenzene	ND		13.8	1	10/31/2018 13:33	WG1188986
sec-Butylbenzene	ND		13.8	1	10/31/2018 13:33	WG1188986
tert-Butylbenzene	ND	J4	5.51	1	10/31/2018 13:33	WG1188986
p-Isopropyltoluene	ND		5.51	1	10/31/2018 13:33	WG1188986
n-Propylbenzene	ND		5.51	1	10/31/2018 13:33	WG1188986
1,2,4-Trimethylbenzene	ND		5.51	1	10/31/2018 13:33	WG1188986
1,3,5-Trimethylbenzene	ND		5.51	1	10/31/2018 13:33	WG1188986
(S) Toluene-d8	*106*		*75.0-131*		*10/31/2018 13:33*	WG1188986
(S) Toluene-d8	*97.1*		*75.0-131*		*11/04/2018 15:28*	WG1191199
(S) Dibromofluoromethane	*86.5*		*65.0-129*		*10/31/2018 13:33*	WG1188986
(S) Dibromofluoromethane	*120*		*65.0-129*		*11/04/2018 15:28*	WG1191199
(S) a,a,a-Trifluorotoluene	*109*		*80.0-120*		*10/31/2018 13:33*	WG1188986
(S) a,a,a-Trifluorotoluene	*102*		*80.0-120*		*11/04/2018 15:28*	WG1191199
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*10/31/2018 13:33*	WG1188986
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*11/04/2018 15:28*	WG1191199

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		18.7	1	11/01/2018 14:43	WG1189308
PCB 1221	ND		18.7	1	11/01/2018 14:43	WG1189308
PCB 1232	ND		18.7	1	11/01/2018 14:43	WG1189308
PCB 1242	ND		18.7	1	11/01/2018 14:43	WG1189308
PCB 1248	ND		18.7	1	11/01/2018 14:43	WG1189308
PCB 1254	ND		18.7	1	11/01/2018 14:43	WG1189308
PCB 1260	ND		18.7	1	11/01/2018 14:43	WG1189308
(S) Decachlorobiphenyl	*59.1*		*10.0-135*		*11/01/2018 14:43*	WG1189308
(S) Tetrachloro-m-xylene	*65.6*		*10.0-139*		*11/01/2018 14:43*	WG1189308

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Anthracene	43.0		36.4	1	10/31/2018 13:51	WG1188204
Acenaphthylene	ND		36.4	1	10/31/2018 13:51	WG1188204
Acenaphthene	ND		36.4	1	10/31/2018 13:51	WG1188204
Benzo(a)anthracene	255		36.4	1	10/31/2018 13:51	WG1188204
Benzo(a)pyrene	294		36.4	1	10/31/2018 13:51	WG1188204
Benzo(b)fluoranthene	434		36.4	1	10/31/2018 13:51	WG1188204
Benzo(g,h,i)perylene	203		36.4	1	10/31/2018 13:51	WG1188204
Benzo(k)fluoranthene	106		36.4	1	10/31/2018 13:51	WG1188204
Chrysene	256		36.4	1	10/31/2018 13:51	WG1188204
Dibenz(a,h)anthracene	ND		36.4	1	10/31/2018 13:51	WG1188204
Fluoranthene	614		36.4	1	10/31/2018 13:51	WG1188204
Fluorene	ND		36.4	1	10/31/2018 13:51	WG1188204
Indeno(1,2,3-cd)pyrene	173		36.4	1	10/31/2018 13:51	WG1188204
Naphthalene	ND		36.4	1	10/31/2018 13:51	WG1188204
Phenanthrene	258		36.4	1	10/31/2018 13:51	WG1188204
Pyrene	457		36.4	1	10/31/2018 13:51	WG1188204
(S) Nitrobenzene-d5	*123*		*31.0-146*		*10/31/2018 13:51*	WG1188204
(S) 2-Fluorobiphenyl	*95.5*		*31.0-130*		*10/31/2018 13:51*	WG1188204
(S) p-Terphenyl-d14	*80.0*		*20.0-127*		*10/31/2018 13:51*	WG1188204

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.5		1	11/01/2018 15:27	WG1189680

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	31.5	B	21.9	1	10/31/2018 14:52	WG1188180

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Aluminum	6810000		10900	1	11/01/2018 09:57	WG1188132
Antimony	ND		2190	1	11/01/2018 09:57	WG1188132
Arsenic	2510		2190	1	11/01/2018 09:57	WG1188132
Barium	49700		547	1	11/01/2018 09:57	WG1188132
Beryllium	272		219	1	11/01/2018 09:57	WG1188132
Cadmium	ND		547	1	11/01/2018 09:57	WG1188132
Calcium	51000000		109000	1	11/01/2018 09:57	WG1188132
Chromium	11100		1090	1	11/01/2018 09:57	WG1188132
Cobalt	5360		1090	1	11/01/2018 09:57	WG1188132
Copper	35900		2190	1	11/01/2018 09:57	WG1188132
Iron	14300000		10900	1	11/01/2018 09:57	WG1188132
Lead	87400		547	1	11/01/2018 09:57	WG1188132
Magnesium	11500000		109000	1	11/01/2018 09:57	WG1188132
Manganese	734000		1090	1	11/01/2018 09:57	WG1188132
Nickel	14200		2190	1	11/01/2018 09:57	WG1188132
Potassium	1290000		109000	1	11/01/2018 09:57	WG1188132
Selenium	ND		2190	1	11/01/2018 09:57	WG1188132
Silver	ND		1090	1	11/01/2018 09:57	WG1188132
Sodium	197000	B	109000	1	11/01/2018 09:57	WG1188132
Thallium	ND		2190	1	11/01/2018 09:57	WG1188132
Vanadium	12000		2190	1	11/01/2018 09:57	WG1188132
Zinc	59500		5470	1	11/01/2018 09:57	WG1188132

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		27.3	1	10/31/2018 13:53	WG1188986
Benzene	ND		1.09	1	10/31/2018 13:53	WG1188986
Bromochloromethane	ND		5.47	1	10/31/2018 13:53	WG1188986
Bromodichloromethane	ND		2.73	1	10/31/2018 13:53	WG1188986
Bromoform	ND		27.3	1	10/31/2018 13:53	WG1188986
Bromomethane	ND		13.7	1	10/31/2018 13:53	WG1188986
Carbon disulfide	ND		13.7	1	10/31/2018 13:53	WG1188986
Carbon tetrachloride	ND		5.47	1	10/31/2018 13:53	WG1188986
Chlorobenzene	ND		2.73	1	10/31/2018 13:53	WG1188986
Chlorodibromomethane	ND		2.73	1	10/31/2018 13:53	WG1188986
Chloroethane	ND		5.47	1	10/31/2018 13:53	WG1188986
Chloroform	ND		2.73	1	10/31/2018 13:53	WG1188986
Chloromethane	ND		13.7	1	10/31/2018 13:53	WG1188986
Cyclohexane	ND		2.73	1	10/31/2018 13:53	WG1188986
1,2-Dibromo-3-Chloropropane	ND		27.3	1	10/31/2018 13:53	WG1188986
1,2-Dibromoethane	ND	J4	2.73	1	10/31/2018 13:53	WG1188986
Dichlorodifluoromethane	ND		2.73	1	11/04/2018 15:46	WG1191199
1,1-Dichloroethane	ND		2.73	1	10/31/2018 13:53	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		2.73	1	10/31/2018 13:53	WG1188986
1,2-Dichlorobenzene	ND		5.47	1	10/31/2018 13:53	WG1188986
1,3-Dichlorobenzene	ND		5.47	1	10/31/2018 13:53	WG1188986
1,4-Dichlorobenzene	ND		5.47	1	10/31/2018 13:53	WG1188986
1,1-Dichloroethene	ND		2.73	1	10/31/2018 13:53	WG1188986
cis-1,2-Dichloroethene	ND		2.73	1	10/31/2018 13:53	WG1188986
trans-1,2-Dichloroethene	ND		5.47	1	10/31/2018 13:53	WG1188986
1,2-Dichloropropane	ND		5.47	1	11/04/2018 15:46	WG1191199
cis-1,3-Dichloropropene	ND		2.73	1	10/31/2018 13:53	WG1188986
trans-1,3-Dichloropropene	ND		5.47	1	10/31/2018 13:53	WG1188986
Ethylbenzene	ND		2.73	1	10/31/2018 13:53	WG1188986
2-Hexanone	ND		27.3	1	10/31/2018 13:53	WG1188986
Isopropylbenzene	ND		2.73	1	10/31/2018 13:53	WG1188986
2-Butanone (MEK)	ND		27.3	1	11/04/2018 15:46	WG1191199
Methyl Acetate	ND		5.47	1	10/31/2018 13:53	WG1188986
Methyl Cyclohexane	ND		5.47	1	10/31/2018 13:53	WG1188986
Methylene Chloride	ND		27.3	1	10/31/2018 13:53	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		27.3	1	10/31/2018 13:53	WG1188986
Methyl tert-butyl ether	ND		1.09	1	10/31/2018 13:53	WG1188986
Naphthalene	ND		13.7	1	10/31/2018 13:53	WG1188986
Styrene	ND		13.7	1	10/31/2018 13:53	WG1188986
1,1,2,2-Tetrachloroethane	ND		2.73	1	10/31/2018 13:53	WG1188986
Tetrachloroethene	ND		2.73	1	10/31/2018 13:53	WG1188986
Toluene	ND		5.47	1	10/31/2018 13:53	WG1188986
1,2,3-Trichlorobenzene	ND		2.73	1	10/31/2018 13:53	WG1188986
1,2,4-Trichlorobenzene	ND		13.7	1	10/31/2018 13:53	WG1188986
1,1,1-Trichloroethane	ND		2.73	1	10/31/2018 13:53	WG1188986
1,1,2-Trichloroethane	ND		2.73	1	10/31/2018 13:53	WG1188986
Trichloroethene	ND	J4	1.09	1	10/31/2018 13:53	WG1188986
Trichlorofluoromethane	ND		2.73	1	10/31/2018 13:53	WG1188986
1,1,2-Trichlorotrifluoroethane	ND		2.73	1	10/31/2018 13:53	WG1188986
Vinyl chloride	ND		2.73	1	10/31/2018 13:53	WG1188986
o-Xylene	ND		2.73	1	10/31/2018 13:53	WG1188986
m&p-Xylenes	ND		4.37	1	10/31/2018 13:53	WG1188986
n-Butylbenzene	ND		13.7	1	10/31/2018 13:53	WG1188986
sec-Butylbenzene	ND		13.7	1	10/31/2018 13:53	WG1188986
tert-Butylbenzene	ND	J4	5.47	1	10/31/2018 13:53	WG1188986
p-Isopropyltoluene	ND		5.47	1	10/31/2018 13:53	WG1188986
n-Propylbenzene	ND		5.47	1	10/31/2018 13:53	WG1188986
1,2,4-Trimethylbenzene	ND		5.47	1	10/31/2018 13:53	WG1188986
1,3,5-Trimethylbenzene	ND		5.47	1	10/31/2018 13:53	WG1188986
(S) Toluene-d8	*107*		*75.0-131*		*10/31/2018 13:53*	WG1188986
(S) Toluene-d8	*98.1*		*75.0-131*		*11/04/2018 15:46*	WG1191199
(S) Dibromofluoromethane	*87.5*		*65.0-129*		*10/31/2018 13:53*	WG1188986
(S) Dibromofluoromethane	*120*		*65.0-129*		*11/04/2018 15:46*	WG1191199
(S) a,a,a-Trifluorotoluene	*107*		*80.0-120*		*10/31/2018 13:53*	WG1188986
(S) a,a,a-Trifluorotoluene	*101*		*80.0-120*		*11/04/2018 15:46*	WG1191199
(S) 4-Bromofluorobenzene	*98.1*		*67.0-138*		*10/31/2018 13:53*	WG1188986
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*11/04/2018 15:46*	WG1191199

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		18.6	1	11/01/2018 14:56	WG1189308
PCB 1221	ND		18.6	1	11/01/2018 14:56	WG1189308
PCB 1232	ND		18.6	1	11/01/2018 14:56	WG1189308
PCB 1242	ND		18.6	1	11/01/2018 14:56	WG1189308
PCB 1248	ND		18.6	1	11/01/2018 14:56	WG1189308
PCB 1254	ND		18.6	1	11/01/2018 14:56	WG1189308
PCB 1260	ND		18.6	1	11/01/2018 14:56	WG1189308
(S) Decachlorobiphenyl	*65.4*		*10.0-135*		*11/01/2018 14:56*	WG1189308
(S) Tetrachloro-m-xylene	*76.2*		*10.0-139*		*11/01/2018 14:56*	WG1189308

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		36.1	1	10/31/2018 14:16	WG1188204
Acenaphthylene	ND		36.1	1	10/31/2018 14:16	WG1188204
Acenaphthene	ND		36.1	1	10/31/2018 14:16	WG1188204
Benzo(a)anthracene	ND		36.1	1	10/31/2018 14:16	WG1188204
Benzo(a)pyrene	ND		36.1	1	10/31/2018 14:16	WG1188204
Benzo(b)fluoranthene	ND		36.1	1	10/31/2018 14:16	WG1188204
Benzo(g,h,i)perylene	ND		36.1	1	10/31/2018 14:16	WG1188204
Benzo(k)fluoranthene	ND		36.1	1	10/31/2018 14:16	WG1188204
Chrysene	ND		36.1	1	10/31/2018 14:16	WG1188204
Dibenz(a,h)anthracene	ND		36.1	1	10/31/2018 14:16	WG1188204
Fluoranthene	ND		36.1	1	10/31/2018 14:16	WG1188204
Fluorene	ND		36.1	1	10/31/2018 14:16	WG1188204
Indeno(1,2,3-cd)pyrene	ND		36.1	1	10/31/2018 14:16	WG1188204
Naphthalene	ND		36.1	1	10/31/2018 14:16	WG1188204
Phenanthrene	ND		36.1	1	10/31/2018 14:16	WG1188204
Pyrene	ND		36.1	1	10/31/2018 14:16	WG1188204
(S) Nitrobenzene-d5	*136*		*31.0-146*		*10/31/2018 14:16*	WG1188204
(S) 2-Fluorobiphenyl	*103*		*31.0-130*		*10/31/2018 14:16*	WG1188204
(S) p-Terphenyl-d14	*99.2*		*20.0-127*		*10/31/2018 14:16*	WG1188204

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.5		1	11/01/2018 15:27	WG1189680

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	118		23.1	1	10/31/2018 14:54	WG1188180

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Aluminum	12000000		11600	1	11/01/2018 09:59	WG1188132
Antimony	ND		2310	1	11/01/2018 09:59	WG1188132
Arsenic	3410		2310	1	11/01/2018 09:59	WG1188132
Barium	62300		578	1	11/01/2018 09:59	WG1188132
Beryllium	464		231	1	11/01/2018 09:59	WG1188132
Cadmium	ND		578	1	11/01/2018 09:59	WG1188132
Calcium	2720000		116000	1	11/01/2018 09:59	WG1188132
Chromium	12700		1160	1	11/01/2018 09:59	WG1188132
Cobalt	5400		1160	1	11/01/2018 09:59	WG1188132
Copper	17300		2310	1	11/01/2018 09:59	WG1188132
Iron	15000000		11600	1	11/01/2018 09:59	WG1188132
Lead	117000		578	1	11/01/2018 09:59	WG1188132
Magnesium	2830000		116000	1	11/01/2018 09:59	WG1188132
Manganese	353000		1160	1	11/01/2018 09:59	WG1188132
Nickel	10900		2310	1	11/01/2018 09:59	WG1188132
Potassium	795000		116000	1	11/01/2018 09:59	WG1188132
Selenium	ND		2310	1	11/01/2018 09:59	WG1188132
Silver	ND		1160	1	11/01/2018 09:59	WG1188132
Sodium	ND		116000	1	11/01/2018 09:59	WG1188132
Thallium	ND		2310	1	11/01/2018 09:59	WG1188132
Vanadium	17900		2310	1	11/01/2018 09:59	WG1188132
Zinc	96500		5780	1	11/01/2018 09:59	WG1188132

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		28.9	1	10/31/2018 14:13	WG1188986
Benzene	ND		1.16	1	10/31/2018 14:13	WG1188986
Bromochloromethane	ND		5.78	1	10/31/2018 14:13	WG1188986
Bromodichloromethane	ND		2.89	1	10/31/2018 14:13	WG1188986
Bromoform	ND		28.9	1	10/31/2018 14:13	WG1188986
Bromomethane	ND		14.5	1	10/31/2018 14:13	WG1188986
Carbon disulfide	ND		14.5	1	10/31/2018 14:13	WG1188986
Carbon tetrachloride	ND		5.78	1	10/31/2018 14:13	WG1188986
Chlorobenzene	ND		2.89	1	10/31/2018 14:13	WG1188986
Chlorodibromomethane	ND		2.89	1	10/31/2018 14:13	WG1188986
Chloroethane	ND		5.78	1	10/31/2018 14:13	WG1188986
Chloroform	ND		2.89	1	10/31/2018 14:13	WG1188986
Chloromethane	ND		14.5	1	10/31/2018 14:13	WG1188986
Cyclohexane	ND		2.89	1	10/31/2018 14:13	WG1188986
1,2-Dibromo-3-Chloropropane	ND		28.9	1	10/31/2018 14:13	WG1188986
1,2-Dibromoethane	ND	J4	2.89	1	10/31/2018 14:13	WG1188986
Dichlorodifluoromethane	ND		2.89	1	11/04/2018 16:32	WG1191199
1,1-Dichloroethane	ND		2.89	1	10/31/2018 14:13	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		2.89	1	10/31/2018 14:13	WG1188986
1,2-Dichlorobenzene	ND		5.78	1	10/31/2018 14:13	WG1188986
1,3-Dichlorobenzene	ND		5.78	1	10/31/2018 14:13	WG1188986
1,4-Dichlorobenzene	ND		5.78	1	10/31/2018 14:13	WG1188986
1,1-Dichloroethene	ND		2.89	1	10/31/2018 14:13	WG1188986
cis-1,2-Dichloroethene	ND		2.89	1	10/31/2018 14:13	WG1188986
trans-1,2-Dichloroethene	ND		5.78	1	10/31/2018 14:13	WG1188986
1,2-Dichloropropane	ND		5.78	1	11/04/2018 16:32	WG1191199
cis-1,3-Dichloropropene	ND		2.89	1	10/31/2018 14:13	WG1188986
trans-1,3-Dichloropropene	ND		5.78	1	10/31/2018 14:13	WG1188986
Ethylbenzene	ND		2.89	1	10/31/2018 14:13	WG1188986
2-Hexanone	ND		28.9	1	10/31/2018 14:13	WG1188986
Isopropylbenzene	ND		2.89	1	10/31/2018 14:13	WG1188986
2-Butanone (MEK)	ND		28.9	1	11/04/2018 16:32	WG1191199
Methyl Acetate	ND		5.78	1	10/31/2018 14:13	WG1188986
Methyl Cyclohexane	ND		5.78	1	10/31/2018 14:13	WG1188986
Methylene Chloride	ND		28.9	1	10/31/2018 14:13	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		28.9	1	10/31/2018 14:13	WG1188986
Methyl tert-butyl ether	ND		1.16	1	10/31/2018 14:13	WG1188986
Naphthalene	ND		14.5	1	10/31/2018 14:13	WG1188986
Styrene	ND		14.5	1	10/31/2018 14:13	WG1188986
1,1,2,2-Tetrachloroethane	ND		2.89	1	10/31/2018 14:13	WG1188986
Tetrachloroethene	ND		2.89	1	10/31/2018 14:13	WG1188986
Toluene	ND		5.78	1	10/31/2018 14:13	WG1188986
1,2,3-Trichlorobenzene	ND		2.89	1	10/31/2018 14:13	WG1188986
1,2,4-Trichlorobenzene	ND		14.5	1	10/31/2018 14:13	WG1188986
1,1,1-Trichloroethane	ND		2.89	1	10/31/2018 14:13	WG1188986
1,1,2-Trichloroethane	ND		2.89	1	10/31/2018 14:13	WG1188986
Trichloroethene	ND	J4	1.16	1	10/31/2018 14:13	WG1188986
Trichlorofluoromethane	ND		2.89	1	10/31/2018 14:13	WG1188986
1,1,2-Trichlorotrifluoroethane	ND		2.89	1	10/31/2018 14:13	WG1188986
Vinyl chloride	ND		2.89	1	10/31/2018 14:13	WG1188986
o-Xylene	ND		2.89	1	10/31/2018 14:13	WG1188986
m&p-Xylenes	ND		4.63	1	10/31/2018 14:13	WG1188986
n-Butylbenzene	ND		14.5	1	10/31/2018 14:13	WG1188986
sec-Butylbenzene	ND		14.5	1	10/31/2018 14:13	WG1188986
tert-Butylbenzene	ND	J4	5.78	1	10/31/2018 14:13	WG1188986
p-Isopropyltoluene	ND		5.78	1	10/31/2018 14:13	WG1188986
n-Propylbenzene	ND		5.78	1	10/31/2018 14:13	WG1188986
1,2,4-Trimethylbenzene	ND		5.78	1	10/31/2018 14:13	WG1188986
1,3,5-Trimethylbenzene	ND		5.78	1	10/31/2018 14:13	WG1188986
(S) Toluene-d8	*107*		*75.0-131*		*10/31/2018 14:13*	WG1188986
(S) Toluene-d8	*99.6*		*75.0-131*		*11/04/2018 16:32*	WG1191199
(S) Dibromofluoromethane	*88.6*		*65.0-129*		*10/31/2018 14:13*	WG1188986
(S) Dibromofluoromethane	*123*		*65.0-129*		*11/04/2018 16:32*	WG1191199
(S) a,a,a-Trifluorotoluene	*107*		*80.0-120*		*10/31/2018 14:13*	WG1188986
(S) a,a,a-Trifluorotoluene	*101*		*80.0-120*		*11/04/2018 16:32*	WG1191199
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*10/31/2018 14:13*	WG1188986
(S) 4-Bromofluorobenzene	*106*		*67.0-138*		*11/04/2018 16:32*	WG1191199

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Anthracene	117		38.2	1	10/31/2018 16:20	WG1188204
Acenaphthylene	ND		38.2	1	10/31/2018 16:20	WG1188204
Acenaphthene	ND		38.2	1	10/31/2018 16:20	WG1188204
Benzo(a)anthracene	341		38.2	1	10/31/2018 16:20	WG1188204
Benzo(a)pyrene	346		38.2	1	10/31/2018 16:20	WG1188204
Benzo(b)fluoranthene	519		38.2	1	10/31/2018 16:20	WG1188204
Benzo(g,h,i)perylene	216		38.2	1	10/31/2018 16:20	WG1188204
Benzo(k)fluoranthene	141		38.2	1	10/31/2018 16:20	WG1188204
Chrysene	400		38.2	1	10/31/2018 16:20	WG1188204
Dibenz(a,h)anthracene	55.5		38.2	1	10/31/2018 16:20	WG1188204
Fluoranthene	911		38.2	1	10/31/2018 16:20	WG1188204
Fluorene	ND		38.2	1	10/31/2018 16:20	WG1188204
Indeno(1,2,3-cd)pyrene	188		38.2	1	10/31/2018 16:20	WG1188204
Naphthalene	ND		38.2	1	10/31/2018 16:20	WG1188204
Phenanthrene	431		38.2	1	10/31/2018 16:20	WG1188204
Pyrene	668		38.2	1	10/31/2018 16:20	WG1188204
(S) Nitrobenzene-d5	*129*		*31.0-146*		*10/31/2018 16:20*	WG1188204
(S) 2-Fluorobiphenyl	*95.2*		*31.0-130*		*10/31/2018 16:20*	WG1188204
(S) p-Terphenyl-d14	*88.6*		*20.0-127*		*10/31/2018 16:20*	WG1188204

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.9		1	11/01/2018 15:27	WG1189680

Mercury by Method 7471B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Mercury	ND		22.2	1	10/31/2018 14:56	WG1188180

Metals (ICP) by Method 6010C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Aluminum	4740000		11100	1	11/01/2018 10:02	WG1188132
Antimony	ND		2220	1	11/01/2018 10:02	WG1188132
Arsenic	ND		2220	1	11/01/2018 10:02	WG1188132
Barium	24600		556	1	11/01/2018 10:02	WG1188132
Beryllium	ND		222	1	11/01/2018 10:02	WG1188132
Cadmium	ND		556	1	11/01/2018 10:02	WG1188132
Calcium	70200000		111000	1	11/01/2018 10:02	WG1188132
Chromium	6170		1110	1	11/01/2018 10:02	WG1188132
Cobalt	3390		1110	1	11/01/2018 10:02	WG1188132
Copper	9460		2220	1	11/01/2018 10:02	WG1188132
Iron	9880000		11100	1	11/01/2018 10:02	WG1188132
Lead	6070		556	1	11/01/2018 10:02	WG1188132
Magnesium	23300000		111000	1	11/01/2018 10:02	WG1188132
Manganese	314000		1110	1	11/01/2018 10:02	WG1188132
Nickel	7420		2220	1	11/01/2018 10:02	WG1188132
Potassium	1160000		111000	1	11/01/2018 10:02	WG1188132
Selenium	ND		2220	1	11/01/2018 10:02	WG1188132
Silver	ND		1110	1	11/01/2018 10:02	WG1188132
Sodium	185000	B	111000	1	11/01/2018 10:02	WG1188132
Thallium	ND		2220	1	11/01/2018 10:02	WG1188132
Vanadium	9230		2220	1	11/01/2018 10:02	WG1188132
Zinc	21900		5560	1	11/01/2018 10:02	WG1188132

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		27.8	1	10/31/2018 14:34	WG1188986
Benzene	ND		1.11	1	10/31/2018 14:34	WG1188986
Bromochloromethane	ND		5.56	1	10/31/2018 14:34	WG1188986
Bromodichloromethane	ND		2.78	1	10/31/2018 14:34	WG1188986
Bromoform	ND		27.8	1	10/31/2018 14:34	WG1188986
Bromomethane	ND		13.9	1	10/31/2018 14:34	WG1188986
Carbon disulfide	ND		13.9	1	10/31/2018 14:34	WG1188986
Carbon tetrachloride	ND		5.56	1	10/31/2018 14:34	WG1188986
Chlorobenzene	ND		2.78	1	10/31/2018 14:34	WG1188986
Chlorodibromomethane	ND		2.78	1	10/31/2018 14:34	WG1188986
Chloroethane	ND		5.56	1	10/31/2018 14:34	WG1188986
Chloroform	ND		2.78	1	10/31/2018 14:34	WG1188986
Chloromethane	ND		13.9	1	10/31/2018 14:34	WG1188986
Cyclohexane	ND		2.78	1	10/31/2018 14:34	WG1188986
1,2-Dibromo-3-Chloropropane	ND		27.8	1	10/31/2018 14:34	WG1188986
1,2-Dibromoethane	ND	J4	2.78	1	10/31/2018 14:34	WG1188986
Dichlorodifluoromethane	ND		2.78	1	11/04/2018 16:50	WG1191199
1,1-Dichloroethane	ND		2.78	1	10/31/2018 14:34	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
1,2-Dichloroethane	ND		2.78	1	10/31/2018 14:34	WG1188986
1,2-Dichlorobenzene	ND		5.56	1	10/31/2018 14:34	WG1188986
1,3-Dichlorobenzene	ND		5.56	1	10/31/2018 14:34	WG1188986
1,4-Dichlorobenzene	ND		5.56	1	10/31/2018 14:34	WG1188986
1,1-Dichloroethene	ND		2.78	1	10/31/2018 14:34	WG1188986
cis-1,2-Dichloroethene	ND		2.78	1	10/31/2018 14:34	WG1188986
trans-1,2-Dichloroethene	ND		5.56	1	10/31/2018 14:34	WG1188986
1,2-Dichloropropane	ND		5.56	1	11/04/2018 16:50	WG1191199
cis-1,3-Dichloropropene	ND		2.78	1	10/31/2018 14:34	WG1188986
trans-1,3-Dichloropropene	ND		5.56	1	10/31/2018 14:34	WG1188986
Ethylbenzene	ND		2.78	1	10/31/2018 14:34	WG1188986
2-Hexanone	ND		27.8	1	10/31/2018 14:34	WG1188986
Isopropylbenzene	ND		2.78	1	10/31/2018 14:34	WG1188986
2-Butanone (MEK)	ND		27.8	1	11/04/2018 16:50	WG1191199
Methyl Acetate	ND		5.56	1	10/31/2018 14:34	WG1188986
Methyl Cyclohexane	ND		5.56	1	10/31/2018 14:34	WG1188986
Methylene Chloride	ND		27.8	1	10/31/2018 14:34	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		27.8	1	10/31/2018 14:34	WG1188986
Methyl tert-butyl ether	ND		1.11	1	10/31/2018 14:34	WG1188986
Naphthalene	ND		13.9	1	10/31/2018 14:34	WG1188986
Styrene	ND		13.9	1	10/31/2018 14:34	WG1188986
1,1,2,2-Tetrachloroethane	ND		2.78	1	10/31/2018 14:34	WG1188986
Tetrachloroethene	ND		2.78	1	10/31/2018 14:34	WG1188986
Toluene	ND		5.56	1	10/31/2018 14:34	WG1188986
1,2,3-Trichlorobenzene	ND		2.78	1	10/31/2018 14:34	WG1188986
1,2,4-Trichlorobenzene	ND		13.9	1	10/31/2018 14:34	WG1188986
1,1,1-Trichloroethane	ND		2.78	1	10/31/2018 14:34	WG1188986
1,1,2-Trichloroethane	ND		2.78	1	10/31/2018 14:34	WG1188986
Trichloroethene	ND	J4	1.11	1	10/31/2018 14:34	WG1188986
Trichlorofluoromethane	ND		2.78	1	10/31/2018 14:34	WG1188986
1,1,2-Trichlorotrifluoroethane	ND		2.78	1	10/31/2018 14:34	WG1188986
Vinyl chloride	ND		2.78	1	10/31/2018 14:34	WG1188986
o-Xylene	ND		2.78	1	10/31/2018 14:34	WG1188986
m&p-Xylenes	ND		4.45	1	10/31/2018 14:34	WG1188986
n-Butylbenzene	ND		13.9	1	10/31/2018 14:34	WG1188986
sec-Butylbenzene	ND		13.9	1	10/31/2018 14:34	WG1188986
tert-Butylbenzene	ND	J4	5.56	1	10/31/2018 14:34	WG1188986
p-Isopropyltoluene	ND		5.56	1	10/31/2018 14:34	WG1188986
n-Propylbenzene	ND		5.56	1	10/31/2018 14:34	WG1188986
1,2,4-Trimethylbenzene	ND		5.56	1	10/31/2018 14:34	WG1188986
1,3,5-Trimethylbenzene	ND		5.56	1	10/31/2018 14:34	WG1188986
(S) Toluene-d8	*106*		*75.0-131*		*10/31/2018 14:34*	WG1188986
(S) Toluene-d8	*97.7*		*75.0-131*		*11/04/2018 16:50*	WG1191199
(S) Dibromofluoromethane	*85.3*		*65.0-129*		*10/31/2018 14:34*	WG1188986
(S) Dibromofluoromethane	*119*		*65.0-129*		*11/04/2018 16:50*	WG1191199
(S) a,a,a-Trifluorotoluene	*108*		*80.0-120*		*10/31/2018 14:34*	WG1188986
(S) a,a,a-Trifluorotoluene	*100*		*80.0-120*		*11/04/2018 16:50*	WG1191199
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*10/31/2018 14:34*	WG1188986
(S) 4-Bromofluorobenzene	*106*		*67.0-138*		*11/04/2018 16:50*	WG1191199

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		36.7	1	10/31/2018 14:41	WG1188204
Acenaphthylene	ND		36.7	1	10/31/2018 14:41	WG1188204
Acenaphthene	ND		36.7	1	10/31/2018 14:41	WG1188204
Benzo(a)anthracene	ND		36.7	1	10/31/2018 14:41	WG1188204
Benzo(a)pyrene	ND		36.7	1	10/31/2018 14:41	WG1188204
Benzo(b)fluoranthene	ND		36.7	1	10/31/2018 14:41	WG1188204
Benzo(g,h,i)perylene	ND		36.7	1	10/31/2018 14:41	WG1188204
Benzo(k)fluoranthene	ND		36.7	1	10/31/2018 14:41	WG1188204
Chrysene	ND		36.7	1	10/31/2018 14:41	WG1188204
Dibenz(a,h)anthracene	ND		36.7	1	10/31/2018 14:41	WG1188204
Fluoranthene	ND		36.7	1	10/31/2018 14:41	WG1188204
Fluorene	ND		36.7	1	10/31/2018 14:41	WG1188204
Indeno(1,2,3-cd)pyrene	ND		36.7	1	10/31/2018 14:41	WG1188204
Naphthalene	ND		36.7	1	10/31/2018 14:41	WG1188204
Phenanthrene	ND		36.7	1	10/31/2018 14:41	WG1188204
Pyrene	ND		36.7	1	10/31/2018 14:41	WG1188204
(S) Nitrobenzene-d5	*120*		*31.0-146*		*10/31/2018 14:41*	WG1188204
(S) 2-Fluorobiphenyl	*82.2*		*31.0-130*		*10/31/2018 14:41*	WG1188204
(S) p-Terphenyl-d14	*74.8*		*20.0-127*		*10/31/2018 14:41*	WG1188204

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.2		1	11/01/2018 15:27	WG1189680

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

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	ug/kg		ug/kg		date / time	
Acetone	ND		26.8	1	10/31/2018 14:54	WG1188986
Benzene	ND		1.07	1	10/31/2018 14:54	WG1188986
Bromochloromethane	ND		5.37	1	10/31/2018 14:54	WG1188986
Bromodichloromethane	ND		2.68	1	10/31/2018 14:54	WG1188986
Bromoform	ND		26.8	1	10/31/2018 14:54	WG1188986
Bromomethane	ND		13.4	1	10/31/2018 14:54	WG1188986
Carbon disulfide	ND		13.4	1	10/31/2018 14:54	WG1188986
Carbon tetrachloride	ND		5.37	1	10/31/2018 14:54	WG1188986
Chlorobenzene	ND		2.68	1	10/31/2018 14:54	WG1188986
Chlorodibromomethane	ND		2.68	1	10/31/2018 14:54	WG1188986
Chloroethane	ND		5.37	1	10/31/2018 14:54	WG1188986
Chloroform	ND		2.68	1	10/31/2018 14:54	WG1188986
Chloromethane	ND		13.4	1	10/31/2018 14:54	WG1188986
Cyclohexane	ND		2.68	1	10/31/2018 14:54	WG1188986
1,2-Dibromo-3-Chloropropane	ND		26.8	1	10/31/2018 14:54	WG1188986
1,2-Dibromoethane	ND	J4	2.68	1	10/31/2018 14:54	WG1188986
Dichlorodifluoromethane	ND		2.68	1	11/04/2018 17:09	WG1191199
1,1-Dichloroethane	ND		2.68	1	10/31/2018 14:54	WG1188986
1,2-Dichloroethane	ND		2.68	1	10/31/2018 14:54	WG1188986
1,2-Dichlorobenzene	ND		5.37	1	10/31/2018 14:54	WG1188986
1,3-Dichlorobenzene	ND		5.37	1	10/31/2018 14:54	WG1188986
1,4-Dichlorobenzene	ND		5.37	1	10/31/2018 14:54	WG1188986
1,1-Dichloroethene	ND		2.68	1	10/31/2018 14:54	WG1188986
cis-1,2-Dichloroethene	ND		2.68	1	10/31/2018 14:54	WG1188986
trans-1,2-Dichloroethene	ND		5.37	1	10/31/2018 14:54	WG1188986
1,2-Dichloropropane	ND		5.37	1	11/04/2018 17:09	WG1191199
cis-1,3-Dichloropropene	ND		2.68	1	10/31/2018 14:54	WG1188986
trans-1,3-Dichloropropene	ND		5.37	1	10/31/2018 14:54	WG1188986
Ethylbenzene	ND		2.68	1	10/31/2018 14:54	WG1188986
2-Hexanone	ND		26.8	1	10/31/2018 14:54	WG1188986
Isopropylbenzene	ND		2.68	1	10/31/2018 14:54	WG1188986
2-Butanone (MEK)	ND		26.8	1	11/04/2018 17:09	WG1191199
Methyl Acetate	ND		5.37	1	10/31/2018 14:54	WG1188986
Methyl Cyclohexane	ND		5.37	1	10/31/2018 14:54	WG1188986
Methylene Chloride	ND		26.8	1	10/31/2018 14:54	WG1188986
4-Methyl-2-pentanone (MIBK)	ND		26.8	1	10/31/2018 14:54	WG1188986
Methyl tert-butyl ether	ND		1.07	1	10/31/2018 14:54	WG1188986
Naphthalene	ND		13.4	1	10/31/2018 14:54	WG1188986
Styrene	ND		13.4	1	10/31/2018 14:54	WG1188986
1,1,2,2-Tetrachloroethane	ND		2.68	1	10/31/2018 14:54	WG1188986
Tetrachloroethene	ND		2.68	1	10/31/2018 14:54	WG1188986
Toluene	ND		5.37	1	10/31/2018 14:54	WG1188986
1,2,3-Trichlorobenzene	ND		2.68	1	10/31/2018 14:54	WG1188986
1,2,4-Trichlorobenzene	ND		13.4	1	10/31/2018 14:54	WG1188986
1,1,1-Trichloroethane	ND		2.68	1	10/31/2018 14:54	WG1188986
1,1,2-Trichloroethane	ND		2.68	1	10/31/2018 14:54	WG1188986
Trichloroethene	ND	J4	1.07	1	10/31/2018 14:54	WG1188986
Trichlorofluoromethane	ND		2.68	1	10/31/2018 14:54	WG1188986
1,1,2-Trichlorotrifluoroethane	ND		2.68	1	10/31/2018 14:54	WG1188986
Vinyl chloride	ND		2.68	1	10/31/2018 14:54	WG1188986

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

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
o-Xylene	ND		2.68	1	10/31/2018 14:54	WG1188986
m&p-Xylenes	ND		4.29	1	10/31/2018 14:54	WG1188986
n-Butylbenzene	ND		13.4	1	10/31/2018 14:54	WG1188986
sec-Butylbenzene	ND		13.4	1	10/31/2018 14:54	WG1188986
tert-Butylbenzene	ND	J4	5.37	1	10/31/2018 14:54	WG1188986
p-Isopropyltoluene	ND		5.37	1	10/31/2018 14:54	WG1188986
n-Propylbenzene	ND		5.37	1	10/31/2018 14:54	WG1188986
1,2,4-Trimethylbenzene	ND		5.37	1	10/31/2018 14:54	WG1188986
1,3,5-Trimethylbenzene	ND		5.37	1	10/31/2018 14:54	WG1188986
(S) Toluene-d8	*109*		*75.0-131*		*10/31/2018 14:54*	WG1188986
(S) Toluene-d8	*98.3*		*75.0-131*		*11/04/2018 17:09*	WG1191199
(S) Dibromofluoromethane	*88.3*		*65.0-129*		*10/31/2018 14:54*	WG1188986
(S) Dibromofluoromethane	*118*		*65.0-129*		*11/04/2018 17:09*	WG1191199
(S) a,a,a-Trifluorotoluene	*105*		*80.0-120*		*10/31/2018 14:54*	WG1188986
(S) a,a,a-Trifluorotoluene	*99.5*		*80.0-120*		*11/04/2018 17:09*	WG1191199
(S) 4-Bromofluorobenzene	*101*		*67.0-138*		*10/31/2018 14:54*	WG1188986
(S) 4-Bromofluorobenzene	*105*		*67.0-138*		*11/04/2018 17:09*	WG1191199

Polychlorinated Biphenyls (GC) by Method 8082 A

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
PCB 1016	ND		18.2	1	11/01/2018 15:10	WG1189308
PCB 1221	ND		18.2	1	11/01/2018 15:10	WG1189308
PCB 1232	ND		18.2	1	11/01/2018 15:10	WG1189308
PCB 1242	ND		18.2	1	11/01/2018 15:10	WG1189308
PCB 1248	ND		18.2	1	11/01/2018 15:10	WG1189308
PCB 1254	ND		18.2	1	11/01/2018 15:10	WG1189308
PCB 1260	ND		18.2	1	11/01/2018 15:10	WG1189308
(S) Decachlorobiphenyl	*70.1*		*10.0-135*		*11/01/2018 15:10*	WG1189308
(S) Tetrachloro-m-xylene	*80.2*		*10.0-139*		*11/01/2018 15:10*	WG1189308

Semi Volatile Organic Compounds (GC/MS) by Method 8270D

Analyte	Result (dry) ug/kg	Qualifier	RDL (dry) ug/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		35.4	1	10/31/2018 15:05	WG1188204
Acenaphthylene	ND		35.4	1	10/31/2018 15:05	WG1188204
Acenaphthene	ND		35.4	1	10/31/2018 15:05	WG1188204
Benzo(a)anthracene	ND		35.4	1	10/31/2018 15:05	WG1188204
Benzo(a)pyrene	ND		35.4	1	10/31/2018 15:05	WG1188204
Benzo(b)fluoranthene	ND		35.4	1	10/31/2018 15:05	WG1188204
Benzo(g,h,i)perylene	ND		35.4	1	10/31/2018 15:05	WG1188204
Benzo(k)fluoranthene	ND		35.4	1	10/31/2018 15:05	WG1188204
Chrysene	ND		35.4	1	10/31/2018 15:05	WG1188204
Dibenz(a,h)anthracene	ND		35.4	1	10/31/2018 15:05	WG1188204
Fluoranthene	ND		35.4	1	10/31/2018 15:05	WG1188204
Fluorene	ND		35.4	1	10/31/2018 15:05	WG1188204
Indeno(1,2,3-cd)pyrene	ND		35.4	1	10/31/2018 15:05	WG1188204
Naphthalene	ND		35.4	1	10/31/2018 15:05	WG1188204
Phenanthrene	ND		35.4	1	10/31/2018 15:05	WG1188204
Pyrene	ND		35.4	1	10/31/2018 15:05	WG1188204
(S) Nitrobenzene-d5	*122*		*31.0-146*		*10/31/2018 15:05*	WG1188204
(S) 2-Fluorobiphenyl	*88.6*		*31.0-130*		*10/31/2018 15:05*	WG1188204
(S) p-Terphenyl-d14	*81.0*		*20.0-127*		*10/31/2018 15:05*	WG1188204

Method Blank (MB)

(MB) R3356207-1 11/01/18 15:27

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1038886-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1038886-04 11/01/18 15:27 • (DUP) R3356207-3 11/01/18 15:27

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	89.9	88.7	1	1.35		10

Laboratory Control Sample (LCS)

(LCS) R3356207-2 11/01/18 15:27

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3355653-1 10/31/18 13:57

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Mercury	8.53	J	2.80	20.0

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3355653-2 10/31/18 13:59 • (LCSD) R3355653-3 10/31/18 14:01

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	300	322	320	107	107	80.0-120			0.571	20

L1039044-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1039044-02 10/31/18 14:04 • (MS) R3355653-4 10/31/18 14:06 • (MSD) R3355653-5 10/31/18 14:08

Analyte	Spike Amount ug/kg	Original Result ug/kg	MS Result ug/kg	MSD Result ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	300	13.1	324	337	103	108	1	75.0-125			4.02	20

Method Blank (MB)

(MB) R3356013-1 11/01/18 08:55

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Aluminum	U		3500	10000
Antimony	U		750	2000
Arsenic	U		460	2000
Barium	U		170	500
Beryllium	U		70.0	200
Cadmium	U		70.0	500
Calcium	U		4630	100000
Chromium	U		140	1000
Cobalt	U		230	1000
Copper	U		530	2000
Iron	U		1410	10000
Lead	266	J	190	500
Magnesium	4420	J	1110	100000
Manganese	U		120	1000
Nickel	U		490	2000
Potassium	27000	J	10200	100000
Selenium	U		620	2000
Silver	U		120	1000
Sodium	63900	J	9850	100000
Thallium	U		650	2000
Vanadium	U		240	2000
Zinc	638	J	590	5000

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356013-2 11/01/18 08:58 • (LCSD) R3356013-3 11/01/18 09:00

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Aluminum	1000000	993000	1020000	99.3	102	80.0-120			3.01	20
Antimony	100000	97200	101000	97.2	101	80.0-120			4.22	20
Arsenic	100000	94600	98600	94.6	98.6	80.0-120			4.13	20
Barium	100000	101000	105000	101	105	80.0-120			4.02	20
Beryllium	100000	101000	104000	101	104	80.0-120			3.55	20
Cadmium	100000	95300	99300	95.3	99.3	80.0-120			4.11	20
Calcium	1000000	972000	999000	97.2	99.9	80.0-120			2.69	20
Chromium	100000	95900	99900	95.9	99.9	80.0-120			4.10	20
Cobalt	100000	99100	103000	99.1	103	80.0-120			3.88	20
Copper	100000	98200	103000	98.2	103	80.0-120			4.89	20
Iron	1000000	972000	999000	97.2	99.9	80.0-120			2.70	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356013-2 11/01/18 08:58 • (LCSD) R3356013-3 11/01/18 09:00

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Lead	100000	95100	99100	95.1	99.1	80.0-120			4.10	20
Magnesium	1000000	992000	1020000	99.2	102	80.0-120			3.02	20
Manganese	100000	95500	100000	95.5	100	80.0-120			4.78	20
Nickel	100000	96900	100000	96.9	100	80.0-120			3.53	20
Potassium	1000000	956000	982000	95.6	98.2	80.0-120			2.71	20
Selenium	100000	94100	98500	94.1	98.5	80.0-120			4.57	20
Silver	20000	18200	19200	91.2	95.8	80.0-120			4.97	20
Sodium	1000000	999000	1030000	99.9	103	80.0-120			2.73	20
Thallium	100000	94300	98300	94.3	98.3	80.0-120			4.17	20
Vanadium	100000	98900	102000	98.9	102	80.0-120			3.05	20
Zinc	100000	94400	98100	94.4	98.1	80.0-120			3.83	20

L1038920-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038920-02 11/01/18 09:03 • (MS) R3356013-6 11/01/18 09:11 • (MSD) R3356013-7 11/01/18 09:14

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aluminum	1160000	11300000	8670000	8990000	0.000	0.000	1	75.0-125	V	V	3.64	20
Antimony	116000	U	70600	64200	60.6	55.2	1	75.0-125	J6	J6	9.45	20
Arsenic	116000	4480	117000	117000	96.6	96.5	1	75.0-125			0.127	20
Barium	116000	157000	238000	298000	69.6	121	1	75.0-125	J6	J3	22.2	20
Beryllium	116000	499	117000	115000	99.9	98.5	1	75.0-125			1.37	20
Cadmium	116000	222	116000	115000	99.2	98.4	1	75.0-125			0.834	20
Calcium	1160000	122000000	83900000	96800000	0.000	0.000	1	75.0-125	V	V	14.2	20
Chromium	116000	12600	116000	116000	89.2	88.8	1	75.0-125			0.424	20
Cobalt	116000	6520	124000	124000	101	101	1	75.0-125			0.539	20
Copper	116000	21400	137000	138000	99.6	99.9	1	75.0-125			0.272	20
Iron	1160000	13400000	9250000	9520000	0.000	0.000	1	75.0-125	V	V	2.82	20
Lead	116000	42400	151000	155000	93.0	97.1	1	75.0-125			3.10	20
Magnesium	1160000	15600000	10200000	13200000	0.000	0.000	1	75.0-125	V	J3 V	25.9	20
Manganese	116000	417000	332000	368000	0.000	0.000	1	75.0-125	J6	J6	10.1	20
Nickel	116000	18000	127000	126000	93.7	93.0	1	75.0-125			0.633	20
Potassium	1160000	1960000	2650000	2600000	59.3	54.3	1	75.0-125	J6	J6	2.21	20
Selenium	116000	U	112000	111000	96.1	95.7	1	75.0-125			0.388	20
Silver	23300	U	23000	23000	98.9	98.6	1	75.0-125			0.298	20
Sodium	1160000	538000	1620000	1620000	93.2	92.8	1	75.0-125			0.275	20
Thallium	116000	U	111000	109000	94.9	93.7	1	75.0-125			1.28	20
Vanadium	116000	20000	128000	127000	92.6	91.8	1	75.0-125			0.734	20
Zinc	116000	99800	196000	254000	83.0	132	1	75.0-125		J3 J5	25.5	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3356687-2 10/31/18 10:18

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Acetone	U		13.7	25.0
Benzene	U		0.400	1.00
Bromodichloromethane	U		0.788	2.50
Bromochloromethane	U		1.13	5.00
Bromoform	U		5.98	25.0
Bromomethane	U		3.70	12.5
n-Butylbenzene	U		3.84	12.5
sec-Butylbenzene	U		2.53	12.5
tert-Butylbenzene	U		1.55	5.00
Carbon disulfide	U		4.06	12.5
Carbon tetrachloride	U		1.08	5.00
Chlorobenzene	U		0.573	2.50
Chlorodibromomethane	U		0.450	2.50
Chloroethane	U		1.08	5.00
Chloroform	U		0.415	2.50
Chloromethane	U		1.39	12.5
Cyclohexane	U		0.508	2.50
1,2-Dibromo-3-Chloropropane	U		5.10	25.0
1,2-Dibromoethane	U		0.525	2.50
1,2-Dichlorobenzene	U		1.45	5.00
1,3-Dichlorobenzene	U		1.70	5.00
1,4-Dichlorobenzene	U		1.97	5.00
1,1-Dichloroethane	U		0.575	2.50
1,2-Dichloroethane	U		0.475	2.50
1,1-Dichloroethene	U		0.500	2.50
cis-1,2-Dichloroethene	U		0.690	2.50
trans-1,2-Dichloroethene	U		1.43	5.00
cis-1,3-Dichloropropene	U		0.678	2.50
trans-1,3-Dichloropropene	U		1.53	5.00
Ethylbenzene	U		0.530	2.50
2-Hexanone	U		10.0	25.0
Isopropylbenzene	U		0.863	2.50
p-Isopropyltoluene	U		2.33	5.00
Methyl Acetate	U		2.10	5.00
Methyl Cyclohexane	U		1.03	5.00
Methylene Chloride	U		6.64	25.0
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0
Methyl tert-butyl ether	U		0.295	1.00
Naphthalene	U		3.12	12.5
n-Propylbenzene	U		1.18	5.00

Method Blank (MB)

(MB) R3356687-2 10/31/18 10:18

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Styrene	U		2.73	12.5
1,1,2,2-Tetrachloroethane	U		0.390	2.50
Tetrachloroethene	U		0.700	2.50
Toluene	U		1.25	5.00
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50
1,2,3-Trichlorobenzene	U		0.625	2.50
1,2,4-Trichlorobenzene	U		4.82	12.5
1,1,1-Trichloroethane	U		0.275	2.50
1,1,2-Trichloroethane	U		0.883	2.50
Trichloroethene	U		0.400	1.00
Trichlorofluoromethane	U		0.500	2.50
1,2,4-Trimethylbenzene	U		1.16	5.00
1,3,5-Trimethylbenzene	U		1.08	5.00
Vinyl chloride	U		0.683	2.50
o-Xylene	U		1.00	2.50
m&p-Xylenes	U		1.50	4.00
(S) Toluene-d8	*107*			*75.0-131*
(S) Dibromofluoromethane	*89.4*			*65.0-129*
(S) a,a,a-Trifluorotoluene	*106*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*67.0-138*

Laboratory Control Sample (LCS)

(LCS) R3356687-1 10/31/18 09:18

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	625	762	122	10.0-160	
Benzene	125	121	97.2	70.0-123	
Bromodichloromethane	125	92.4	74.0	73.0-121	
Bromochloromethane	125	103	82.2	77.0-128	
Bromoform	125	117	93.9	64.0-132	
Bromomethane	125	97.2	77.7	56.0-147	
n-Butylbenzene	125	125	99.7	68.0-135	
sec-Butylbenzene	125	99.4	79.5	74.0-130	
tert-Butylbenzene	125	93.5	74.8	75.0-127	J4
Carbon disulfide	125	103	82.1	56.0-133	
Carbon tetrachloride	125	105	84.1	66.0-128	
Chlorobenzene	125	104	83.6	76.0-128	
Chlorodibromomethane	125	93.0	74.4	74.0-127	

Laboratory Control Sample (LCS)

(LCS) R3356687-1 10/31/18 09:18

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloroethane	125	93.6	74.9	61.0-134	
Chloroform	125	119	95.3	72.0-123	
Chloromethane	125	143	115	51.0-138	
1,2-Dibromo-3-Chloropropane	125	110	87.8	59.0-130	
1,2-Dibromoethane	125	90.7	72.6	74.0-128	J4
1,2-Dichlorobenzene	125	119	95.5	76.0-124	
1,3-Dichlorobenzene	125	103	82.2	76.0-125	
1,4-Dichlorobenzene	125	99.7	79.7	77.0-121	
1,1-Dichloroethane	125	95.8	76.6	70.0-127	
1,2-Dichloroethane	125	107	85.8	65.0-131	
1,1-Dichloroethene	125	99.2	79.3	65.0-131	
cis-1,2-Dichloroethene	125	108	86.6	73.0-125	
trans-1,2-Dichloroethene	125	139	111	71.0-125	
cis-1,3-Dichloropropene	125	104	83.5	76.0-127	
trans-1,3-Dichloropropene	125	105	83.8	73.0-127	
Ethylbenzene	125	98.4	78.7	74.0-126	
2-Hexanone	625	616	98.5	54.0-147	
Isopropylbenzene	125	95.1	76.1	72.0-127	
p-Isopropyltoluene	125	106	84.9	72.0-133	
Methylene Chloride	125	109	87.2	68.0-123	
4-Methyl-2-pentanone (MIBK)	625	724	116	56.0-143	
Methyl tert-butyl ether	125	116	93.0	66.0-132	
Naphthalene	125	129	103	59.0-130	
n-Propylbenzene	125	112	89.8	74.0-126	
Styrene	125	106	84.8	72.0-127	
1,1,2,2-Tetrachloroethane	125	108	86.1	68.0-128	
Tetrachloroethene	125	107	85.6	70.0-136	
Toluene	125	121	97.1	75.0-121	
1,1,2-Trichlorotrifluoroethane	125	101	80.7	61.0-139	
1,2,3-Trichlorobenzene	125	139	111	59.0-139	
1,2,4-Trichlorobenzene	125	120	95.9	62.0-137	
1,1,1-Trichloroethane	125	124	98.9	69.0-126	
1,1,2-Trichloroethane	125	112	89.3	78.0-123	
Trichloroethene	125	94.5	75.6	76.0-126	J4
Trichlorofluoromethane	125	130	104	61.0-142	
1,2,4-Trimethylbenzene	125	103	82.2	70.0-126	
1,3,5-Trimethylbenzene	125	98.8	79.0	73.0-127	
Vinyl chloride	125	127	101	63.0-134	
o-Xylene	125	103	82.6	79.0-124	
m&p-Xylenes	250	204	81.8	76.0-126	

Laboratory Control Sample (LCS)

(LCS) R3356687-1 10/31/18 09:18

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Methyl Acetate	625	701	112	43.0-158	
Cyclohexane	125	127	101	65.0-128	
Methyl Cyclohexane	125	110	87.6	67.0-129	
(S) Toluene-d8			*99.3*	*75.0-131*	
(S) Dibromofluoromethane			*98.6*	*65.0-129*	
(S) a,a,a-Trifluorotoluene			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*96.7*	*67.0-138*	

L1038880-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038880-05 10/31/18 13:13 • (MS) R3356687-3 10/31/18 17:56 • (MSD) R3356687-4 10/31/18 18:17

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	670	ND	264	206	39.5	30.7	1	10.0-160			24.9	40
Benzene	134	ND	100	63.8	75.0	47.6	1	10.0-149		J3	44.6	37
Bromodichloromethane	134	ND	77.0	63.0	57.5	47.0	1	10.0-143			20.0	37
Bromochloromethane	134	ND	90.4	75.3	67.5	56.2	1	10.0-155			18.3	33
Bromoform	134	ND	117	108	87.4	80.9	1	10.0-146			7.77	36
Bromomethane	134	ND	73.6	48.9	54.9	36.5	1	10.0-149		J3	40.3	38
n-Butylbenzene	134	ND	130	80.8	96.9	60.3	1	10.0-160		J3	46.6	40
sec-Butylbenzene	134	ND	103	63.0	76.9	47.0	1	10.0-159		J3	48.3	39
tert-Butylbenzene	134	ND	103	70.7	76.6	52.8	1	10.0-156			36.8	39
Carbon disulfide	134	ND	60.0	33.3	44.8	24.8	1	10.0-145		J3	57.4	39
Carbon tetrachloride	134	ND	85.2	40.6	63.6	30.3	1	10.0-145		J3	70.9	37
Chlorobenzene	134	ND	105	71.2	78.6	53.2	1	10.0-152			38.6	39
Chlorodibromomethane	134	ND	89.8	75.4	67.0	56.3	1	10.0-146			17.5	37
Chloroethane	134	ND	64.1	51.5	47.8	38.5	1	10.0-146			21.7	40
Chloroform	134	ND	99.3	66.6	74.1	49.7	1	10.0-146		J3	39.5	37
Chloromethane	134	ND	95.5	56.0	71.3	41.8	1	10.0-159		J3	52.1	37
1,2-Dibromo-3-Chloropropane	134	ND	95.8	84.7	71.5	63.2	1	10.0-151			12.3	39
1,2-Dibromoethane	134	ND	95.2	77.3	71.0	57.7	1	10.0-148			20.7	34
1,2-Dichlorobenzene	134	ND	111	100	82.7	74.6	1	10.0-155			10.2	37
1,3-Dichlorobenzene	134	ND	106	81.3	78.9	60.6	1	10.0-153			26.2	38
1,4-Dichlorobenzene	134	ND	110	77.6	81.8	57.9	1	10.0-151			34.2	38
1,1-Dichloroethane	134	ND	81.5	51.0	60.9	38.1	1	10.0-147		J3	46.0	37
1,2-Dichloroethane	134	ND	88.7	68.4	66.2	51.0	1	10.0-148			25.9	35
1,1-Dichloroethene	134	ND	76.2	38.2	56.9	28.5	1	10.0-155		J3	66.5	37
cis-1,2-Dichloroethene	134	ND	89.5	60.3	66.8	45.0	1	10.0-149		J3	38.9	37
trans-1,2-Dichloroethene	134	ND	116	70.5	86.2	52.6	1	10.0-150		J3	48.4	37

L1038880-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038880-05 10/31/18 13:13 • (MS) R3356687-3 10/31/18 17:56 • (MSD) R3356687-4 10/31/18 18:17

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	134	ND	101	74.9	75.4	55.9	1	10.0-151			29.7	37
trans-1,3-Dichloropropene	134	ND	117	93.8	87.6	70.0	1	10.0-148			22.4	37
Ethylbenzene	134	ND	96.7	59.1	72.1	44.1	1	10.0-160		J3	48.2	38
2-Hexanone	670	ND	588	520	87.8	77.5	1	10.0-160			12.4	36
Isopropylbenzene	134	ND	96.1	61.3	71.7	45.8	1	10.0-155		J3	44.2	38
p-Isopropyltoluene	134	ND	117	73.8	87.0	55.0	1	10.0-160		J3	45.0	40
Methylene Chloride	134	ND	96.3	70.4	71.9	52.5	1	10.0-141			31.1	37
4-Methyl-2-pentanone (MIBK)	670	ND	623	574	93.0	85.7	1	10.0-160			8.20	35
Methyl tert-butyl ether	134	ND	85.4	81.4	63.7	60.7	1	11.0-147			4.79	35
Naphthalene	134	ND	123	107	91.5	79.6	1	10.0-160			13.9	36
n-Propylbenzene	134	ND	114	71.7	85.4	53.5	1	10.0-158		J3	46.0	38
Styrene	134	ND	117	83.7	87.0	62.5	1	10.0-160			32.8	40
1,1,2,2-Tetrachloroethane	134	ND	97.5	87.8	72.8	65.5	1	10.0-160			10.5	35
Tetrachloroethene	134	ND	96.7	55.3	72.2	41.3	1	10.0-156		J3	54.4	39
Toluene	134	ND	122	77.7	91.2	58.0	1	10.0-156		J3	44.6	38
1,1,2-Trichlorotrifluoroethane	134	ND	89.1	36.8	66.5	27.5	1	10.0-160		J3	83.0	36
1,2,3-Trichlorobenzene	134	ND	131	118	97.6	87.7	1	10.0-160			10.7	40
1,2,4-Trichlorobenzene	134	ND	114	91.9	85.0	68.6	1	10.0-160			21.4	40
1,1,1-Trichloroethane	134	ND	95.0	53.4	70.9	39.8	1	10.0-144		J3	56.0	35
1,1,2-Trichloroethane	134	ND	114	102	85.1	75.9	1	10.0-160			11.5	35
Trichloroethene	134	ND	88.7	52.4	66.2	39.1	1	10.0-156		J3	51.4	38
Trichlorofluoromethane	134	ND	72.1	36.9	53.8	27.5	1	10.0-160		J3	64.6	40
1,2,4-Trimethylbenzene	134	ND	107	75.6	79.5	56.4	1	10.0-160			33.9	36
1,3,5-Trimethylbenzene	134	ND	104	69.1	77.3	51.6	1	10.0-160		J3	40.0	38
Vinyl chloride	134	ND	111	50.4	82.9	37.6	1	10.0-160		J3	75.1	37
o-Xylene	134	ND	101	76.2	75.2	56.8	1	10.0-156			27.8	40
m&p-Xylenes	268	ND	204	126	76.0	47.1	1	10.0-156		J3	46.9	40
Methyl Acetate	670	ND	815	536	122	80.0	1	10.0-160		J3	41.3	40
Cyclohexane	134	ND	86.4	42.1	64.5	31.4	1	10.0-157		J3	68.9	32
Methyl Cyclohexane	134	ND	98.5	56.7	73.5	42.3	1	10.0-160		J3	53.9	33
(S) Toluene-d8					*108*	*104*		*75.0-131*				
(S) Dibromofluoromethane					*88.4*	*87.6*		*65.0-129*				
(S) a,a,a-Trifluorotoluene					*103*	*105*		*80.0-120*				
(S) 4-Bromofluorobenzene					*104*	*105*		*67.0-138*				

Method Blank (MB)

(MB) R3356744-1 11/04/18 10:07

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Dichlorodifluoromethane	U		0.818	2.50
1,2-Dichloropropane	U		1.27	5.00
2-Butanone (MEK)	U		12.5	25.0
(S) Toluene-d8	*98.6*			*75.0-131*
(S) Dibromofluoromethane	*113*			*65.0-129*
(S) a,a,a-Trifluorotoluene	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*

Laboratory Control Sample (LCS)

(LCS) R3356744-2 11/04/18 10:25

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dichlorodifluoromethane	125	172	138	43.0-156	
1,2-Dichloropropane	125	141	113	74.0-125	
2-Butanone (MEK)	625	531	84.9	30.0-160	
(S) Toluene-d8			*98.6*	*75.0-131*	
(S) Dibromofluoromethane			*116*	*65.0-129*	
(S) a,a,a-Trifluorotoluene			*103*	*80.0-120*	
(S) 4-Bromofluorobenzene			*108*	*67.0-138*	

Method Blank (MB)

(MB) R3356007-1 11/01/18 10:22

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/kg		ug/kg	ug/kg
PCB 1016	U		3.50	17.0
PCB 1221	U		5.37	17.0
PCB 1232	U		4.17	17.0
PCB 1242	U		3.18	17.0
PCB 1248	U		3.15	17.0
PCB 1254	U		4.72	17.0
PCB 1260	U		4.94	17.0
(S) Decachlorobiphenyl	*71.6*			*10.0-135*
(S) Tetrachloro-m-xylene	*79.6*			*10.0-139*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356007-2 11/01/18 10:36 • (LCSD) R3356007-3 11/01/18 10:49

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/kg	ug/kg	ug/kg	%	%	%			%	%
PCB 1260	167	107	137	64.1	82.0	37.0-145			24.6	37
PCB 1016	167	115	141	68.9	84.4	36.0-141			20.3	35
(S) Decachlorobiphenyl				*76.6*	*78.1*	*10.0-135*				
(S) Tetrachloro-m-xylene				*81.8*	*83.6*	*10.0-139*				

L1038886-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038886-05 11/01/18 15:10 • (MS) R3356007-4 11/01/18 15:24 • (MSD) R3356007-5 11/01/18 15:37

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/kg	ug/kg	ug/kg	ug/kg	%	%		%			%	%
PCB 1260	179	ND	136	131	76.0	73.1	1	10.0-160			4.02	38
PCB 1016	179	ND	157	143	87.4	79.6	1	10.0-160			9.32	37
(S) Decachlorobiphenyl					*77.0*	*75.1*		*10.0-135*				
(S) Tetrachloro-m-xylene					*87.4*	*83.3*		*10.0-139*				

Method Blank (MB)

(MB) R3355617-1 10/31/18 08:53

Analyte	MB Result ug/kg	MB Qualifier	MB MDL ug/kg	MB RDL ug/kg
Anthracene	U		7.28	33.0
Acenaphthene	U		7.37	33.0
Acenaphthylene	U		7.51	33.0
Benzo(a)anthracene	U		4.28	33.0
Benzo(a)pyrene	U		5.02	33.0
Benzo(b)fluoranthene	U		6.95	33.0
Benzo(g,h,i)perylene	U		7.21	33.0
Benzo(k)fluoranthene	U		5.06	33.0
Chrysene	U		7.85	33.0
Dibenz(a,h)anthracene	U		5.91	33.0
Fluoranthene	U		7.08	33.0
Fluorene	U		7.19	33.0
Indeno(1,2,3-cd)pyrene	U		5.61	33.0
Naphthalene	U		5.13	33.0
Phenanthrene	U		7.10	33.0
Pyrene	U		7.76	33.0
(S) Nitrobenzene-d5	*151*	J1		*31.0-146*
(S) 2-Fluorobiphenyl	*114*			*31.0-130*
(S) p-Terphenyl-d14	*112*			*20.0-127*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3355617-2 10/31/18 09:18 • (LCSD) R3355617-3 10/31/18 09:43

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acenaphthylene	400	379	365	94.8	91.3	49.0-127			3.76	20
Acenaphthene	400	391	364	97.8	91.0	51.0-122			7.15	20
Anthracene	400	329	330	82.3	82.5	48.0-123			0.303	20
Benzo(a)anthracene	400	348	333	87.0	83.3	47.0-123			4.41	20
Benzo(b)fluoranthene	400	332	328	83.0	82.0	45.0-124			1.21	20
Benzo(g,h,i)perylene	400	376	366	94.0	91.5	47.0-132			2.70	20
Benzo(k)fluoranthene	400	358	371	89.5	92.7	47.0-123			3.57	20
Benzo(a)pyrene	400	346	338	86.5	84.5	48.0-123			2.34	20
Chrysene	400	380	376	95.0	94.0	51.0-125			1.06	20
Dibenz(a,h)anthracene	400	366	359	91.5	89.8	46.0-131			1.93	20
Fluoranthene	400	375	377	93.8	94.3	53.0-132			0.532	20
Fluorene	400	385	373	96.3	93.3	53.0-120			3.17	20
Phenanthrene	400	342	335	85.5	83.8	49.0-120			2.07	20
Indeno(1,2,3-cd)pyrene	400	374	375	93.5	93.8	48.0-131			0.267	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3355617-2 10/31/18 09:18 • (LCSD) R3355617-3 10/31/18 09:43

Analyte	Spike Amount ug/kg	LCS Result ug/kg	LCSD Result ug/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	400	370	360	92.5	90.0	51.0-120			2.74	20
Pyrene	400	367	356	91.8	89.0	46.0-127			3.04	20
(S) Nitrobenzene-d5				*144*	*135*	*31.0-146*				
(S) 2-Fluorobiphenyl				*108*	*97.6*	*31.0-130*				
(S) p-Terphenyl-d14				*104*	*94.8*	*20.0-127*				

L1038886-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1038886-05 10/31/18 15:05 • (MS) R3355617-6 10/31/18 15:30 • (MSD) R3355617-7 10/31/18 15:55

Analyte	Spike Amount (dry) ug/kg	Original Result (dry) ug/kg	MS Result (dry) ug/kg	MSD Result (dry) ug/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthylene	429	ND	374	359	87.0	83.5	1	21.0-135			4.11	25
Acenaphthene	429	ND	374	356	87.0	83.0	1	21.0-127			4.71	25
Anthracene	429	ND	326	319	76.0	74.2	1	10.0-133			2.33	30
Benzo(a)anthracene	429	ND	342	325	79.8	75.8	1	10.0-140			5.14	35
Benzo(g,h,i)perylene	429	ND	345	324	80.3	75.5	1	10.0-140			6.10	37
Benzo(b)fluoranthene	429	ND	320	315	74.5	73.3	1	10.0-137			1.69	40
Benzo(k)fluoranthene	429	ND	359	333	83.5	77.5	1	10.0-130			7.45	34
Benzo(a)pyrene	429	ND	341	322	79.5	75.0	1	10.0-137			5.83	35
Chrysene	429	ND	395	354	92.0	82.5	1	10.0-144			10.9	33
Dibenz(a,h)anthracene	429	ND	348	336	81.0	78.3	1	10.0-133			3.45	31
Fluoranthene	429	ND	371	350	86.5	81.5	1	10.0-150			5.95	33
Fluorene	429	ND	360	347	83.8	80.7	1	20.0-128			3.65	29
Phenanthrene	429	ND	333	320	77.5	74.5	1	10.0-139			3.95	32
Indeno(1,2,3-cd)pyrene	429	ND	353	334	82.3	77.8	1	10.0-136			5.63	35
Naphthalene	429	ND	378	360	88.0	83.8	1	10.0-146			4.95	27
Pyrene	429	ND	370	347	86.3	80.7	1	10.0-143			6.59	35
(S) Nitrobenzene-d5					*133*	*135*		*31.0-146*				
(S) 2-Fluorobiphenyl					*95.7*	*95.1*		*31.0-130*				
(S) p-Terphenyl-d14					*97.2*	*94.1*		*20.0-127*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.

LaBella Associates, D.P.C.
300 State Street, Suite 201
Rochester, NY 14614

Billing Information: SAME

Report to: Mike Marrash

Email To: mmarrash@labellapc.com

Project Description: East Main and Laura Street

City/State Collected: Rochester NY

Phone: 585 402 7078
Fax:

Client Project # 2182815

Lab Project #

Collected by (print): Mike Marrash

Site/Facility ID #

P.O. # 2182815

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: STD

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TCL and CP51 VOCs 8260	CP51 SVOCs 8270	TAL Metals 6010	PCBs 8082	Remarks	Sample # (lab only)
SB-01	Grab	SS	0.5-1'	10/22/18	1330	2	X	X	X	X		-01
SB-02	Grab	SS	10-11'	10/22/18	1348	2	X	X	X	X		02
~~SB-03~~	~~Grab~~	~~SS~~	~~6-8'~~	~~10/22/18~~	~~1410~~	~~2~~						
SB-04	Grab	SS	1-3'	10/22/18	1415	2	X	X	X			03
SB-05	Grab	SS	6-8'	10/22/18	1440	2	X	X	X			04
SBGT-06	Grab	SS	6-8'	10/22/18	1510	2	X	X		X		05

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L1038886

G027

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	10/26/18	1300	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 2.8+0.1=2.9 °C Bottles Received: 10

If preservation required by Login: Date/Time

Date: 10/27/18 Time: 8:45

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

Lab Number:	L1845925
Client:	LaBella Associates, P.C. 300 State Street Suite 201 Rochester, NY 14614
ATTN:	Dan Noll
Phone:	(585) 454-6110
Project Name:	EAST MAIN & LAURA ST. PHASE II
Project Number:	2182815
Report Date:	11/16/18

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: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815

Lab Number: L1845925
Report Date: 11/16/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1845925-01	SB-08 (0.75-1.25)	SOIL	ROCHESTER, NY	11/01/18 13:30	11/08/18
L1845925-02	SB-08 (12.75-13.4)	SOIL	ROCHESTER, NY	11/01/18 13:45	11/08/18
L1845925-03	BW-01 (8.5-9)	SOIL	ROCHESTER, NY	11/01/18 09:40	11/08/18

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925
Project Number: 2182815 **Report Date:** 11/16/18

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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

Project Name:	EAST MAIN & LAURA ST. PHASE II	**Lab Number:**	L1845925
Project Number:	2182815	**Report Date:**	11/16/18

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.

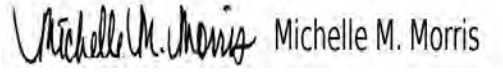
Volatile Organics

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.

Total Metals

L1845925-01: 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.

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:  Michelle M. Morris

Title: Technical Director/Representative Date: 11/16/18

ORGANICS

VOLATILES

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-02
Client ID: SB-08 (12.75-13.4)
Sample Location: ROCHESTER, NY

Date Collected: 11/01/18 13:45
Date Received: 11/08/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 11/15/18 00:32
Analyst: MV
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	4.3	2.0	1
1,1-Dichloroethane	ND		ug/kg	0.85	0.12	1
Chloroform	ND		ug/kg	1.3	0.12	1
Carbon tetrachloride	ND		ug/kg	0.85	0.20	1
1,2-Dichloropropane	ND		ug/kg	0.85	0.11	1
Dibromochloromethane	ND		ug/kg	0.85	0.12	1
1,1,2-Trichloroethane	ND		ug/kg	0.85	0.23	1
Tetrachloroethene	ND		ug/kg	0.43	0.17	1
Chlorobenzene	ND		ug/kg	0.43	0.11	1
Trichlorofluoromethane	ND		ug/kg	3.4	0.59	1
1,2-Dichloroethane	ND		ug/kg	0.85	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.43	0.14	1
Bromodichloromethane	ND		ug/kg	0.43	0.09	1
trans-1,3-Dichloropropene	ND		ug/kg	0.85	0.23	1
cis-1,3-Dichloropropene	ND		ug/kg	0.43	0.13	1
Bromoform	ND		ug/kg	3.4	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.43	0.14	1
Benzene	ND		ug/kg	0.43	0.14	1
Toluene	ND		ug/kg	0.85	0.46	1
Ethylbenzene	ND		ug/kg	0.85	0.12	1
Chloromethane	ND		ug/kg	3.4	0.80	1
Bromomethane	ND		ug/kg	1.7	0.50	1
Vinyl chloride	ND		ug/kg	0.85	0.28	1
Chloroethane	ND		ug/kg	1.7	0.38	1
1,1-Dichloroethene	ND		ug/kg	0.85	0.20	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.12	1
Trichloroethene	ND		ug/kg	0.43	0.12	1
1,2-Dichlorobenzene	ND		ug/kg	1.7	0.12	1

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-02 Date Collected: 11/01/18 13:45

Client ID: SB-08 (12.75-13.4) Date Received: 11/08/18

Sample Location: ROCHESTER, 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	1.7	0.13	1
1,4-Dichlorobenzene	0.53	J	ug/kg	1.7	0.14	1
Methyl tert butyl ether	ND		ug/kg	1.7	0.17	1
p/m-Xylene	ND		ug/kg	1.7	0.48	1
o-Xylene	ND		ug/kg	0.85	0.25	1
cis-1,2-Dichloroethene	ND		ug/kg	0.85	0.15	1
Styrene	ND		ug/kg	0.85	0.17	1
Dichlorodifluoromethane	ND		ug/kg	8.5	0.78	1
Acetone	5.1	J	ug/kg	8.5	4.1	1
Carbon disulfide	ND		ug/kg	8.5	3.9	1
2-Butanone	ND		ug/kg	8.5	1.9	1
4-Methyl-2-pentanone	ND		ug/kg	8.5	1.1	1
2-Hexanone	ND		ug/kg	8.5	1.0	1
1,2-Dibromoethane	ND		ug/kg	0.85	0.24	1
n-Butylbenzene	ND		ug/kg	0.85	0.14	1
sec-Butylbenzene	ND		ug/kg	0.85	0.12	1
tert-Butylbenzene	ND		ug/kg	1.7	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.6	0.85	1
Isopropylbenzene	ND		ug/kg	0.85	0.09	1
p-Isopropyltoluene	ND		ug/kg	0.85	0.09	1
Naphthalene	ND		ug/kg	3.4	0.55	1
n-Propylbenzene	ND		ug/kg	0.85	0.14	1
1,2,4-Trichlorobenzene	ND		ug/kg	1.7	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	1.7	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	1.7	0.28	1
Methyl Acetate	ND		ug/kg	3.4	0.81	1
Cyclohexane	ND		ug/kg	8.5	0.46	1
Freon-113	ND		ug/kg	3.4	0.59	1
Methyl cyclohexane	ND		ug/kg	3.4	0.51	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	103		70-130

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-03
Client ID: BW-01 (8.5-9)
Sample Location: ROCHESTER, NY

Date Collected: 11/01/18 09:40
Date Received: 11/08/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 11/15/18 00:59
Analyst: MV
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.9	3.2	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.20	1
Chloroform	ND		ug/kg	2.1	0.19	1
Carbon tetrachloride	ND		ug/kg	1.4	0.32	1
1,2-Dichloropropane	ND		ug/kg	1.4	0.17	1
Dibromochloromethane	ND		ug/kg	1.4	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.37	1
Tetrachloroethene	ND		ug/kg	0.69	0.27	1
Chlorobenzene	ND		ug/kg	0.69	0.18	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.96	1
1,2-Dichloroethane	ND		ug/kg	1.4	0.36	1
1,1,1-Trichloroethane	ND		ug/kg	0.69	0.23	1
Bromodichloromethane	ND		ug/kg	0.69	0.15	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	0.38	1
cis-1,3-Dichloropropene	ND		ug/kg	0.69	0.22	1
Bromoform	ND		ug/kg	5.5	0.34	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.69	0.23	1
Benzene	0.30	J	ug/kg	0.69	0.23	1
Toluene	0.77	J	ug/kg	1.4	0.75	1
Ethylbenzene	ND		ug/kg	1.4	0.20	1
Chloromethane	ND		ug/kg	5.5	1.3	1
Bromomethane	ND		ug/kg	2.8	0.80	1
Vinyl chloride	ND		ug/kg	1.4	0.46	1
Chloroethane	ND		ug/kg	2.8	0.62	1
1,1-Dichloroethene	ND		ug/kg	1.4	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	0.19	1
Trichloroethene	ND		ug/kg	0.69	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	0.20	1

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-03 Date Collected: 11/01/18 09:40

Client ID: BW-01 (8.5-9) Date Received: 11/08/18

Sample Location: ROCHESTER, 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	2.8	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	0.24	1
Methyl tert butyl ether	ND		ug/kg	2.8	0.28	1
p/m-Xylene	ND		ug/kg	2.8	0.77	1
o-Xylene	ND		ug/kg	1.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	0.24	1
Styrene	ND		ug/kg	1.4	0.27	1
Dichlorodifluoromethane	ND		ug/kg	14	1.3	1
Acetone	ND		ug/kg	14	6.6	1
Carbon disulfide	ND		ug/kg	14	6.3	1
2-Butanone	ND		ug/kg	14	3.1	1
4-Methyl-2-pentanone	ND		ug/kg	14	1.8	1
2-Hexanone	ND		ug/kg	14	1.6	1
1,2-Dibromoethane	ND		ug/kg	1.4	0.39	1
n-Butylbenzene	ND		ug/kg	1.4	0.23	1
sec-Butylbenzene	ND		ug/kg	1.4	0.20	1
tert-Butylbenzene	ND		ug/kg	2.8	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.2	1.4	1
Isopropylbenzene	ND		ug/kg	1.4	0.15	1
p-Isopropyltoluene	ND		ug/kg	1.4	0.15	1
Naphthalene	ND		ug/kg	5.5	0.90	1
n-Propylbenzene	ND		ug/kg	1.4	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	0.38	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	0.27	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	0.46	1
Methyl Acetate	ND		ug/kg	5.5	1.3	1
Cyclohexane	ND		ug/kg	14	0.75	1
Freon-113	ND		ug/kg	5.5	0.96	1
Methyl cyclohexane	ND		ug/kg	5.5	0.83	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	101		70-130

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/14/18 20:23
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG1179645-5					
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	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: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/14/18 20:23
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG1179645-5					
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
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/14/18 20:23
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG1179645-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II

Project Number: 2182815

Lab Number: L1845925

Report Date: 11/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG1179645-3 WG1179645-4								
Methylene chloride	102		109		70-130	7		30
1,1-Dichloroethane	110		118		70-130	7		30
Chloroform	108		117		70-130	8		30
Carbon tetrachloride	114		124		70-130	8		30
1,2-Dichloropropane	106		115		70-130	8		30
Dibromochloromethane	91		101		70-130	10		30
1,1,2-Trichloroethane	93		102		70-130	9		30
Tetrachloroethene	103		114		70-130	10		30
Chlorobenzene	97		106		70-130	9		30
Trichlorofluoromethane	118		129		70-139	9		30
1,2-Dichloroethane	105		113		70-130	7		30
1,1,1-Trichloroethane	111		122		70-130	9		30
Bromodichloromethane	107		117		70-130	9		30
trans-1,3-Dichloropropene	89		100		70-130	12		30
cis-1,3-Dichloropropene	111		121		70-130	9		30
Bromoform	84		91		70-130	8		30
1,1,2,2-Tetrachloroethane	89		95		70-130	7		30
Benzene	108		118		70-130	9		30
Toluene	98		106		70-130	8		30
Ethylbenzene	99		109		70-130	10		30
Chloromethane	93		103		52-130	10		30
Bromomethane	122		131		57-147	7		30
Vinyl chloride	106		117		67-130	10		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II

Project Number: 2182815

Lab Number: L1845925

Report Date: 11/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG1179645-3 WG1179645-4								
Chloroethane	108		118		50-151	9		30
1,1-Dichloroethene	124		122		65-135	2		30
trans-1,2-Dichloroethene	112		121		70-130	8		30
Trichloroethene	110		121		70-130	10		30
1,2-Dichlorobenzene	92		102		70-130	10		30
1,3-Dichlorobenzene	95		103		70-130	8		30
1,4-Dichlorobenzene	93		100		70-130	7		30
Methyl tert butyl ether	99		106		66-130	7		30
p/m-Xylene	101		112		70-130	10		30
o-Xylene	100		110		70-130	10		30
cis-1,2-Dichloroethene	111		120		70-130	8		30
Styrene	99		110		70-130	11		30
Dichlorodifluoromethane	76		82		30-146	8		30
Acetone	92		95		54-140	3		30
Carbon disulfide	129		104		59-130	21		30
2-Butanone	79		92		70-130	15		30
4-Methyl-2-pentanone	86		92		70-130	7		30
2-Hexanone	76		90		70-130	17		30
1,2-Dibromoethane	90		98		70-130	9		30
n-Butylbenzene	97		106		70-130	9		30
sec-Butylbenzene	95		105		70-130	10		30
tert-Butylbenzene	95		105		70-130	10		30
1,2-Dibromo-3-chloropropane	75		82		68-130	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II

Project Number: 2182815

Lab Number: L1845925

Report Date: 11/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG1179645-3 WG1179645-4								
Isopropylbenzene	95		104		70-130	9		30
p-Isopropyltoluene	96		106		70-130	10		30
Naphthalene	84		92		70-130	9		30
n-Propylbenzene	96		104		70-130	8		30
1,2,4-Trichlorobenzene	96		106		70-130	10		30
1,3,5-Trimethylbenzene	93		103		70-130	10		30
1,2,4-Trimethylbenzene	94		103		70-130	9		30
Methyl Acetate	89		93		51-146	4		30
Cyclohexane	114		124		59-142	8		30
Freon-113	139		114		50-139	20		30
Methyl cyclohexane	113		123		70-130	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		99		70-130
Toluene-d8	94		95		70-130
4-Bromofluorobenzene	98		97		70-130
Dibromofluoromethane	107		106		70-130

SEMIVOLATILES

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-02
Client ID: SB-08 (12.75-13.4)
Sample Location: ROCHESTER, NY

Date Collected: 11/01/18 13:45
Date Received: 11/08/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/14/18 17:23
Analyst: RC
Percent Solids: 88%

Extraction Method: EPA 3546
Extraction Date: 11/11/18 09:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	ND		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-02 Date Collected: 11/01/18 13:45

Client ID: SB-08 (12.75-13.4) Date Received: 11/08/18

Sample Location: ROCHESTER, 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	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	ND		ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	66.	1
Benzaldehyde	ND		ug/kg	250	51.	1

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-02 Date Collected: 11/01/18 13:45

Client ID: SB-08 (12.75-13.4) Date Received: 11/08/18

Sample Location: ROCHESTER, 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	190	57.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	38.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	73		10-136
4-Terphenyl-d14	54		18-120

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815
Lab Number: L1845925
Report Date: 11/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/12/18 14:53
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 11/11/18 00:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1178241-1					
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	26.
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	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/12/18 14:53
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 11/11/18 00:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1178241-1					
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
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	25.
2-Chlorophenol	ND		ug/kg	160	20.
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: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815
Lab Number: L1845925
Report Date: 11/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/12/18 14:53
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 11/11/18 00:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1178241-1					
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	45.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	64		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	67		10-136
4-Terphenyl-d14	73		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815
Lab Number: L1845925
Report Date: 11/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1178241-2 WG1178241-3								
Acenaphthene	79		78		31-137	1		50
Hexachlorobenzene	76		77		40-140	1		50
Bis(2-chloroethyl)ether	79		83		40-140	5		50
2-Chloronaphthalene	83		88		40-140	6		50
3,3'-Dichlorobenzidine	60		60		40-140	0		50
2,4-Dinitrotoluene	79		80		40-132	1		50
2,6-Dinitrotoluene	88		91		40-140	3		50
Fluoranthene	87		85		40-140	2		50
4-Chlorophenyl phenyl ether	78		78		40-140	0		50
4-Bromophenyl phenyl ether	76		77		40-140	1		50
Bis(2-chloroisopropyl)ether	82		89		40-140	8		50
Bis(2-chloroethoxy)methane	84		84		40-117	0		50
Hexachlorobutadiene	80		83		40-140	4		50
Hexachlorocyclopentadiene	72		76		40-140	5		50
Hexachloroethane	82		85		40-140	4		50
Isophorone	86		88		40-140	2		50
Naphthalene	83		88		40-140	6		50
Nitrobenzene	84		87		40-140	4		50
NDPA/DPA	81		81		36-157	0		50
n-Nitrosodi-n-propylamine	86		88		32-121	2		50
Bis(2-ethylhexyl)phthalate	96		98		40-140	2		50
Butyl benzyl phthalate	95		97		40-140	2		50
Di-n-butylphthalate	93		96		40-140	3		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815
Lab Number: L1845925
Report Date: 11/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1178241-2 WG1178241-3								
Di-n-octylphthalate	95		98		40-140	3		50
Diethyl phthalate	80		82		40-140	2		50
Dimethyl phthalate	84		89		40-140	6		50
Benzo(a)anthracene	78		80		40-140	3		50
Benzo(a)pyrene	86		86		40-140	0		50
Benzo(b)fluoranthene	87		88		40-140	1		50
Benzo(k)fluoranthene	86		86		40-140	0		50
Chrysene	84		87		40-140	4		50
Acenaphthylene	84		88		40-140	5		50
Anthracene	88		91		40-140	3		50
Benzo(ghi)perylene	90		87		40-140	3		50
Fluorene	80		81		40-140	1		50
Phenanthrene	87		88		40-140	1		50
Dibenzo(a,h)anthracene	88		86		40-140	2		50
Indeno(1,2,3-cd)pyrene	88		87		40-140	1		50
Pyrene	86		87		35-142	1		50
Biphenyl	87		92		54-104	6		50
4-Chloroaniline	47		52		40-140	10		50
2-Nitroaniline	83		89		47-134	7		50
3-Nitroaniline	53		54		26-129	2		50
4-Nitroaniline	70		71		41-125	1		50
Dibenzofuran	79		81		40-140	3		50
2-Methylnaphthalene	83		87		40-140	5		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815
Lab Number: L1845925
Report Date: 11/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1178241-2 WG1178241-3								
1,2,4,5-Tetrachlorobenzene	87		90		40-117	3		50
Acetophenone	86		90		14-144	5		50
2,4,6-Trichlorophenol	86		86		30-130	0		50
p-Chloro-m-cresol	89		93		26-103	4		50
2-Chlorophenol	86		89		25-102	3		50
2,4-Dichlorophenol	91		90		30-130	1		50
2,4-Dimethylphenol	89		92		30-130	3		50
2-Nitrophenol	83		86		30-130	4		50
4-Nitrophenol	91		89		11-114	2		50
2,4-Dinitrophenol	63		60		4-130	5		50
4,6-Dinitro-o-cresol	68		69		10-130	1		50
Pentachlorophenol	73		72		17-109	1		50
Phenol	85		88		26-90	3		50
2-Methylphenol	89		89		30-130.	0		50
3-Methylphenol/4-Methylphenol	84		87		30-130	4		50
2,4,5-Trichlorophenol	85		93		30-130	9		50
Carbazole	88		89		54-128	1		50
Atrazine	79		77		40-140	3		50
Benzaldehyde	70		79		40-140	12		50
Caprolactam	86		90		15-130	5		50
2,3,4,6-Tetrachlorophenol	80		75		40-140	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II

Project Number: 2182815

Lab Number: L1845925

Report Date: 11/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1178241-2 WG1178241-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	81		85		25-120
Phenol-d6	86		88		10-120
Nitrobenzene-d5	85		87		23-120
2-Fluorobiphenyl	82		84		30-120
2,4,6-Tribromophenol	78		77		10-136
4-Terphenyl-d14	75		77		18-120

PCBS

Project Name: EAST MAIN & LAURA ST. PHASE II
Lab Number: L1845925
Project Number: 2182815
Report Date: 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-01
Client ID: SB-08 (0.75-1.25)
Sample Location: ROCHESTER, NY

Date Collected: 11/01/18 13:30
Date Received: 11/08/18
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 11/14/18 23:40
Analyst: HT
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 11/11/18 08:15
Cleanup Method: EPA 3665A
Cleanup Date: 11/12/18
Cleanup Method: EPA 3660B
Cleanup Date: 11/12/18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.6	3.08	1	A
Aroclor 1221	ND		ug/kg	34.6	3.47	1	A
Aroclor 1232	ND		ug/kg	34.6	7.35	1	A
Aroclor 1242	ND		ug/kg	34.6	4.67	1	A
Aroclor 1248	ND		ug/kg	34.6	5.20	1	A
Aroclor 1254	ND		ug/kg	34.6	3.79	1	A
Aroclor 1260	ND		ug/kg	34.6	6.40	1	A
Aroclor 1262	ND		ug/kg	34.6	4.40	1	A
Aroclor 1268	ND		ug/kg	34.6	3.59	1	A
PCBs, Total	ND		ug/kg	34.6	3.08	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	40		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815
Lab Number: L1845925
Report Date: 11/16/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 11/14/18 00:09
Analyst: HT

Extraction Method: EPA 3546
Extraction Date: 11/10/18 23:18
Cleanup Method: EPA 3665A
Cleanup Date: 11/11/18
Cleanup Method: EPA 3660B
Cleanup Date: 11/11/18

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG1178232-1						
Aroclor 1016	ND		ug/kg	31.7	2.81	A
Aroclor 1221	ND		ug/kg	31.7	3.17	A
Aroclor 1232	ND		ug/kg	31.7	6.72	A
Aroclor 1242	ND		ug/kg	31.7	4.27	A
Aroclor 1248	ND		ug/kg	31.7	4.75	A
Aroclor 1254	ND		ug/kg	31.7	3.47	A
Aroclor 1260	ND		ug/kg	31.7	5.86	A
Aroclor 1262	ND		ug/kg	31.7	4.02	A
Aroclor 1268	ND		ug/kg	31.7	3.28	A
PCBs, Total	ND		ug/kg	31.7	2.81	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	79		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II

Project Number: 2182815

Lab Number: L1845925

Report Date: 11/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG1178232-2 WG1178232-3									
Aroclor 1016	78		81		40-140	4		50	A
Aroclor 1260	70		74		40-140	6		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		79		30-150	A
Decachlorobiphenyl	67		74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		83		30-150	B
Decachlorobiphenyl	76		82		30-150	B

METALS

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-01 Date Collected: 11/01/18 13:30

Client ID: SB-08 (0.75-1.25) Date Received: 11/08/18

Sample Location: ROCHESTER, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2020		mg/kg	8.18	2.21	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Antimony, Total	ND		mg/kg	4.09	0.311	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Arsenic, Total	3.41		mg/kg	0.818	0.170	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Barium, Total	18.5		mg/kg	0.818	0.142	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Beryllium, Total	0.098	J	mg/kg	0.409	0.027	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Cadmium, Total	0.442	J	mg/kg	0.818	0.080	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Calcium, Total	61100		mg/kg	8.18	2.86	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Chromium, Total	4.11		mg/kg	0.818	0.079	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Cobalt, Total	2.15		mg/kg	1.64	0.136	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Copper, Total	9.50		mg/kg	0.818	0.211	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Iron, Total	6170		mg/kg	4.09	0.739	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Lead, Total	25.1		mg/kg	4.09	0.219	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Magnesium, Total	18000		mg/kg	8.18	1.26	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Manganese, Total	249		mg/kg	0.818	0.130	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Mercury, Total	ND		mg/kg	0.067	0.014	1	11/10/18 08:00	11/12/18 15:57	EPA 7471B	1,7471B	MG
Nickel, Total	7.67		mg/kg	2.04	0.198	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Potassium, Total	315		mg/kg	204	11.8	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Selenium, Total	ND		mg/kg	1.64	0.211	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Silver, Total	ND		mg/kg	0.818	0.231	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Sodium, Total	153	J	mg/kg	164	2.58	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Thallium, Total	ND		mg/kg	1.64	0.258	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Vanadium, Total	24.2		mg/kg	0.818	0.166	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE
Zinc, Total	29.6		mg/kg	4.09	0.240	2	11/13/18 21:17	11/14/18 10:28	EPA 3050B	1,6010D	PE

Project Name: EAST MAIN & LAURA ST. PHASE II **Lab Number:** L1845925

Project Number: 2182815 **Report Date:** 11/16/18

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): 01 Batch: WG1178065-1										
Mercury, Total	0.025	J	mg/kg	0.083	0.018	1	11/10/18 08:00	11/12/18 15:46	1,7471B	MG

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1179069-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Antimony, Total	0.156	J	mg/kg	2.00	0.152	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Arsenic, Total	ND		mg/kg	0.400	0.083	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Barium, Total	ND		mg/kg	0.400	0.070	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Beryllium, Total	ND		mg/kg	0.200	0.013	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Cadmium, Total	ND		mg/kg	0.400	0.039	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Calcium, Total	ND		mg/kg	4.00	1.40	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Chromium, Total	ND		mg/kg	0.400	0.038	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Cobalt, Total	ND		mg/kg	0.800	0.066	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Copper, Total	ND		mg/kg	0.400	0.103	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Iron, Total	0.548	J	mg/kg	2.00	0.361	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Lead, Total	ND		mg/kg	2.00	0.107	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Magnesium, Total	ND		mg/kg	4.00	0.616	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Manganese, Total	ND		mg/kg	0.400	0.064	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Nickel, Total	ND		mg/kg	1.00	0.097	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Potassium, Total	ND		mg/kg	100	5.76	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Selenium, Total	ND		mg/kg	0.800	0.103	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Silver, Total	ND		mg/kg	0.400	0.113	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Sodium, Total	2.84	J	mg/kg	80.0	1.26	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Thallium, Total	ND		mg/kg	0.800	0.126	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Vanadium, Total	ND		mg/kg	0.400	0.081	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE
Zinc, Total	ND		mg/kg	2.00	0.117	1	11/13/18 21:17	11/14/18 09:27	1,6010D	PE

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815
Lab Number: L1845925
Report Date: 11/16/18

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II

Project Number: 2182815

Lab Number: L1845925

Report Date: 11/16/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1178065-2 SRM Lot Number: D102-540								
Mercury, Total	88		-		65-134	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II

Project Number: 2182815

Lab Number: L1845925

Report Date: 11/16/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1179069-2 SRM Lot Number: D102-540					
Aluminum, Total	65	-	49-150	-	
Antimony, Total	151	-	1-199	-	
Arsenic, Total	87	-	83-117	-	
Barium, Total	86	-	83-118	-	
Beryllium, Total	90	-	83-116	-	
Cadmium, Total	93	-	83-118	-	
Calcium, Total	84	-	82-118	-	
Chromium, Total	86	-	83-117	-	
Cobalt, Total	85	-	84-116	-	
Copper, Total	90	-	84-116	-	
Iron, Total	86	-	61-139	-	
Lead, Total	84	-	82-118	-	
Magnesium, Total	79	-	76-124	-	
Manganese, Total	88	-	82-118	-	
Nickel, Total	88	-	83-117	-	
Potassium, Total	75	-	70-130	-	
Selenium, Total	88	-	79-121	-	
Silver, Total	86	-	80-120	-	
Sodium, Total	101	-	74-126	-	
Thallium, Total	89	-	81-119	-	
Vanadium, Total	84	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II

Project Number: 2182815

Lab Number: L1845925

Report Date: 11/16/18

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1179069-2 SRM Lot Number: D102-540					
Zinc, Total	83	-	81-118	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815

Lab Number: L1845925
Report Date: 11/16/18

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): 01 QC Batch ID: WG1178065-3 WG1178065-4 QC Sample: L1845944-02 Client ID: MS Sample												
Mercury, Total	0.052J	0.149	0.265	**177**	Q	0.280	**185**	Q	80-120	6		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815

Lab Number: L1845925
Report Date: 11/16/18

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): 01 QC Batch ID: WG1179069-3 QC Sample: L1846156-07 Client ID: MS Sample										
Aluminum, Total	6360	180	6900	**300**	Q	-	-	75-125	-	20
Antimony, Total	ND	44.9	41.6	92		-	-	75-125	-	20
Arsenic, Total	1.84	10.8	11.9	93		-	-	75-125	-	20
Barium, Total	24.5	180	192	93		-	-	75-125	-	20
Beryllium, Total	0.279J	4.49	4.61	102		-	-	75-125	-	20
Cadmium, Total	ND	4.58	4.34	95		-	-	75-125	-	20
Calcium, Total	769.	899	1500	81		-	-	75-125	-	20
Chromium, Total	12.8	18	29.9	95		-	-	75-125	-	20
Cobalt, Total	5.11	44.9	46.7	92		-	-	75-125	-	20
Copper, Total	3.30	22.5	24.9	96		-	-	75-125	-	20
Iron, Total	16500	89.9	15600	**0**	Q	-	-	75-125	-	20
Lead, Total	10.0	45.8	52.4	92		-	-	75-125	-	20
Magnesium, Total	1460	899	2660	**134**	Q	-	-	75-125	-	20
Manganese, Total	296.	44.9	322	**58**	Q	-	-	75-125	-	20
Nickel, Total	14.1	44.9	59.1	100		-	-	75-125	-	20
Potassium, Total	443.	899	1460	113		-	-	75-125	-	20
Selenium, Total	ND	10.8	9.90	92		-	-	75-125	-	20
Silver, Total	ND	27	28.2	104		-	-	75-125	-	20
Sodium, Total	100.J	899	954	106		-	-	75-125	-	20
Thallium, Total	ND	10.8	8.95	83		-	-	75-125	-	20
Vanadium, Total	13.7	44.9	56.1	94		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815

Lab Number: L1845925
Report Date: 11/16/18

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): 01 QC Batch ID: WG1179069-3 QC Sample: L1846156-07 Client ID: MS Sample									
Zinc, Total	19.6	44.9	65.0	101	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815

Lab Number: L1845925
Report Date: 11/16/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1179069-4 QC Sample: L1846156-07 Client ID: DUP Sample						
Aluminum, Total	6360	5700	mg/kg	11		20
Antimony, Total	ND	ND	mg/kg	NC		20
Arsenic, Total	1.84	1.45	mg/kg	**24**	Q	20
Barium, Total	24.5	23.3	mg/kg	5		20
Beryllium, Total	0.279J	0.249J	mg/kg	NC		20
Cadmium, Total	ND	ND	mg/kg	NC		20
Calcium, Total	769.	605	mg/kg	**24**	Q	20
Chromium, Total	12.8	14.2	mg/kg	10		20
Cobalt, Total	5.11	4.80	mg/kg	6		20
Copper, Total	3.30	3.26	mg/kg	1		20
Iron, Total	16500	13800	mg/kg	18		20
Lead, Total	10.0	7.95	mg/kg	**23**	Q	20
Magnesium, Total	1460	1300	mg/kg	12		20
Manganese, Total	296.	297	mg/kg	0		20
Nickel, Total	14.1	14.1	mg/kg	0		20
Potassium, Total	443.	391	mg/kg	12		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	100.J	89.9J	mg/kg	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II

Project Number: 2182815

Lab Number: L1845925

Report Date: 11/16/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1179069-4 QC Sample: L1846156-07 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	13.7	12.4	mg/kg	10	20
Zinc, Total	19.6	16.8	mg/kg	15	20

INORGANICS
&
MISCELLANEOUS

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815
Lab Number: L1845925
Report Date: 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-01
Client ID: SB-08 (0.75-1.25)
Sample Location: ROCHESTER, NY
Sample Depth:
Matrix: Soil
Date Collected: 11/01/18 13:30
Date Received: 11/08/18
Field Prep: Not Specified

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	-	11/09/18 13:06	121,2540G	RI

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815
Lab Number: L1845925
Report Date: 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-02
Client ID: SB-08 (12.75-13.4)
Sample Location: ROCHESTER, NY
Sample Depth:
Matrix: Soil
Date Collected: 11/01/18 13:45
Date Received: 11/08/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.1		%	0.100	NA	1	-	11/09/18 13:06	121,2540G	RI

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815
Lab Number: L1845925
Report Date: 11/16/18

SAMPLE RESULTS

Lab ID: L1845925-03
Client ID: BW-01 (8.5-9)
Sample Location: ROCHESTER, NY
Sample Depth:
Matrix: Soil
Date Collected: 11/01/18 09:40
Date Received: 11/08/18
Field Prep: Not Specified

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	-	11/09/18 13:06	121,2540G	RI

Lab Duplicate Analysis

Batch Quality Control

Project Name: EAST MAIN & LAURA ST. PHASE II

Project Number: 2182815

Lab Number: L1845925

Report Date: 11/16/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1177860-1 QC Sample: L1845925-01 Client ID: SB-08 (0.75-1.25)						
Solids, Total	92.9	93.0	%	0		20

Project Name: EAST MAIN & LAURA ST. PHASE II
Project Number: 2182815

Lab Number: L1845925
Report Date: 11/16/18

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(*)
L1845925-01A	Glass 120ml/4oz unpreserved	A	NA		3.9	Y	Absent		TS(7),NYTCL-8082(14)
L1845925-01B	Glass 60ml unpreserved split	A	NA		3.9	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1845925-02A	Glass 250ml/8oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8270(14),NYTCL-8260-R2(14),TS(7)
L1845925-02X	Vial MeOH preserved split	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1845925-02Y	Vial Water preserved split	A	NA		3.9	Y	Absent	**12-NOV-18 09:21**	NYTCL-8260-R2(14)
L1845925-02Z	Vial Water preserved split	A	NA		3.9	Y	Absent	**12-NOV-18 09:21**	NYTCL-8260-R2(14)
L1845925-03A	Glass 60mL/2oz unpreserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14),TS(7)
L1845925-03X	Vial MeOH preserved split	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1845925-03Y	Vial Water preserved split	A	NA		3.9	Y	Absent	**12-NOV-18 09:21**	NYTCL-8260-R2(14)
L1845925-03Z	Vial Water preserved split	A	NA		3.9	Y	Absent	**12-NOV-18 09:21**	NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	EAST MAIN & LAURA ST. PHASE II	**Lab Number:**	L1845925
Project Number:	2182815	**Report Date:**	11/16/18

GLOSSARY

Acronyms

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.
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.
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

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.

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EAST MAIN & LAURA ST. PHASE II	**Lab Number:**	L1845925
Project Number:	2182815	**Report Date:**	11/16/18

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

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.

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).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EAST MAIN & LAURA ST. PHASE II	**Lab Number:**	L1845925
Project Number:	2182815	**Report Date:**	11/16/18

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

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), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

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**
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 1

Date Rec'd in Lab: 11/9/18

ALPHA Job #: L1845925

Client Information
Client: LaBella Associates
Address: 300 State St
Rochester, NY 14614
Phone: (585) 454-6110
Fax:
Email: dnoll@labellapc.com

Project Information
Project Name: East Main & Laura St. Phase II ESA
Project Location: Rochester, N.Y.
Project #: 2182815
(Use Project name as Project #) ☐
Project Manager: Dan Noll
ALPHAQuote #:

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

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 # 2182815

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:

NYSDEC Equis EDD/Tier 4

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL+CP51 VOCs 8260	TCL+CP51 SVOCs 8270	TAL Metals 6010	PCBs 8082	Total Bottles
45925.01	SB-08 (0.75-1.25)	11/1/18	13:30	Soil	ED			X	X	
.02	SB-08 (12.75-13.4)	11/1/18	13:45	Soil	ED	X	X			
.03	BW-01 (8.5-9)	11/1/18	9:40	Soil	ED	X				

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Sample Specific Comments

	A	A	A	A
Container Type				
Preservative	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
	11/8/18 14:35		
	11/5/18 14:35		11/5/18 14:35

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:	L1852828
Client:	LaBella Associates, P.C. 300 State Street Suite 201 Rochester, NY 14614
ATTN:	Dan Noll
Phone:	(585) 454-6110
Project Name:	E. MAIN & LAURA ST.
Project Number:	2182815
Report Date:	01/03/19

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).

Project Name: E. MAIN & LAURA ST.
Project Number: 2182815

Lab Number: L1852828
Report Date: 01/03/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1852828-01	BW-01	WATER	1240 E. MAIN ST., ROCHESTER, NY	12/21/18 10:20	12/21/18

Project Name: E. MAIN & LAURA ST. **Lab Number:** L1852828
Project Number: 2182815 **Report Date:** 01/03/19

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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

Project Name:	E. MAIN & LAURA ST.	**Lab Number:**	L1852828
Project Number:	2182815	**Report Date:**	01/03/19

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: 01/03/19

ORGANICS

VOLATILES

Project Name: E. MAIN & LAURA ST. **Lab Number:** L1852828

Project Number: 2182815 **Report Date:** 01/03/19

SAMPLE RESULTS

Lab ID: L1852828-01 Date Collected: 12/21/18 10:20
Client ID: BW-01 Date Received: 12/21/18
Sample Location: 1240 E. MAIN ST., ROCHESTER, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 12/28/18 17:19
Analyst: AD

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: E. MAIN & LAURA ST. **Lab Number:** L1852828

Project Number: 2182815 **Report Date:** 01/03/19

SAMPLE RESULTS

Lab ID: L1852828-01 Date Collected: 12/21/18 10:20

Client ID: BW-01 Date Received: 12/21/18

Sample Location: 1240 E. MAIN ST., ROCHESTER, 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	ND		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	ND		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	99		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	99		70-130

Project Name: E. MAIN & LAURA ST.
Project Number: 2182815
Lab Number: L1852828
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/28/18 10:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1193880-5					
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: E. MAIN & LAURA ST.
Project Number: 2182815
Lab Number: L1852828
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/28/18 10:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1193880-5					
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: E. MAIN & LAURA ST.
Project Number: 2182815
Lab Number: L1852828
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 12/28/18 10:21
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1193880-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: E. MAIN & LAURA ST.

Project Number: 2182815

Lab Number: L1852828

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193880-3 WG1193880-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	110		100		63-132	10		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	96		92		63-130	4		20
1,1,2-Trichloroethane	100		97		70-130	3		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		99		75-130	1		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	110		100		67-130	10		20
Bromodichloromethane	99		98		67-130	1		20
trans-1,3-Dichloropropene	93		88		70-130	6		20
cis-1,3-Dichloropropene	100		97		70-130	3		20
Bromoform	92		86		54-136	7		20
1,1,2,2-Tetrachloroethane	97		93		67-130	4		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	65		**62**	Q	64-130	5		20
Bromomethane	**32**	Q	**25**	Q	39-139	**25**	Q	20
Vinyl chloride	99		97		55-140	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: E. MAIN & LAURA ST.

Project Number: 2182815

Lab Number: L1852828

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193880-3 WG1193880-4								
Chloroethane	120		110		55-138	9		20
1,1-Dichloroethene	110		100		61-145	10		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	110		100		70-130	10		20
1,2-Dichlorobenzene	96		94		70-130	2		20
1,3-Dichlorobenzene	98		98		70-130	0		20
1,4-Dichlorobenzene	98		97		70-130	1		20
Methyl tert butyl ether	110		100		63-130	10		20
p/m-Xylene	105		100		70-130	5		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	70		68		36-147	3		20
Acetone	71		65		58-148	9		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	91		82		63-138	10		20
4-Methyl-2-pentanone	91		85		59-130	7		20
2-Hexanone	83		77		57-130	8		20
1,2-Dibromoethane	98		94		70-130	4		20
n-Butylbenzene	98		96		53-136	2		20
sec-Butylbenzene	100		99		70-130	1		20
tert-Butylbenzene	98		97		70-130	1		20
1,2-Dibromo-3-chloropropane	82		76		41-144	8		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: E. MAIN & LAURA ST.

Project Number: 2182815

Lab Number: L1852828

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1193880-3 WG1193880-4								
Isopropylbenzene	100		98		70-130	2		20
p-Isopropyltoluene	97		96		70-130	1		20
Naphthalene	88		85		70-130	3		20
n-Propylbenzene	100		98		69-130	2		20
1,2,4-Trichlorobenzene	91		88		70-130	3		20
1,3,5-Trimethylbenzene	99		97		64-130	2		20
1,2,4-Trimethylbenzene	97		96		70-130	1		20
Methyl Acetate	92		85		70-130	8		20
Cyclohexane	110		110		70-130	0		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	110		110		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		95		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	94		96		70-130
Dibromofluoromethane	100		100		70-130

SEMIVOLATILES

Project Name: E. MAIN & LAURA ST.
Lab Number: L1852828
Project Number: 2182815
Report Date: 01/03/19

SAMPLE RESULTS

Lab ID: L1852828-01
Client ID: BW-01
Sample Location: 1240 E. MAIN ST., ROCHESTER, NY

Date Collected: 12/21/18 10:20
Date Received: 12/21/18
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/28/18 14:52
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 12/26/18 18:01

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	49		15-120
4-Terphenyl-d14	**40**	Q	41-149

Project Name: E. MAIN & LAURA ST.
Project Number: 2182815
Lab Number: L1852828
Report Date: 01/03/19

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/28/18 13:40
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 12/26/18 18:01

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1192858-1					
Acenaphthene	ND		ug/l	0.10	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	69		15-120
4-Terphenyl-d14	69		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: E. MAIN & LAURA ST.

Project Number: 2182815

Lab Number: L1852828

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1192858-2 WG1192858-3								
Acenaphthene	61		61		40-140	0		40
Fluoranthene	75		74		40-140	1		40
Benzo(a)anthracene	72		71		40-140	1		40
Benzo(a)pyrene	73		74		40-140	1		40
Benzo(b)fluoranthene	72		70		40-140	3		40
Benzo(k)fluoranthene	64		66		40-140	3		40
Chrysene	61		61		40-140	0		40
Acenaphthylene	65		65		40-140	0		40
Anthracene	72		71		40-140	1		40
Benzo(ghi)perylene	75		75		40-140	0		40
Fluorene	64		63		40-140	2		40
Phenanthrene	63		62		40-140	2		40
Dibenzo(a,h)anthracene	74		74		40-140	0		40
Indeno(1,2,3-cd)pyrene	77		77		40-140	0		40
Pyrene	75		74		40-140	1		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	79		79		23-120
2-Fluorobiphenyl	63		64		15-120
4-Terphenyl-d14	69		68		41-149

METALS

Project Name: E. MAIN & LAURA ST. **Lab Number:** L1852828

Project Number: 2182815 **Report Date:** 01/03/19

SAMPLE RESULTS

Lab ID: L1852828-01 Date Collected: 12/21/18 10:20

Client ID: BW-01 Date Received: 12/21/18

Sample Location: 1240 E. MAIN ST., ROCHESTER, 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											
Arsenic, Total	0.00026	J	mg/l	0.00050	0.00016	1	12/28/18 18:00	01/03/19 09:22	EPA 3005A	1,6020B	AM
Barium, Total	0.09208		mg/l	0.00050	0.00017	1	12/28/18 18:00	01/03/19 09:22	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00007	J	mg/l	0.00020	0.00005	1	12/28/18 18:00	01/03/19 09:22	EPA 3005A	1,6020B	AM
Chromium, Total	0.00053	J	mg/l	0.00100	0.00017	1	12/28/18 18:00	01/03/19 09:22	EPA 3005A	1,6020B	AM
Lead, Total	0.00046	J	mg/l	0.00100	0.00034	1	12/28/18 18:00	01/03/19 09:22	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	12/27/18 11:14	12/27/18 22:27	EPA 7470A	1,7470A	MG
Selenium, Total	ND		mg/l	0.00500	0.00173	1	12/28/18 18:00	01/03/19 09:22	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/28/18 18:00	01/03/19 09:22	EPA 3005A	1,6020B	AM

Project Name: E. MAIN & LAURA ST.
Project Number: 2182815
Lab Number: L1852828
Report Date: 01/03/19

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): 01 Batch: WG1193089-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	12/27/18 11:14	12/27/18 21:42	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1193657-1										
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	12/28/18 18:00	01/02/19 15:10	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	12/28/18 18:00	01/02/19 15:10	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	12/28/18 18:00	01/02/19 15:10	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	12/28/18 18:00	01/02/19 15:10	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	12/28/18 18:00	01/02/19 15:10	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	12/28/18 18:00	01/02/19 15:10	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/28/18 18:00	01/02/19 15:10	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: E. MAIN & LAURA ST.

Project Number: 2182815

Lab Number: L1852828

Report Date: 01/03/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193089-2								
Mercury, Total	86		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1193657-2								
Arsenic, Total	108		-		80-120	-		
Barium, Total	104		-		80-120	-		
Cadmium, Total	106		-		80-120	-		
Chromium, Total	101		-		80-120	-		
Lead, Total	105		-		80-120	-		
Selenium, Total	111		-		80-120	-		
Silver, Total	102		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: E. MAIN & LAURA ST.
Project Number: 2182815

Lab Number: L1852828
Report Date: 01/03/19

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): 01 QC Batch ID: WG1193089-3 QC Sample: L1900001-09 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00389	78		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193657-3 QC Sample: L1852823-01 Client ID: MS Sample												
Arsenic, Total	0.0094	0.12	0.1351	105		-	-		75-125	-		20
Barium, Total	0.0686	2	2.151	104		-	-		75-125	-		20
Cadmium, Total	0.0012	0.051	0.05656	108		-	-		75-125	-		20
Chromium, Total	0.0300	0.2	0.2285	99		-	-		75-125	-		20
Lead, Total	0.03982	0.51	0.5766	105		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.118	98		-	-		75-125	-		20
Silver, Total	ND	0.05	0.05247	105		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: E. MAIN & LAURA ST.

Project Number: 2182815

Lab Number: L1852828

Report Date: 01/03/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193089-4 QC Sample: L1900001-09 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1193657-4 QC Sample: L1852823-01 Client ID: DUP Sample						
Lead, Total	0.03982	0.04073	mg/l	2		20

Project Name: E. MAIN & LAURA ST.
Project Number: 2182815

Lab Number: L1852828
Report Date: 01/03/19

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(*)
L1852828-01A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1852828-01B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1852828-01C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1852828-01D	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Absent		BA-6020T(180),SE-6020T(180),CR-6020T(180),PB-6020T(180),AS-6020T(180),AG-6020T(180),CD-6020T(180),HG-T(28)
L1852828-01E	Amber 1000ml unpreserved	A	7	7	2.5	Y	Absent		NYCP51-PAHSIM(7)
L1852828-01F	Amber 1000ml unpreserved	A	7	7	2.5	Y	Absent		NYCP51-PAHSIM(7)

*Values in parentheses indicate holding time in days

Project Name:	E. MAIN & LAURA ST.	**Lab Number:**	L1852828
Project Number:	2182815	**Report Date:**	01/03/19

GLOSSARY

Acronyms

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.
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.
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

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.

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	E. MAIN & LAURA ST.	**Lab Number:**	L1852828
Project Number:	2182815	**Report Date:**	01/03/19

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

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.

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).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	E. MAIN & LAURA ST.	**Lab Number:**	L1852828
Project Number:	2182815	**Report Date:**	01/03/19

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

EPA 6860: SCM: Perchlorate

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**
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 1

Date Rec'd in Lab: 12/22/18

ALPHA Job #: L1852829

Client Information
Client: LaBella Associates
Address: 300 State St
Rochester, NY 14614
Phone: 585-454-6110
Fax:
Email: dnoll@labellape.com

Project Information
Project Name: E. Main & Laura St.
Project Location: 1240 E. Main St, Rochester, NY
Project #: 2182815
(Use Project name as Project #) ☐
Project Manager: Dan Noll
ALPHAQuote #:

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

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 # 2182815

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:

Standard QC

Please specify Metals or TAL.

ANALYSIS
TCL & CP-51 VOC
CP-51 SVOC
RCRA METALS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total # Bottles

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL & CP-51 VOC	CP-51 SVOC	RCRA METALS	Sample Specific Comments	Total # Bottles
52982401	BW-01	12/21/18	10:20	GW	SH	3	2	1		6

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

Container Type	A	A	P							
Preservative	B	A	C							

Relinquished By:	Date/Time	Received By:	Date/Time
SARAH HOGAN	12/21/18 1200	Eric Petzal	12/21/18 1200
Eric Petzal	12/21/18 1250	Audrey Tilley AAL	12/21/18 12:50
Audrey Tilley AAL	12/21/18 13:15		12/22/18 0645

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)

APPENDIX 3

Investigation Derived Waste Disposal Documentation

AMERICAN RECYCLERS COMPANY
Waste Profile Report (WPR)

177 Wales Avenue Tonawanda, New York 14151 *Phone (716) 695-6720 Fax (716) 695-0161*	**APPROVAL NUMBER:** L-14751L **EXPIRATION DATE:** 2/13/2021 **HANDLING CODE:** L

Generator: City of Rochester EPA ID #:

Address: 1240 East Main Street Contact: Jane Forbes

City Rochester STATE: NY ZIP: 14614 Phone: 585-428-7892 Fax:

Waste Name: Soil Cuttings	Shipping Name: Non RCRA Non DOT Regulated
Generating Process: From Installation of monitoring wells	Rate of Generation: Once
	Container Type: 55 Gal Steel 1A2

Composition of Waste	%		%
Soil cuttings	100 - 100		
analytical attached	-		

Phase	%
Solids	
Liquid	
Sludge	
Debris	

Is the material RCRA listed or Characteristicly Hazardous?	☐ YES	☒ NO
Does the material contain Medical or Biological Wastes?	☐ YES	☒ NO
Does the material contain etiological waste?	☐ YES	☒ NO
Does the material contain, or has it come in contact with PCB's?	☐ YES	☒ NO
Is the material radioactive?	☐ YES	☒ NO
Does the material contain septic or domestic sewage?	☐ YES	☒ NO
Is the material Non-Hazardous as defined by RCRA Title 40?	☒ YES	☐ NO

Check all below which apply:

Material is to be shipped and recycled as Universal Waste	☐ YES	☒ NO
Material is to be shipped and recycled under 6 NYCRR Part 371.1(g)(1)(ii)(b) *(ie Computer Equipment & monitors)*	☐ YES	☒ NO
Material is being shipped for disposal/recycle via facility transfer/consolidation permit	☒ YES	☐ NO
Material is a Labpack and all contents are CERTIFIED as Non-RCRA	☐ YES	☒ NO
List all Lab Pack Container Numbers: *(Attach packing slips to profile)*		

I certify that the above submitted information (including any attachments) is true, accurate and complete to the best of my knowledge and ability and that all known and suspected hazards have been disclosed. All material offered herein is deemed Non-RCRA.

Signer Title: Sr. Env. Specialist

Company: City of Rochester

Signed: [signature] **Print:** Jane M Forbes **Date:** 2/14/2019

ARC Personel Reviewed and Approved by:

Approved by: **Print: Tom Martin** **Date:**

AMERICAN RECYCLERS COMPANY
Waste Profile Report (WPR)

177 Wales Avenue Tonawanda, New York 14151 *Phone (716) 695-6720 Fax (716) 695-0161*	**APPROVAL NUMBER:** X-14752IN **EXPIRATION DATE:** 2/13/2021 **HANDLING CODE:** B

Generator: City of Rochester EPA ID #:

Address: 1240 East Main Street Contact: Jane Forbes

City Rochester STATE: NY ZIP: 14614 Phone: 585-428-7892 Fax:

Waste Name: Purge Water	Shipping Name: Non RCRA Non DOT Regulated
Generating Process: installation of a monitoring well	
	Rate of Generation: Once
	Container Type: 55 Gal Steel 1A1

Composition of Waste	%		%
Purge water	50 - 100		
Sediments	0 - 50		

Phase	%
Solids	
Liquid	
Sludge	
Debris	

Is the material RCRA listed or Characteristicly Hazardous?	☐ YES	☒ NO
Does the material contain Medical or Biological Wastes?	☐ YES	☒ NO
Does the material contain etiological waste?	☐ YES	☒ NO
Does the material contain, or has it come in contact with PCB's?	☐ YES	☒ NO
Is the material radioactive?	☐ YES	☒ NO
Does the material contain septic or domestic sewage?	☐ YES	☒ NO
Is the material Non-Hazardous as defined by RCRA Title 40?	☒ YES	☐ NO

Check all below which apply:

Material is to be shipped and recycled as Universal Waste	☐ YES	☒ NO
Material is to be shipped and recycled under 6 NYCRR Part 371.1(g)(1)(ii)(b) *(ie Computer Equipment & monitors)*	☐ YES	☒ NO
Material is being shipped for disposal/recycle via facility transfer/consolidation permit	☒ YES	☐ NO
Material is a Labpack and all contents are CERTIFIED as Non-RCRA	☐ YES	☒ NO
List all Lab Pack Container Numbers: *(Attach packing slips to profile)*		

I certify that the above submitted information (including any attachments) is true, accurate and complete to the best of my knowledge and ability and that all known and suspected hazards have been disclosed. All material offered herein is deemed Non-RCRA.

Signer Title: Sr. Env. Specialist

Company: City of Rochester

Signed: [signature] **Print:** Jane Mtt Forbes **Date:** 2/14/2019

ARC Personel Reviewed and Approved by:

Approved by: **Print: Tom Martin** **Date:**

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	1	800-535-5053	29864

GENERATOR

5. Generator's Name and Mailing Address
City of Rochester
30 Church St
Rochester, NY 14614
Generator's Phone: 585-428-7892

Generator's Site Address (if different than mailing address)
City of Rochester
1240 East Main Street
Rochester, NY 14614

6. Transporter 1 Company Name: Environmental Service Group, Inc 716.695.6720 — U.S. EPA ID Number: NYD986903904

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
American Recyclers Company
177 Wales Avenue
Tonawanda, NY 14150
Facility's Phone: 716.695.6720 — U.S. EPA ID Number: NYR000030809

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non RCRA Non DOT Regulated, (Ground water)	0002	DM	110	G	
2.	Non RCRA Non DOT Regulated, (Soil Cuttings)	0002	DM	600	P	ESI
3.						
4.						

13. Special Handling Instructions and Additional Information

ERG:
1 -
2 -
3 -
4 -

Approval #:
1 - X-14752IW
2 - L-14751L
3 -
4 -

Handling Codes:
1 - None
2 - None
3 -
4 -

24 Hour Emergency Contact: INFOTRAC (Caller Must ID ESG)

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Eric LaMarche, as agent for Rochester — Signature — Month 2 — Day 24 — Year 11

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name — Signature — Month — Day — Year

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month — Day — Year

GENERATOR'S/SHIPPER'S INITIAL COPY

Environmental Service Group, Inc (NY)
177 Wales Avenue
Tonawanda, NY 14150-0242
Phone: 716.695.6720
Fax: 716.695.0161

Job ID: 25224

Job Date: 02/14/2019
Salesman: Julian Mastropoll

Generator: City of Rochester
Address: 1240 East Main Street
Rochester, NY 14614
Phone: 585-428-7892
Fax:
Gen Contact: Jane Forbes
Gen EPAID:
Billing Contact: Michelle Clausen
Billing Phone: 585-454-6110
PO:

Job Notes And Notes To Driver:
Eric for site questions - Best # is 585-278-8202
physical p/u at fenced in lot at 1200 E. Main St

Project:
Project Description:

Ordered Quantity:	Rate:	Common Name Description:	Approval Number:	Facility:	Manifest Document Number
2	$ per Drum	Non-Hazardous Waste Disposal Only: Soil Cuttings	L-14751L	ARC	29864
3	$ per Drum	Non-Hazardous Waste Disposal Only: Purge Water	X-14752IN	ARC	29864

Driver Notes:

Materials Used:

Site Time: ☑ 1/2 hour ☐ 1 hour ☐ 2 hour ☐ Other _____

GENERATOR SIGNATURE: Eric Dethl as agent for City of Rochester Date: 2/20/19

DRIVER SIGNATURE: [signature] Date: 2/20/19

APPENDIX 4

Pre-Development Geotechnical Assessment Report

Foundation Design, P.C.
SOIL • BEDROCK • GROUNDWATER

April 3, 2019

LaBella Associates, D.P.C.
300 State Street, Suite 201
Rochester, New York 14614

Attention: Mr. Daniel Noll

Reference: Rochester Police Station
East Main Street @ Laura Street, Rochester, New York
Pre-Development Geotechnical Assessment, 4510.0

Dear Mr. Noll:

This letter summarizes our Pre-Development Geotechnical Assessment for the referenced project. We understand that the City of Rochester is in the process of acquiring parcels in the East Main Street and Laura Street community. The current concept is to construct an 8,858 square foot, two-story, slab-on-grade Police Station on the combined parcel. The structure would be constructed using exterior bearing walls with few interior columns. For this preliminary assessment, we have assumed that the maximum column load will be under 150 kips and that the maximum wall load will be under 9,000 pounds per lineal foot. New paved parking lots will be constructed on the 1-5 Laura Street, 2 Laura Street, 4-6 Laura Street, 8-8.85 Laura Street, 7-9 Laura Street, 10 Laura Street, 11-15 Laura Street, 1200 East Main Street, 1240 East Main Street, 1244-1246 East Main Street and 1252 East Main Street parcels. An Architectura, P.C. *Conceptual Site* Plan is enclosed. During this study, access is limited to current City-owned parcels and right-of-ways; the actual building footprint was not accessible.

We base this preliminary evaluation on our review of U.S.G.S. topographic and geologic mapping; EDR/Sanborn Fire Insurance Mapping; previous subsurface exploration, new soil probe, test pit,

and test boring exploration; laboratory test results; and consultation with the design team. LaBella Associates, D.P.C. (LaBella) commissioned this study on behalf of the City of Rochester. We intend this report for use exclusively on this project.

The proposed Police Station will be located east of downtown Rochester, New York. The anticipated development will encompass 1-5 Laura Street, 2 Laura Street, 4-6 Laura Street, 7-9 Laura Street, 8-8.5 Laura Street, 10 Laura Street, 11-15 Laura Street, 1214-1216 East Main Street, 1222 East Main Street, 1228-1230 East Main Street, 1240 East Main Street, 1244-1246 East Main Street and 1252 East Main Street parcels. The development lies within a residential neighborhood. EDR/Sanborn Fire Insurance mapping indicates that most of the lots contained one and two family residential homes historically. Former structures have been demolished on seven of the fourteen parcels. The parcel at 1200 East Main Street previously contained a gas station. A *General Location Plan* on 2016 U.S.G.S. topographic mapping is attached to this report.

An environmental clean-up was conducted on the 1200 East Main Street parcel in 2010 and 2016. Bergmann Associates, D.P.C. (Bergmann) was retained by the City of Rochester to observe this clean-up work. As part of the site remediation efforts, five large excavations were made on the parcel (see Figures 4 and 5). These excavations extended 1.5 to 16.0 feet deep. Area 1A and Area 1B were backfilled with environmentally-approved material excavated from Area 4. Areas 2 and 3 were backfilled with environmentally-approved material excavated from Areas 2 and 3; this material was supplemented with environmentally-approved material imported from a 1315 South Plymouth Avenue stockpile of spoil soils. (See Bergmann test pit logs enclosed for a description of the material imported). The March 2016 excavation was backfilled with crusher-run stone. It is our understanding that all of the backfill was placed in compacted, one to three foot thick lifts (not tested/checked for density nor stability).

The recent exploration program consisted of twelve test pits, five soil probes, three SPT borings and one SPT sampled bedrock well. LaBella established the investigation locations in the field. A *Proposed Testing* map, showing the recent test pit, soil probe, soil boring, and bedrock well locations, and copies of subsurface logs are attached to this report.

LaBella Environmental, LLC excavated test pits TP18-1 through TP18-12 on October 18, 2018. They provided a CAT 380E mini-excavator for the test pit work. Our staff logged the subsurface profiles. The test pit excavations ranged from 3.8 to 10.4 feet deep.

LaBella Environmental, LLC performed soil probes SB-01 through SB-05, SB-07, and SB-08, and geotechnical borings GT-01, GT-02, and SBGT-06 on October 22, 2018. They provided a Geoprobe 6610 for the soil sampling. A four foot long macro-core barrel was used to recover the soil samples at the soil probe locations. The soil borings were advanced using hollow stem auger casings, with SPT soil samples recovered using a two-inch diameter sample spoon. Our staff logged the subsurface profiles and collected representative soil samples. The soil probes/borings ranged from 8.0 to 16.5 feet deep.

NYEG Drilling installed bedrock well BW-01 on October 31, 2018. They provided a CME-75 drill rig equipped with hollow stem augers for the well installation. SPT soil samples were recovered using a two-inch diameter sample spoon to spoon/auger refusal. Fifteen feet of rock core was taken. Your staff logged the subsurface profiles and collected representative soil samples. The bedrock well extended 25.0 feet below grade.

Other soil information was available for our review for this report. This information included the following soil probe data; location plans for the exploration are enclosed with the logs.

- 2000 and 2003 Bergmann Associates, D.P.C. soil borings/monitoring wells MW-1 through MW-14; logs for MW-15 and MW-16 are not available at this time.
- 2009 Bergmann Associates, D.P.C. test pits BTP-1 through BTP-6 located within the 1315 South Plymouth Avenue stockpile.

The following interpretations of the soil, bedrock, and groundwater conditions are based on widely spaced test pits, soil probes, and soil borings; our site observations; and prior work in the area. Variations from the inferred subsurface profile are possible, especially on this filled and previously disturbed site. See the logs attached for soil descriptions at the test locations. Call us immediately if such variations are found so we may evaluate the impact on the conclusions outlined below.

A typical subsurface profile is expected to consist of fill material over glacial till, then bedrock. In general, the fill material encountered consists of earth fill (silt, sand, and gravel mixture) with varying amounts of cobbles, boulders, ash, cinders, rock fragments, metal pipe, brick, glass, concrete fragments, and asphalt fragments. The older fill deposits ('cleaner' earth fills) were placed during the residential development. Spoils from the full or partial basement excavations were spread around the homes, raising grades. These earth fills were likely placed over the pre-existing topsoil layer. As noted previously, several of the houses have since been demolished; fills in the old basement areas vary from basement to basement. All contained varying amounts of debris; few contained wood and topsoil/organic matter mixed with the fill.

On the 1200 East Main lot, an environmental remediation project has disturbed the site. Excavations were backfilled with mixed earth with concrete asphalt, wood, plastic, brick, ash, and wire. We understand that these fills were placed in an uncontrolled manner (i.e. one to three foot

thick compacted lifts). The backfill material(s) utilized, the fill depths, and the excavation limits are plotted on Bergmann Figures 4 and 5 enclosed.

The underlying glacial till deposit is a firm to dense red-brown silty sand/sandy silt with gravel and clay (SM and ML in the Unified Soil Classification System). Cobbles and boulders are present in this formation. Pockets of uniform sand and silt were noted within the formation. The till formation extends to the bedrock surface; two to three feet of slab rock/large boulders overlay the bedrock surface with a similar soil matrix.

Bergmann documented groundwater levels in the observation wells installed in the overburden and bedrock. The depth to groundwater ranges from 13 to 20 feet below grade and lies in the bedrock. The groundwater levels are tabulated below.

Table No. 1 - Groundwater Measurements

Well Number	Top of Casing Elevation	11.06.2016	11.08.2018
MW-1	495.35	475.77	
MW-2	496.02	473.68	
MW-3	492.02	475.72	
MW-4	492.00	474.81	
MW-5	492.70	--	
MW-6	492.65	--	
MW-7R	491.97	474.70	
MW-8	494.91	473.93	
MW-9R	492.41	479.28	
MW-10	496.14	--	
MW-11	495.95	476.63	
MW-12	491.17	--	
MW-15R	492.54	475.04	
MW-16	492.50	--	
BW-1			-15.1

Most of the test holes terminated at refusal on the bedrock surface. We estimate that the bedrock depth ranges from 8.0 to 16.0 feet below grade. Three, 5-foot long core runs were taken of the bedrock at BW-1. The percent recovery ranges from 62 to 99 percent; the RQD measurements were between 49 and 88 percent. The low values were in the upper five feet, indicating that the bedrock becomes more intact with depth. The core was identified as the Lockport Group of Formations. These formations consist of massive dolomites.

We conclude that the in-place fill is not suitable to support the foundations or floors for the new structure(s). The variable fill quality will result in erratic amounts of settlement as the fill continues to consolidate under its own weight. Organic matter within the fill will decompose with time, resulting in more settlement. If constructed over this fill material, it is our opinion that floors and foundations would settle. This would result in unacceptable amounts of distress in masonry walls and building framing. Similar problems would be experienced by floors constructed over the fill. Floors would settle erratically, resulting in wavy, uneven, settled, and severely cracked surfaces.

We recommend avoiding the environmental remediation excavations with the proposed building footprint. Keep the new building footprint at least 10 feet east of the known excavation limits. We believe that the unsuitable fill depths on the 1214-1216, 1222, and 1228-1230 East Main Street parcels and within Laura Street (to be abandoned) will be shallow enough to allow for removal and replacement with structural fill. Further investigation is required to confirm this assessment. Assuming removal and replacement is completed, it is our opinion that the building can be supported on a spread footing foundation system bearing on the native soil or the new structural fill. Once the unsuitable fill is removed, a slab-on-grade is achievable.

If the new structure is located within 10 feet of the know excavation, it is likely that non-structurally placed fills will be encountered. This material would require re-excavation, sorting of highly organic material/pockets within the fill and re-installation of the fill to structural standards. Excavation depths of up to 12 feet are possible. Again, once the removal and replacement is completed, a spread footing foundation system and slab-on-grade are feasible.

The new pavements around the facility will also be constructed over the in-place fill material. Where new pavements are constructed over the in-place fill material, wavy, uneven, settled, and severely cracked surfaces are likely to develop. However, the costs to completely remove the in-place fill and old building remnants would be cost prohibitive. We recommend accepting the risk with long-term performance and incorporating measures into the pavement design to mitigate this risk (thicker subbase layer, geogrid under the subbase, removing old foundations and larger construction debris where encountered within 18 inches of the pavement subbase). If permeable pavements are used, a geogrid should be placed under thick 'clean' stone base course/stormwater infiltration storage zone to extend the pavement performance. Where possible, avoid the deep remediation excavation on the 1200 East Main Street parcel with gravity flowing and/or settlement sensitive underground utility lines.

Based on the above, we have drawn the following preliminary recommendations for conceptual planning of the proposed development:

1. We recommend confining the new building to within the 1214-1216, 1222, and 1228-1230 East Main Street parcels. Extending the building into former Laura Street is feasible, but deeper underground utility lines may require addressing during the removal/replacement work.

2. Plan to remove the in-place fill material and buried topsoil from the proposed building footprint. Within the old building footprints, we recommend conceptual budgets allot to remove/replace six feet of fill material; outside old building locations, plan to remove/replace three feet of fill/buried topsoil. For budgeting, plan to backfill the undercut areas with imported crusher-run stone. During final design, assess whether the crusher-run stone, used to backfill the Area 4 remediation excavation, could be re-excavated, stockpiled, and used for the building structural fill (wasting the undercut material in re-excavated Area 4 hole, thereby reducing import/export costs).

3. It is our opinion that the building can be supported on a spread footing foundation system. Allowable bearing pressures are likely to be in the 2,500 to 4,000 pounds per square foot range, dependent on actual building loads developed. Plan for a minimum footing two feet square or wide. Once the removal/replacement work is completed, interior bearing walls could be designed to be supported on haunches in the floor slab.

4. With the removal/replace work completed, we believe that a slab-on-grade is feasible.

5. NYS Building Code identifies various seismic design criteria for this project. We recommend using a Site Classification of C (Very Dense Soil Profile). Based on ASCE 7-16 design guidelines, we recommend using the following seismic design parameters for this Risk Category IV structure.

Table No. 2 – Seismic Design Parameters

Spectral Response Acceleration		Soil Factors		Design Spectral Response Acceleration	
S_S	S_1	S_{MS}	S_{M1}	SD_s	SD_1
0.160g	0.048g	0.208g	0.072g	0.138g	0.048g

6. The pavement subgrade will consist of similar fill material as the building footprint. Long-term pavement performance will be similar to the existing pavement areas, as these areas will consolidate and settle over time. To improve the long term performance, budget to have the contractor rework and re-compact the upper 18-inches of the in-place fill material (do not rework areas where new fill has been installed). Re-compact the fill to structural fill standards. After achieving compaction and prior to placing the subbase course, the geotechnical engineer or our field representatives will observe a proof-roll of the pavement subgrade(s) prior to placing new fill and/or final subbase material. The contractor should provide a loaded ten-wheel truck or similar heavy construction equipment for the proof-

rolling. If the subgrade ruts, weaves, or quakes during proof-rolling, re-compact or replace the unstable areas as recommended by the geotechnical engineer or our field representative.

Where new pavements will be installed, place Tensar BX-1200 bi-axial geogrid over the subgrade prior to starting the subbase placement. The geogrid is intended to aid in distributing the soil load uniformly over the underlying fill material and better distribute irregularities that form in the subgrade to the surface. We recommend budgeting to install the Standard and Heavy Duty pavement sections tabulated below for your conceptual estimating.

Table No. 3 - Standard Section		
1.5"	Asphalt Topcoat	NYSDOT Item 403.198902
2.5"	Asphalt Binder	NYSDOT Item 403.138902
12.0"	Crusher-run Stone Subbase	NYSDOT Item 304.12
	Bi-axial Geogrid	Tensar BX-1200
	Subgrade	Approved Proof Roll

Table No. 4 – Heavy Duty Section		
1.5"	Asphalt Topcoat	NYSDOT Item 403.198902
2.5"	Asphalt Binder	NYSDOT Item 403.138902
18.0"	Crusher-run Stone Subbase	NYSDOT Item 304.12
	Bi-axial Geogrid	Tensar BX-1200
	Subgrade	Approved Proof Roll

For site planning, we recommend sloping both the pavement surface and subgrade at slopes of at least 2.0 percent to facilitate water flow toward the stormwater system and prolong the pavement life. Drainage of the subbase is critical to proper performance of the pavements. Install 25 foot long weeps off the storm inlets at low points to allow water out of the stone subbase and into the storm water system. Plan to install concrete pavements under/in front of dumpster and any loading docks (areas where tires to repeatedly run in the path).

7. We understand that green infrastructure may be incorporated into the final design. This may consist of stormwater infiltration chambers, rain gardens, and/or permeable pavements. During the final design exploration, NYS DEC Stormwater infiltration tests

should be installed to assess the infiltration rate of the native soil. For conceptual budgeting, assume a permeable pavement section similar to that below may be required.

Table No. 5 – Permeable Pavement Section		
3.0"	Asphalt Topcoat	NYSDOT Item 420.50190108
24.0"	No. 1/No. 2 Stone Subbase	NYSDOT Item 304.12
	Bi-axial Geogrid	Tensar BX-1200 or equivalent
	Separation Fabric	Mirafi 500X or equivalent
	Subgrade	Approved Proof Roll

Attached to the end of this text is a Geoprofessional Business Council paper entitled *Important Information about Your Geotechnical Engineering Report* that you should read. It describes how we intend this report to be used and discusses risks and risk allocation. We will continue to work cooperatively with you and other interested parties to achieve win/win solutions.

This concludes our design phase services. We are available to answer questions that you may have about the data or interpretations of the soil, bedrock, and groundwater conditions and to review near-final plans and specifications. We look forward to hearing from you again as the project proceeds toward construction.

Very truly yours,

FOUNDATION DESIGN, P.C.

Jeffrey D. Netzband, P.E., P.G.
Vice President
Enc.

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, clients can benefit from a lowered exposure to the subsurface problems that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed below, contact your GBA-member geotechnical engineer. Active involvement in the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Geotechnical-Engineering Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a given civil engineer will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. *Those who rely on a geotechnical-engineering report prepared for a different client can be seriously misled.* No one except authorized client representatives should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one – not even you – should apply this report for any purpose or project except the one originally contemplated.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read it *in its entirety*. Do not rely on an executive summary. Do not read selected elements only. *Read this report in full.*

You Need to Inform Your Geotechnical Engineer about Change

Your geotechnical engineer considered unique, project-specific factors when designing the study behind this report and developing the confirmation-dependent recommendations the report conveys. A few typical factors include:

- the client's goals, objectives, budget, schedule, and risk-management preferences;
- the general nature of the structure involved, its size, configuration, and performance criteria;
- the structure's location and orientation on the site; and
- other planned or existing site improvements, such as retaining walls, access roads, parking lots, and underground utilities.

Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.*

This Report May Not Be Reliable

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, that it could be unwise to rely on a geotechnical-engineering report whose reliability may have been affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If your geotechnical engineer has not indicated an "apply-by" date on the report, ask what it should be*, and, in general, *if you are the least bit uncertain* about the continued reliability of this report, contact your geotechnical engineer before applying it. A minor amount of additional testing or analysis – if any is required at all – could prevent major problems.

Most of the "Findings" Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site's subsurface through various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing were performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgment to form opinions about subsurface conditions throughout the site. Actual sitewide-subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team from project start to project finish, so the individual can provide informed guidance quickly, whenever needed.

This Report's Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, *they are not final*, because the geotechnical engineer who developed them relied heavily on judgment and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* revealed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals' misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a full-time member of the design team, to:

- confer with other design-team members,
- help develop specifications,
- review pertinent elements of other design professionals' plans and specifications, and
- be on hand quickly whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction observation.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note conspicuously that you've included the material for informational purposes only*. To avoid misunderstanding, you may also want to note that "informational purposes" means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report, but they may rely on the factual data relative to the specific times, locations, and depths/elevations referenced. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

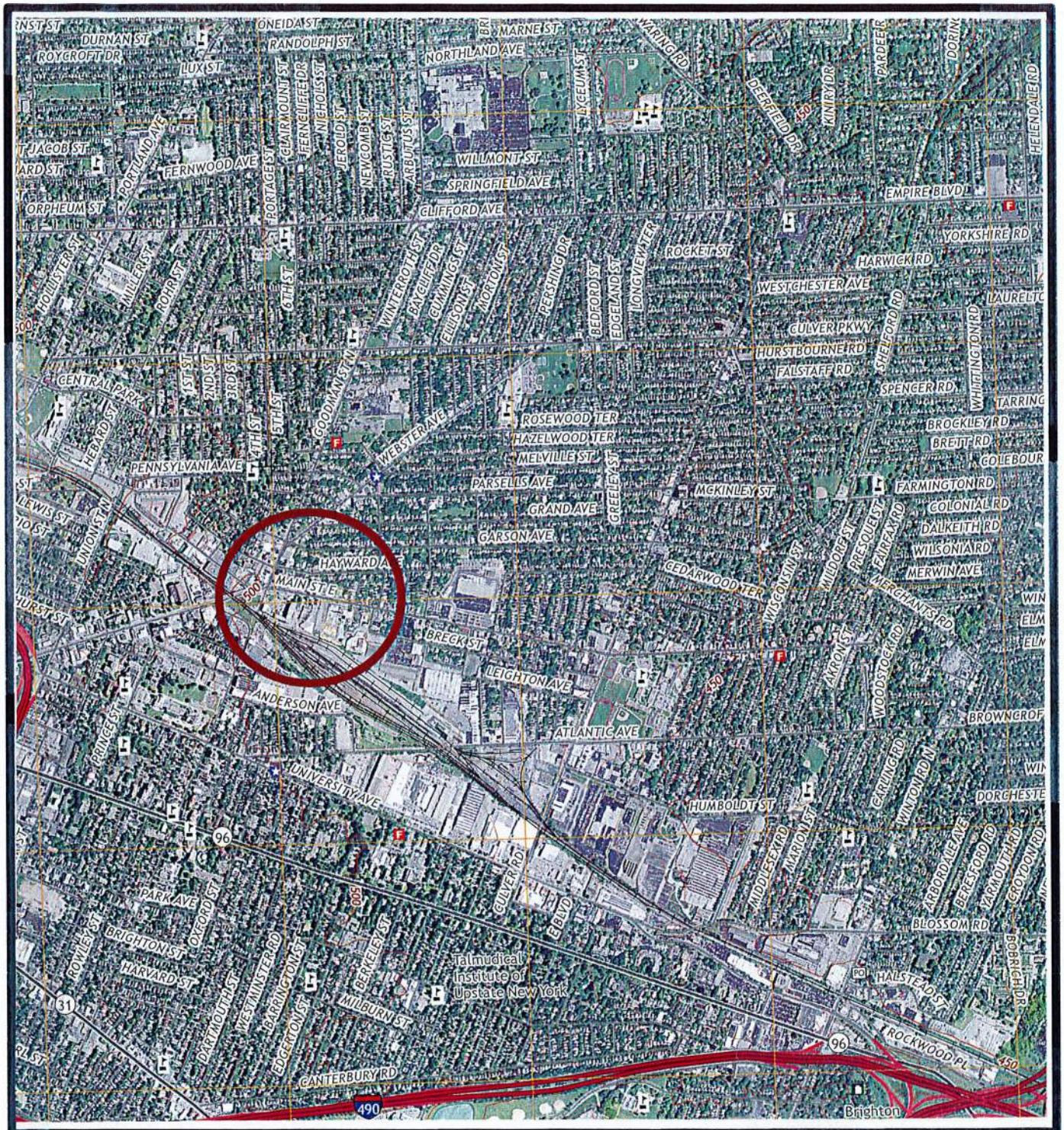
The personnel, equipment, and techniques used to perform an environmental study – e.g., a "phase-one" or "phase-two" environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. As a general rule, *do not rely on an environmental report prepared for a different client, site, or project, or that is more than six months old.*

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, none of the engineer's services were designed, conducted, or intended to prevent uncontrolled migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, ***proper implementation of the geotechnical engineer's recommendations will not of itself be sufficient to prevent moisture infiltration.*** Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. ***Geotechnical engineers are not building-envelope or mold specialists.***

GEOPROFESSIONAL BUSINESS ASSOCIATION

Telephone: 301/565-2733
e-mail: info@geoprofessional.org www.geoprofessional.org



Foundation Design, P.C.

46A Sager Drive
Rochester, New York 14607
Phone (585) 458-0824
FAX (585) 458-3323

Proposed Rochester Police Station

1200 East Main Street, Rochester, New York

General Location Plan

Adapted from: 2016 U.S.G.S. topographic mapping
Rochester-East quadrangle

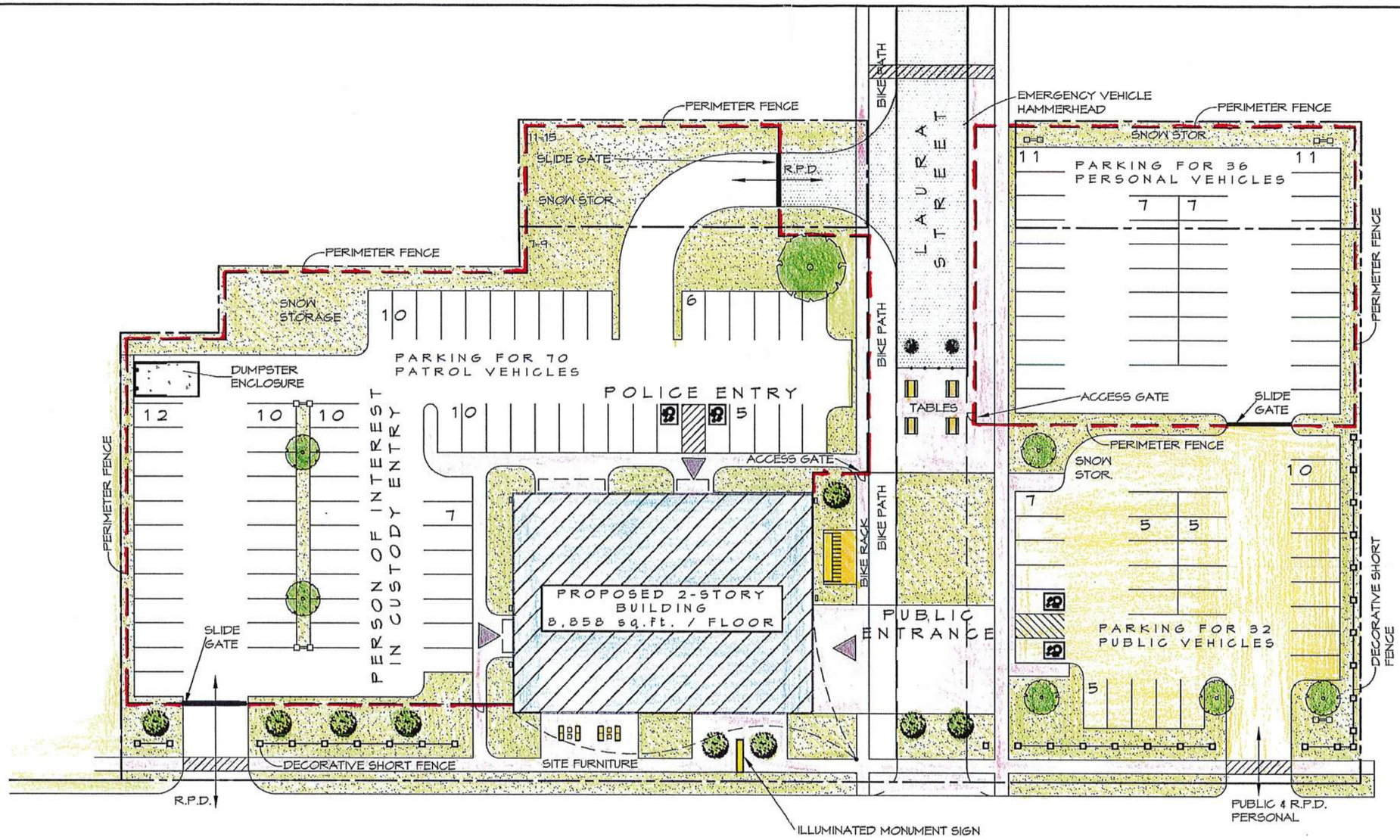
CHECKED BY: JDN

DRAWN BY:

Scale 1"= 2,000'

DATE: 11.27.2018

JOB NO.: 4510.0



PARKING RECAP:

138 TOTAL PARKING SPACES
138 REQUIRED FOR GOODMAN SECTION
32 - PUBLIC PARKING SPACES
36 - PERSONAL VEHICLES
70 - PATROL VEHICLES (Includes Office Staff and Future Growth)

PROPOSED CONCEPTUAL SITE PLAN - 2 STORY BUILDING

1" = 40'-0"

N

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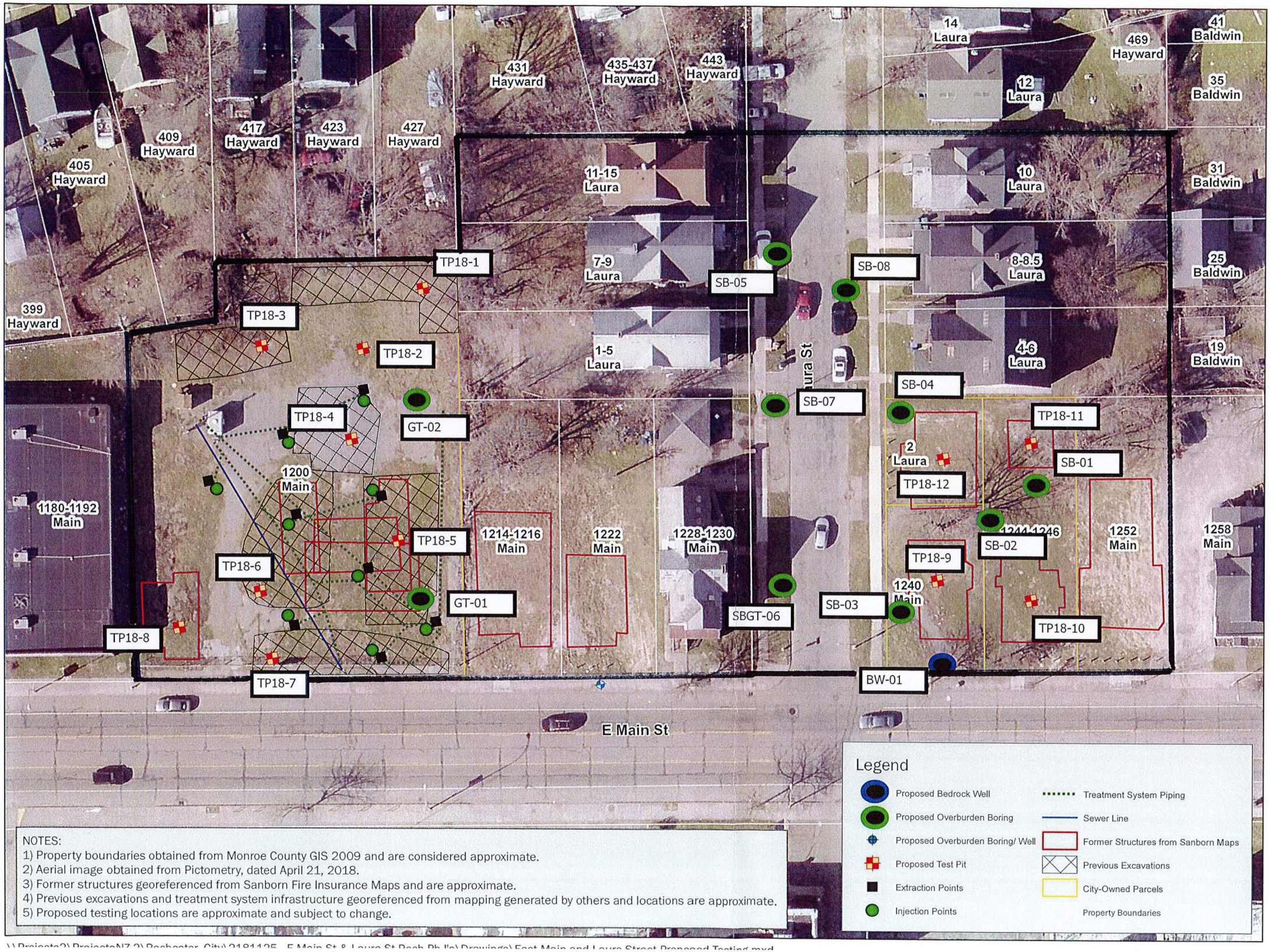
ROCHESTER POLICE DEPARTMENT REORGANIZATION
PROPOSED GOODMAN SECTION
1200 EAST MAIN STREET
CITY OF ROCHESTER DEPARTMENT OF ENVIRONMENTAL SERVICES
PROJECT No. 16033

CHECKED BY: JFT
DRAWN BY: SBT, SCP
PROJECT NO. 183318

DATE: 03-27-2018
REVISIONS:
4-6-18 CLIENT REQUESTED RE-USED ENTRY
5-4-18 CLIENT REQUESTED MISC. REVS
7-18-18 C.R.R. REMOVE ON-STREET PARKING

SHEET NAME: PROPOSED CONCEPTUAL SITE PLAN - 2 STORY BUILDING

SHEET NO.: S-1



NOTES:
1) Property boundaries obtained from Monroe County GIS 2009 and are considered approximate.
2) Aerial image obtained from Pictometry, dated April 21, 2018.
3) Former structures georeferenced from Sanborn Fire Insurance Maps and are approximate.
4) Previous excavations and treatment system infrastructure georeferenced from mapping generated by others and locations are approximate.
5) Proposed testing locations are approximate and subject to change.

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N
W E
S

0 20 40 Feet
1 inch = 40 feet

INTENDED TO PRINT AS: 11" X 17"

CLIENT:

CITY OF ROCHESTER

DRAFT

PROJECT:

PROPOSED TESTING
1200 EAST MAIN STREI
ROCHESTER, NEW YOR

PROJECT #/DRAWING #/ DATE

2181125

FIGURE 1

10/1/2018

\\Projects2\Projects\NZ-2\Rochester, City\2181125 - E Main St & Laura St Rech Ph II\e\Drawings\East Main and Laura Street Proposed Testing.mxd

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

SOIL DESCRIPTIONS

COHESIVE SOIL

Very fine grained soils. Plastic soils that can be rolled into a thin thread if moist. Clays and silty clays show cohesion.

DESCRIPTION	STP –BLOWS/FOOT
Very Soft	0-2
Soft	3-5
Medium	6-15
Stiff	16-25
Hard	26 or more

NON-COHESIVE SOIL

Soils composed of silt, sand and gravel, showing no cohesion or very slight cohesion

DESCRIPTION	STP –BLOWS/FOOT
Loose	0-10
Firm	11-25
Compact	26-40
Dense	41-50
Very Dense	51 or more

SOIL COMPOSITION	DESCRIPTION	ESTIMATED PERCENTAGE
	and	50
	some	30-49
	little	11-29
	trace	0-10

MOISTURE CONDITIONS Dry, Damp, Moist, Wet, Saturated
Groundwater measured in the boring or test pit may not have reached equilibrium

SOIL STRATA:	TERM	DESCRIPTION
	layer	Soil deposit more than 6" thick
	seam	Soil deposit less than 6" thick
	parting	Soil deposit less than 1/8" thick
	varved	Horizontal uniform layers or seams of soil

GRAIN SIZE

MATERIAL		SIEVE SIZE
Boulder		Larger than 12 inches
Cobble		3 inches to 12 inches
Gravel	- coarse	1 inch to 3 inches
	- medium	3/8 inch to 1 inch
	- fine	No. 4 to 3/8 inch
Sand	- coarse	No. 10 to No. 4
	- medium	No. 40 to No. 10
	- fine	No. 200 to No. 40
Silt and Clay		Less than No. 200

Standard Penetration Test: The number of blows required to drive a split spoon sampler into the soil with a 140 pound hammer dropped 30 inches. The number of blows required for each 6-inches of penetration is recorded. The total number of blows required for the second and third 6-inches of penetration is termed the penetration resistance, or the "N" value.

Split Spoon Sampler: Typically a 2-foot long, 2-inch diameter hollow steel tube that breaks apart or splits in two down the tube length.

Refusal: Depth in the boring where more than 100 blows per 5-inches are needed to advance the sample spoon.

Core Recovery (%): The total length of rock core recovered divided by the total core run.

RQD (%): Rock Quality Designation – the total length of all the pieces of the rock core longer than 4-inches divided by the total length of the rock core run.

Foundation Design, P.C.

Boring Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Boring No.**	GT-01
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Asssociates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast	**Engineer**	E. Ashley
Date Started	10.22.18	**Completed**	10.22.18	**Driller**	Dillon
Drilling Company: LaBella Associates, DPC				**Drilling Equipment:** Geoprobe 6620 DT	

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth
	6	9					
			9	10	18	1	0'-2'
	9	8					
			5	5	13	2	2'-4'
5	3	4					
			3	3	7	3	4'-6'
	7	5					
			3	4	8	4	6'-8'
	3	4					
10			4	4	8	5	8'-10'
	5	9					
			6	8	15	6	10'-12'
15							
20							
25							
30							

Visual Soil and Rock Classifications

Remarks

TOPSOIL 0'3"

FILL: Firm brown moist SILT, little to some sand, little to some gravel, little organic, trace brick, large material noted while augering

S-2: trace asphalt

S-3: brown-red, little to some clay

S-4: loose, grey-brown, trace concrete

8'0"

Loose tan-brown wet SILT and SAND, little gravel, trace organic from 8'0"-8'3"

S-6: firm, brown 11'0"

Firm brown wet SAND, some silt

Rough augering below 13'6"

14'5"

Boring Terminated at 14'5" (Auger Refusal)

Notes:

1. Dry upon completion.
2. Advanced holes using hollow stem augers.
3. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

Boring Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Boring No.**	GT-02
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Asssociates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast/rain	**Engineer**	E. Ashley
Date Started	10.22.18	**Completed**	10.22.18	**Driller**	Dillon
Drilling Company: LaBella Associates, DPC				**Drilling Equipment:** Geoprobe 6620 DT	

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth
	6	7					
			5	3	12	1	0'-2'
	4	5					
			5	9	10	2	2'-4'
5	9	12					
			22	37	34	3	4'-6'
	23	22					
			20	21	42	4	6'-8'
	15	17					
10			16	19	33	5	8'-10'
	22	18					
15			13	9	31	6	13'-15'
20							
25							
30							

Visual Soil and Rock Classifications

Remarks

TOPSOIL 0'1"

FILL: Firm black-brown damp ASPHALT, CINDERS, SILT, SAND, and GRAVEL 1'0"

FILL: Firm red-tan-brown mottled moist SILT, some sand, little clay, trace organic, trace gravel 2'0"

FILL: Loose black-red-brown moist SILT, SAND, GRAVEL, ORGANIC, and WOOD 4'0"

Compact tan-brown moist SILT and SAND, some gravel, larger material noted while augering 8'0"

Compact tan-brown moist SAND, some silt, little gravel, larger material noted while augering

S-6: grey, wet, some gravel

16'6"

Boring Tewrminated at 16'6" (Auger Refusal)

Notes:

1. Dry upon completion.
2. Advanced hole using hollow stem augers.
3. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

Boring Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Boring No.**	SBGT-06
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Asssociates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast/rain	**Engineer**	E. Ashley
Date Started	10.22.18	**Completed**	10.22.18	**Driller**	Dillon
Drilling Company: LaBella Associates, DPC				**Drilling Equipment:** Geoprobe 6620 DT	

Ft.	Blows Per Six Inches 0"/6"	6"/12"	12"/18"	18"/24"	N Value	Sample No.	Depth
	1	3					
			2	2	5	1	0'-2'
	2	1					
			3	4	4	2	2'-4'
5	8	19					
			13	15	32	3	4'-6'
	15	17					
			16	13	33	4	6'-8'
	9	13					
10			12	17	25	5	8'-10'
15							
20							
25							
30							

Visual Soil and Rock Classifications

Remarks

TOPSOIL (sandy) 0'7"

Loose red-brown mottled moist SILT, some sand, trace organic, trace gravel (possible fill) 2'6"

Loose red-brown mottled moist SILT, some sand, little gravel, trace clay 5'0"

Compact grey damp GRAVEL and ROCK FRAGMENTS, little silt 6'0"

Compact tan-brown moist SILT, and SAND, little to some gravel (Rough augering below 5'6")

S-5: firm, red-tan-brown, 11'1"

Bring Terminated at 11'1" (Auger Refusal)

Notes:

1. Dry upon completion.
2. Advanced hole using hollow stem augers.
3. Bore hole backfilled using auger spoils.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 4510.0 **Page** 1 **of** 2 **Soil Probe No.** SB-01
Project Name Proposed Rochester Police Station, 1200 East Main Street, Rochester, New York
Client LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York 14604
Elevation **Weather** Overcast **Technician** E. Ashley
Date Started 10.22.2018 **Completed** 10.22.2018 **Operator** Dillon
Soil Probe Subcontractor LaBella Environmental **Equipment** Geoprobe 6620 DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 0'4" FILL Loose to firm black moist CINDERS, little sand, little silt, trace fine gravel 0'11" FILL: Firm red-brown mottled moist SILT, some sand, little to some gravel, trace clay, trace brick 2'0"
4	S-1	0'-5'	Firm red-brown mottled moist SILT, some sand, little to some gravel, trace clay
6			5'-10' firm to compact, tan-brown moist to wet
8	S-2	5'-10'	
10			
12	S-3	10'-13'1"	S-3: compact, tan-brown

Site Pictures

Soil Probe Photos

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 4510.0 **Page** 2 **of** 2 **Soil Probe No.** SB-01
Project Name Proposed Rochester Police Station, 1200 East Main Street, Rochester, New York
Client LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York 14604
Elevation **Weather** Overcast **Technician** E. Ashley
Date Started 10.22.2018 **Completed** 10.22.2018 **Operator** Dillon
Soil Probe Subcontractor LaBella Environmental **Equipment** Geoprobe 6620 DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
14			rock fragments from 12'7" to 13'1" 13'1" Soil Probes Terminated at 13'1" (Sampler Refusal)
16			
18			
20			
22			
24			Notes: 1. Dry on completion. 2. Staked locations and elevations provided by LaBella Associates, DPC

Site Pictures

Soil Probe Photos

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 4510.0 **Page** 1 **of** 2 **Soil Probe No.** SB-02
Project Name Proposed Rochester Police Station, 1200 East Main Street, Rochester, New York
Client LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York 14604
Elevation **Weather** Overcast **Technician** E. Ashley
Date Started 10.22.2018 **Completed** 10.22.2018 **Operator** Dillon
Soil Probe Subcontractor LaBella Environmental **Equipment** Geoprobe 6620 DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications / Remarks
2			TOPSOIL 0'7" FILL: Firm red-brown-black moist SAND, some silt, some gravel, little cinders, little asphalt, trace brick
4	S-1	0'-5'	
6			grey damp concrete pieces from 4'8" to 5'0" 5'3" Firm to compact red-brown-grey moist SAND, some silt, some gravel,
8	S-2	5'-10'	rock pieces from 6' to 7'
10			
12	S-3	10'-12'8"	S-3: compact, tan-brown, moist to wet

Site Pictures

Soil Probe Photos

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 4510.0 **Page** 2 **of** 2 **Soil Probe No.** SB-02
Project Name Proposed Rochester Police Station, 1200 East Main Street, Rochester, New York
Client LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York 14604
Elevation **Weather** Overcast **Technician** E. Ashley
Date Started 10.22.2018 **Completed** 10.22.2018 **Operator** Dillon
Soil Probe Subcontractor LaBella Environmental **Equipment** Geoprobe 6620 DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
14			12'8" Soil Probes Terminated at 12'8" (Sampler Refusal)
16			
18			
20			
22			
24			Notes: 1. Dry on completion. 2. Staked locations and elevations provided by LaBella Associates, DPC

Site Pictures

Soil Probe Photos

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 4510.0 **Page** 1 **of** 2 **Soil Probe No.** SB-03
Project Name Proposed Rochester Police Station, 1200 East Main Street, Rochester, New York
Client LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York 14604
Elevation **Weather** Overcast **Technician** E. Ashley
Date Started 10.22.2018 **Completed** 10.22.2018 **Operator** Dillon
Soil Probe Subcontractor LaBella Environmental **Equipment** Geoprobe 6620 DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications / Remarks
2			TOPSOIL, (sandy) trace asphalt 0'8" FILL: Loose dark-brown moist SILT and SAND, some gravel, little organic, trace brick 2'0"
4	S-1	0'-5'	POSSIBLE FILL: Firm red-brown moist SAND, some fine gravel, little silt 3'3"
6			Compact red-brown moist SAND, some silt, some gravel, trace clay
8	S-2	5'-8'	8'0" Soil Probe Terminated at 8'0" (Sampler Refusal)
10			
12			Notes: 1. Dry on completion. 2. Staked locations and elevations provided by LaBella Associates, DPC

Site Pictures

Soil Probe Photos

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 4510.0 **Page** 1 **of** 2 **Soil Probe No.** SB-04
Project Name Proposed Rochester Police Station, 1200 East Main Street, Rochester, New York
Client LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York 14604
Elevation **Weather** Overcast **Technician** E. Ashley
Date Started 10.22.2018 **Completed** 10.22.2018 **Operator** Dillon
Soil Probe Subcontractor LaBella Environmental **Equipment** Geoprobe 6620 DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 0'5" FILL: Firm dark brown-black moist SILT, some sand, little organic, trace gravel, trace asphalt, trace coal fragments 1'1"
4	S-1	0'-5'	POSSIBLE FILL: Firm red-brown moist SAND, some silt, little gravel, trace organic 2'4" Compact tan-brown-red moist SAND, some silt, some gravel, some clay
6			
8	S-2	5'-10'	5'0" Compact tan-brown moist SAND, some gravel, little silt
10			10'-14'8" same, from 10'6" to 11'3"
12	S-3	10'-14'8""	10'6" Compact, tan-brown, moist to wet SAND, some silt, little gravel 11'3"

Site Pictures

Soil Probe Photos

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No. 4510.0 **Page** 2 **of** 2 **Soil Probe No.** SB-04
Project Name Proposed Rochester Police Station, 1200 East Main Street, Rochester, New York
Client LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York 14604
Elevation **Weather** Overcast **Technician** E. Ashley
Date Started 10.22.2018 **Completed** 10.22.2018 **Operator** Dillon
Soil Probe Subcontractor LaBella Environmental **Equipment** Geoprobe 6620 DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
14			Compact tan-brown moist SAND, some gravel, little silt
16			14'8" Soil Probe Terminated at 14'8" (Sampler Refusal)
18			
20			
22			
24			Notes: 1. Dry on completion. 2. Staked locations and elevations provided by LaBella Associates, DPC

Site Pictures

Soil Probe Photos

LaBella
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300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING:	SB-05
SHEET	1 OF 1
JOB:	2182882
CHKD BY:	DN
DATE:	10/22/2018

CONTRACTOR:	LaBella Env. LLC	BORING LOCATION:		TIME:	1523 TO 1538
DRILLER:	DH	GROUND SURFACE ELEVATION	NA	DATUM:	NA
LABELLA REPRESENTATIVI	MM	START DATE: 10/22/18	END DATE: 10/22/18	WEATHER:	Cloudy

TYPE OF DRILL RIG: Geoprobe 6620DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE: Macrocore
INSIDE DIAMETER: 2"
OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	34		0	Organics, dark silt, no odor, topsoil.	0.0	
1			1	Light brown silt, tightly packed minor coarse sand. No odor, no staining.	0.0	
2						
3			2.3	More coarse sand, light brown silt/some sand. Some medium subangular gravel.	0.0	
4						
5	30					
6			5.7	Light brown sand, medium subangular gravel, tightly packed silt/some sand. No odor, no staining.	0.0	
7						
8			8	Refusal 8'	0.0	
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	Samples 6-8'
NA	NA	NA	NA	8.0	No	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface	and = 35 - 50%	C = Coarse	R = Rounded
NA = Not Applicable	some = 20 - 35%	M = Medium	A = Angular
	little = 10 - 20%	F = Fine	SR = Subrounded
	trace = 1 - 10%	VF = Very Fine	SA = Subangular

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Soil Probe Log

Project No.	4510.0	**Page** 1 **of** 2		**Soil Probe No.**	SB-07
Project Name	Proposed Rochester Police Station, 1200 East Main Street, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York 14604				
Elevation		**Weather**	Overcast	**Technician**	E. Ashley
Date Started	10.22.2018	**Completed**	10.22.2018	**Operator**	Dillon
Soil Probe Subcontractor	LaBella Environmental			**Equipment**	Geoprobe 6620 DT

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 0'6" FILL: Firm red-brown-black mottled moist to wet SILT, some sand, little gravel, trace to little organic 1'10"
4	S-1	0'-5'	Compact tan-brown moist SAND, some gravel, some silt, trace organic at 2'6"
6			
8	S-2	5'-8'	S-2: red-brown-tan wet to saturated from 6'-6'6" 8'0" Soil Probe Terminated at 8'0" (Sampler Refusal)
10			
12			Notes: 1. Dry on completion. 2. Staked locations and elevations provided by LaBella Associates, DPC

Site Pictures

Soil Probe Photos

LaBella
Powered by partnership

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT
Phase II Environmental Site Assessment
Location:
Various East Main & Laura Street Properties
Client:
City of Rochester

BORING: SB-08
SHEET 1 OF 1
JOB: 2182815
CHKD BY: DN
DATE: 11/1/2018

CONTRACTOR:	NYEG Drilling	BORING LOCATION: see map		TIME:	TO
DRILLER:	Chris	GROUND SURFACE ELEVATION	NA	DATUM:	NA
LABELLA REPRESENTATIVI	ED/JP	START DATE: 11/1/18	END DATE: 11/1/18	WEATHER:	Cloudy, rain, 50s

TYPE OF DRILL RIG: Geoprobe 7720DT
AUGER SIZE AND TYPE: NA
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE: 5 ft Macrocore
INSIDE DIAMETER: 2"
OTHER:

DEPTH (FEET BGS)	SAMPLE RECOVERY (INCHES)	SAMPLE NO. AND DEPTH	STRATA CHANGE (FEET BGS)	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0				0-0.75 ft: asphalt and mf Gravel base (A)	0': 0	
1		1 - 0.75 to 1.25 ft	0.75	@ 0.75 ft: dark brown to black SILT, some cinders, little cmf Gravel (A to SA), dry - fill	1': 0	
2			1.25	@ 1.25 ft: light brown SILT, little vf Sand, little cmf Gravel, trace Clay, Fe mottling, moist	2': 0	
3	45" ↓				3': 0	
4				@4.0 ft: as above with some vf Sand, some cmf Gravel (SA)	4': 0	
5					5': 0	
6					6': 0	
7					7': 0	
8	31" ↓				8': 0	
9					9': 0	
10					10': 0	
11					11': 0	
12	24" ↓			@ 11.5 ft: 3" clay lense	12': 0	
13		2 - 12.75 to 13.4 ft		@ 12.75 ft: grey to black (discoloration) cmf Gravel (A to SA) and Silt, wet sewage-	13': 0.4	
			12.75	type odor; no sheen	13.4': 0.2	
14				13.4		
15				Total depth = 13.4 ft bgs (refusal on presumed bedrock)		
16						
17						
18						
19						
20						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	Collect soil samples from 0.75-1.25 ft bgs & 12.75-13.4 ft bgs for analysis grey-black discoloration & sewage-type odor from 12.75-13.4 ft
NA	NA	NA	NA	13.4	No	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER

BGS = Below Ground Surface
NA = Not Applicable

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Pit No.**	TP18-1
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast/rain, 40's	**Engineer**	E. Ashley
Date Started	10.17-2018	**Completed**	10.17-2018	**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC			**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
			TOPSOIL, roots, cobbles, trace bottle, plastic, brick 1'10" Compact to dense red-brown damp to moist SILT, some sand, little to some gravel, few to little cobbles, trace roots, trace organics, few boulders
2			
	S-1	2'6"	
4			large slab rock north end of the test pit at 3'7"
6			
			7'0" Test Pit Terminated at 7'0" (Refusal)
8			
10			
			Notes: 1. Sides vertical upon completion. 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC.
12			

Site Pictures

TP18-1

Spoil Pile

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Pit No.**	TP18-2
Project Name	Proposed Rochester Police Station. 1200 East Main, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast/rain, 40's	**Engineer**	E. Ashley
Date Started	10.17-2018	**Completed**	10.17-2018	**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC			**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 0'3" FILL: Firm black damp to moist SILT, some sand, little to some gravel, little organic, trace roots 1'0" TOPSOIL 2'0"
4	S-1	3'6"	Firm to compact red-brown moist SILT, some sand, little to some gravel, few to little cobbles, few boulders
6			5'9"
8			Test Pit Terminated at 5'9" (Refusal)
10			
12			Notes: 1. Sides vertical upon completion. 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC.

Site Pictures

TP18-2

Spoil Pile

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Pit No.**	TP18-3
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast/rain, 40's	**Engineer**	E. Ashley
Date Started	10.17-2018	**Completed**	10.17-2018	**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC			**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2	S-1	0'6"	ROOT MAT 0'2" FILL: Loose grey-brown moist SAND, little to some gravel, trace to little silt, trace roots, few cobbles 1'3" FILL: Firm red-brown-black moist SILT, some sand, little gravel, trace ash, trace wire, trace roots, trace organic
4			black from 3'4" to 3'8" 3'8" Firm to compact red-brown moist SILT, some sand, some gravel, few to little cobbles, few boulders/slab rock
6			
8			
10			10'5"
12			Test Pit Terminated at 10'5" (Refusal)

Notes:
1. Sides vertical upon completion.
2. Dry on completion.
3. Staked location provided by LaBella Associates, DPC.

Site Pictures

TP18-3

Spoil Pile

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Pit No.**	TP18-4
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast/rain, 40's	**Engineer**	E. Ashley
Date Started	10.17-2018	**Completed**	10.17-2018	**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC			**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			FILL: Loose to firm grey moist CRUSHER-RUN STONE
4			
6			
8			7'0" Test pit terminated at 7'0"
10			Notes: 1. Sides raveled and caved continuously while digging. 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC. 4. Terminated due to raveling, caving in close proximately to environmental lines.
12			

Site Pictures

TP18-4

Spoil Pile

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Pit No.**	TP18-5
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast/rain, 40's	**Engineer**	E. Ashley
Date Started	10.17-2018	**Completed**	10.17-2018	**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC			**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 0'5" FILL: Firm brown moist SILT and SAND, some gravel, trace to little organic, few to little cobbles, trace metal, trace brick, trace plastic, trace concrete, trace asphalt
4	S-1	4'0"	
6			
8			
10			9'5" Test pit terminated at 9'5"
12			Notes: 1. Sides vertical upon completion. 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC.

Site Pictures

TP18-5

Spoil Pile

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Pit No.**	TP18-6
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast/rain, 40's	**Engineer**	E. Ashley
Date Started	10.17-2018	**Completed**	10.17-2018	**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC			**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 0'4" FILL: Firm brown moist SILT, some sand, some gravel, little to cobbles/boulders/slab rock, trace to little organic, trace to little brick, trace to little plastic, trace to little wood, trace to little concrete chunks/slab pieces
4			3'9" Test pit Terminated at 3'9" (massive obstruction)
6			
8			
10			
12			Notes: 1. Sides vertical upon completion. 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC. 4. Terminated on obstruction, not bedrock.

Site Pictures

TP18-6

Spoil Pile

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Pit No.**	TP18-7
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast/rain, 40's	**Engineer**	E. Ashley
Date Started	10.17-2018	**Completed**	10.17-2018	**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC			**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 0'8" FILL: Firm brown moist SILT, SAND, GRAVEL, little cobbles/slab rock, little organic, trace orange safety fence, trace asphalt, trace wood, trace brick
4			
6			Large obstruction southend of 5'2"
8			
10			9'0" Test Pit Terminated at 9'0"
12			Notes: 1. Sides sloughed. 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC.

Site Pictures

TP18-7

Spoil Pile

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Pit No.**	TP18-8
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Overcast/rain, 40's	**Engineer**	E. Ashley
Date Started	10.17-2018	**Completed**	10.17-2018	**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC			**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications / Remarks
2			TOPSOIL, 2" steel conduit (E-W direction) 0'4" FILL: Firm brown moist SILT, SAND, GRAVEL, little organic, little brick, little asphalt, little cobbles, little glass
4			
6			
8			6'4" Firm to compact red-brown moist SILT, some sand, some gravel, few to little cobbles and boulders/slab rock (possible fill) 8'0" Test Pit Terminated at 8'0"
10			
12			Notes: 1. Sides sloughed. 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC.

Site Pictures

TP18-8

Spoil Pile

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page**	1	**of**	1	**Test Pit No.**	TP18-9
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York						
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York						
Elevation		**Weather**	Ptly, cloudy,30's/40's			**Engineer**	E. Ashley
Date Started	10.18-2018	**Completed**	10.18-2018			**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC					**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL, ROOTS 1'3" FILL: Loose to firm brown damp SILT, some sand, little gravel, little to some brick, little to some cut slab rock, little to some ash, little to some metal, little to some tile, little to some bottles, little to some clay tile, little to some concrete, little to some glass, little to some organic ±30%, 50% brick
4			
6			5'3" Test Pit Terminated at 5'3" (Refusal)
8			
10			
12			Notes: 1. Sides vertical. 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC. 4. Obstruction west end of TP at 5'3" possible footing or rock

Site Pictures

TP18-9

Spoil Pile

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Pit No.**	TP18-10
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Ptly, cloudy,30's/40's	**Engineer**	E. Ashley
Date Started	10.18-2018	**Completed**	10.18-2018	**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC			**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 0'3" FILL: Firm brown moist SILT, SAND, and GRAVEL, little to some asphalt, little to some brick, little to some organic, little to some concrete pavers/pieces, little to some cut slab rock, little to some wire cable, little to some wood
4			
6			4'4" Firm red-brown moist SILT, some sand, some gravel, few cobbles/slab rock/boulders
8			7'0" Test Pit Terminated at 7'0" (Refusal)
10			
12			Notes: 1. Sides vertical. 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC.

Site Pictures

TP18-10

Spoil Pile

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page** 1 **of** 1		**Test Pit No.**	TP18-11
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York				
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York				
Elevation		**Weather**	Ptly, cloudy,30's/40's	**Engineer**	E. Ashley
Date Started	10.18-2018	**Completed**	10.18-2018	**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC			**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications / Remarks
2			TOPSOIL 0'3" FILL: Compact brown moist SILT, GRAVEL and COBBLES, some sand, little organic, little roots, trace brick
4			3'0" Compact red-brown moist SILT, some sand, some gravel, little cobbles/boulders/slab rock, trace clay
6			6'6" Test Pit Terminated at 6'6" (Refusal)
8			
10			
12			Notes: 1. Sides vertical. 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC.

Site Pictures

TP18-11

Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

Test Pit Log

Project No.	4510.0	**Page**	1	**of**	1	**Test Pit No.**	TP18-12
Project Name	Proposed Rochester Police Station, 1200 East Main, Rochester, New York						
Client	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York						
Elevation		**Weather**	Ptly, cloudy,30's/40's			**Engineer**	E. Ashley
Date Started	10.18-2018	**Completed**	10.18-2018			**Operator**	Pete
Backhoe Subcontractor	LaBella Associates, DPC					**Equipment**	CAT308E excavator

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			TOPSOIL 0'3" FILL: Compact brown moist SILT, SAND, and GRAVEL, little to some organics, little to some slab rock, little to some brick, little to some cobbles, little to some concrete, trace wood
4			
6			4'1" CONCRETE SLAB 4'3" Compact to dense red-brown moist SILT and SAND, little to some gravel, little to some gravel cobbles/slab rock/boulders 5'9" Test Pit Terminated at 5'9" (Refusal)
8			
10			
12			Notes: 1. Sides vertical upon completion 2. Dry on completion. 3. Staked location provided by LaBella Associates, DPC 4. Foundation still in place, visible on surface.

Site Pictures

TP18-12

Spoil Pile

LaBella
Powered by partnership
300 STATE STREET, ROCHESTER, NEW YORK
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

PROJECT NAME: Phase II Environmental Site Assessment
LOCATION: 1238/1240 East Main Street, Rochester, NY

MONITORING WELL BW-01
SHEET 1 OF 2
JOB # 2182815
CHKD. BY:

CONTRACTOR: NYEG Drilling, Inc.
DRILLER: Chris/Joel
LABELLA REPRESENTATIVE: JP/DN

BORING LOCATION
GROUND SURFACE ELEVATION
START DATE: 11/2/18

DATUM
END DATE: 11/3/18

TYPE OF DRILL RIG: CME 55
AUGER SIZE AND TYPE: 6.25-inch HAS
OVERBURDEN SAMPLING METHOD: 2" Split spoon
ROCK DRILLING METHOD: NX Core Barrel, rotary drilling

WATER LEVEL DATA

DATE	TIME	WATER	REMARKS

DEPTH	BLOW COUNT / 6"	SAMPLE INTERVAL (FT)	CORE RECOVERY	RQD (%)	VISUAL OBSERVATIONS	WELL INSTALLATION INFORMATION	PID (ppm)	NOTES
	4		19"	NA	@ 0 ft: dark brown SILT, little vf Sand, trace glass and slag, moist - fill			
1	5		↓	↓	@ 1.0 ft: light brown SILT, little vf Sand, little mf Gravel (A to SA), dry - fill			
	6							
2	6		18"					
	5		↓					
3	13							
	15							
4	10		19.5"					
	4		↓		@ 4.5 ft: as above but medium dense		0-8 ft: 0.0 ppm	
5	12							
	14				@ 5.5 ft: as above with little cmf Gravel, moist			
6	14		21"		@ 6.25 ft: pushed through cobble/stone; 2" thick and fragmented			
	15		↓		@ 6.5 ft: light brown vf SAND and Silt, little cmf Gravel, moist, dolomite-like rock			
7	17				fragment in cutting shoe			
	19							
8	14		NA		@ 8 ft: difficult augering; auger through boulder or weathered bedrock then into soil at approx.			
	NA		↓		8.5 ft			
9	↓				@ +/- 9 ft: encounter presumed weathered bedrock; drive spoon from 9-9.4 ft (spoon refusal)			
	50/0.4		3"		@ 9.2 ft: weathered dolomite in spoon and cutting shoe (3" thick)		9 ft: 10.2 ppm	
10	NA	Run 1	10-15'=62%	10-15'=49.2%	Run 1: 10-15 ft bgs: dolomite; medium light grey to medium grey; hard; fresh to light weathering;		bedrock/overburden interface	
	↓				laminar to parting bedding; very close to close fracturing; pitted to vug voids		at +/- 9 ft bgs	
11								
12								
13							Run 1 (10-15 ft): 0.0 ppm	
14					@ 14.1 ft: vug			
					@ 14.2 ft: moderate weathering of discontinuity (i.e. Fe staining)			
15		Run 2	15-20'=99%	15-20'=87.9%	@ 14.6 ft: moderate weathering of discontinuity (i.e. Fe staining)			
					Run 2: 15-20 ft bgs: dolomite; medium light grey to medium grey; hard to very hard; slighty to			
16					moderate weathering; laminar to parting bedding, close fracturing;itted to vug voids		Run 2(15-20 ft): 0.0 ppm	

NOTES: Augured through bedrock from approx. 9-10 ft bgs to form rock socket for 4" diam steel well casing.
No evidence of impairment observed during boring/well installation

GENERAL NOTES:

N LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.

ADINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
CUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

and = 35 - 50%
some = 20 - 35%
little = 10 - 20%
trace = 1 - 10%

C = Coarse
M = Medium
F = Fine
VF = Very Fine

R = Rounded
A = Angular
SR = Subrounded
SA = Subangular

BGS = Below Ground Surface
NA = Not Applicable

LaBella
Powered by partnership

00 STATE STREET, ROCHESTER, NEW YORK
NVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT

PROJECT NAME: Phase II Environmental Site Assessment
LOCATION: 1238/1240 East Main Street, Rochester, NY

MONITORING WELL BW-01
SHEET 2 OF 2
JOB # 2182815
CHKD. BY:

ONTRACTOR: NYEG Drilling, Inc.
RILLER: Chris/Joel
ABELLA REPRESENTATIVE: JP, DN

BORING LOCATION
GROUND SURFACE ELEVATION DATUM
START DATE: 11/2/18 END DATE: 11/3/18

YPE OF DRILL RIG: CME 55
UGER SIZE AND TYPE: 6.25-inch HAS
VERBURDEN SAMPLING METHOD: 2" Split spoon
OCK DRILLING METHOD: NX Core Barrel, rotary drilling

WATER LEVEL DATA

DATE	TIME	WATER	REMARKS
11/8/2018		approx 15' btoc	

DEPTH	BLOW COUNT / 6"	SAMPLE INTERVAL (FT)	CORE RECOVERY	RQD (%)	VISUAL OBSERVATIONS	WELL INSTALLATION INFORMATION	PID (ppm)	NOTES
	NA	Run 2	15-20'=99%	15-20'=87.9%	@ 15.1 ft: moderate weathering of discontinuity (i.e. Fe staining)		Run 2: 0.0 ppm	
17	↓	↓			@ 15.2 ft: vug with calcite crystals in void; at 15.4 ft: moderate weathering of discontinuity			
					moderate weathering of discontinuities observed at approx. 16.1 ft, 17.8 ft, 18.9 ft			
18								
19								
20		Run 3	20-25'=93%	20-25'=84.5%				
		↓			Run 3: 20-25 ft bgs: dolomite; medium light grey to medium grey; hard to very hard; slighty to			
21					moderate weathering; laminar bedding; close fracturing, pitted to vug voids			
22								
							Run 3: 0.0 ppm	
23					@ 22.9 ft; moderate wethering of discontinuity (staining)			
24								
25								
					25			
26								
					Total corehole depth = 25 ft bgs			
27								
28								
29							Run 1 (10-15 ft): 0.0 ppm	
30								
31								
32								

NOTES: No evidence of impairment observed in core; monitoring well BW-01 set at 24 ft (screen 24-14 ft, sandpack 24-11 ft, bentonite seal 11-9 ft, grout 9-1 ft)

ENERAL NOTES:

I LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
DINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
JR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

and = 35 - 50%	C = Coarse	R = Rounded	BGS = Below Ground Surface
some = 20 - 35%	M = Medium	A = Angular	NA = Not Applicable
little = 10 - 20%	F = Fine	SR = Subrounded	
trace = 1 - 10%	VF = Very Fine	SA = Subangular	

LaBella
Powered by partnership.
300 STATE STREET, ROCHESTER, NY
PH: (585) 454-6110 FAX: (585) 454-3066

GROUNDWATER DEVELOPMENT FORM

WELL I.D. BW-01

Project Name: East Main & Laura Street Phase II ESA
Project No.: 2182815
Location: 1238-1240 E. Main St., Rochester, NY
Development By: J. Porter
Date: 11/8/2018
Weather: overcast, 45 degrees F

PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch
Static Water Level: 15.1 -Feet
Depth of Well: 24.00 -Feet
Single Well Volume: 1.45 -Gallons

PURGE & SAMPLING METHOD

☐ Bailer - Type:
☐ Pump - Type Water Spout submersible
Sampling Device:
Pump Rate: 1.5-2.0 gpm

FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)		Comments
							Color = clear
							LNAPL or DNAPL observed = No
							Odor: NO
							Sheen: NO

Total 100.00 Gallons Purged Purge Start Time: 9:00 Purge End Time: 10:45

OBSERVATIONS:

Water quality measurements not collected during development; no sheen,odors or evidence of impairment observed during development

Well appeared to pump dry for approximately 3-5 seconds then would resume pumping for approximately 10-15 seconds; flow cycle continued throughout development.

Well Volume (1" well) = 0.0408-gal/ft.	Well Volume (4" well) = 0.65-gal/ft.
Well Volume (2" well) = 0.163-gal/ft.	

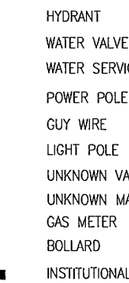
LEGEND

MW	MONITORING WELL
GV	GAS VALVE
HYD	HYDRANT
WV	WATER VALVE
WS	WATER SERVICE
UP	POWER POLE
GW	GUY WIRE
	LIGHT POLE
UV	UNKNOWN VALVE
MH	UNKNOWN MANHOLE
GM	GAS METER
BOL	BOLLARD
	INSTITUTIONAL CONTROL BOUNDARIES

NOTES:

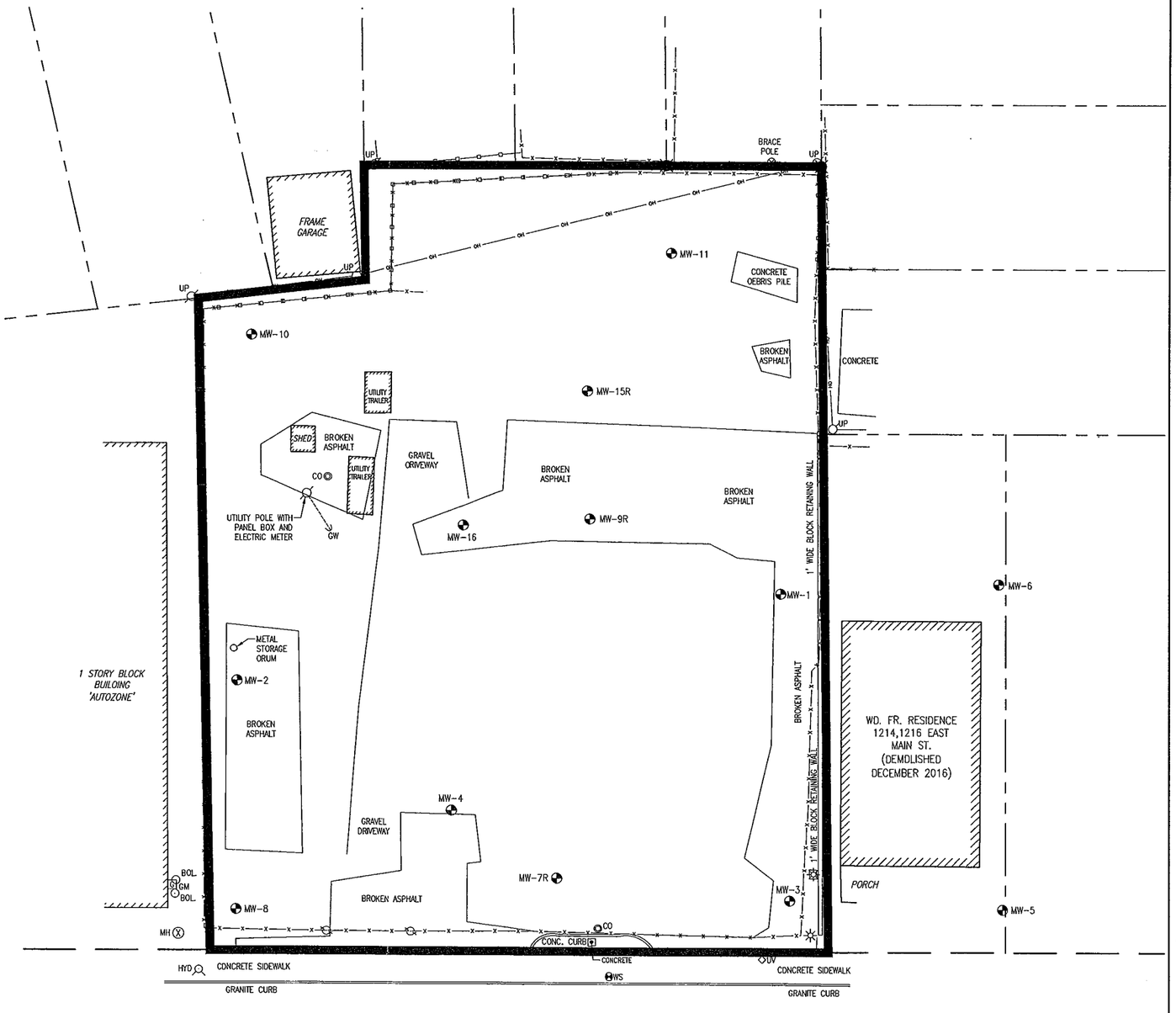
1) THE ENTIRE PROPERTY AT 1200 EAST MAIN STREET IS SUBJECT TO INSTITUTIONAL CONTROLS.

2) SEE SITE MANAGEMENT PLAN AND ENVIRONMENTAL EASEMENT FOR FURTHER DETAILS.



0 30 FT

SCALE BAR
1" = 30'



CITY OF ROCHESTER
1200 EAST MAIN ST.
ROCHESTER, NY
14614

REMEDIATION PROGRAM

BERGMANN associates
Engineers / Architects / Surveyors

REVISIONS

NO.	DATE	DESCRIPTION	REV.	CK'D

NOTE:
Unauthorized alteration or addition to this drawing is a violation of the New York State Education Law Article 145, Section 7209.

INSTITUTIONAL CONTROL BOUNDARIES

Project Manager: S. DEMEO
Designed by:
Drawn by: C. WOOD
Checked by: S. DEMEO
Date Issued: MARCH 2017
Scale: 1"=30'
Date

Project Number: 4453.05
File Name: I:\City of Rochester\004453.05\3.0\3.8\Final FER March 2017\FINAL FER Figures
Drawing Number:

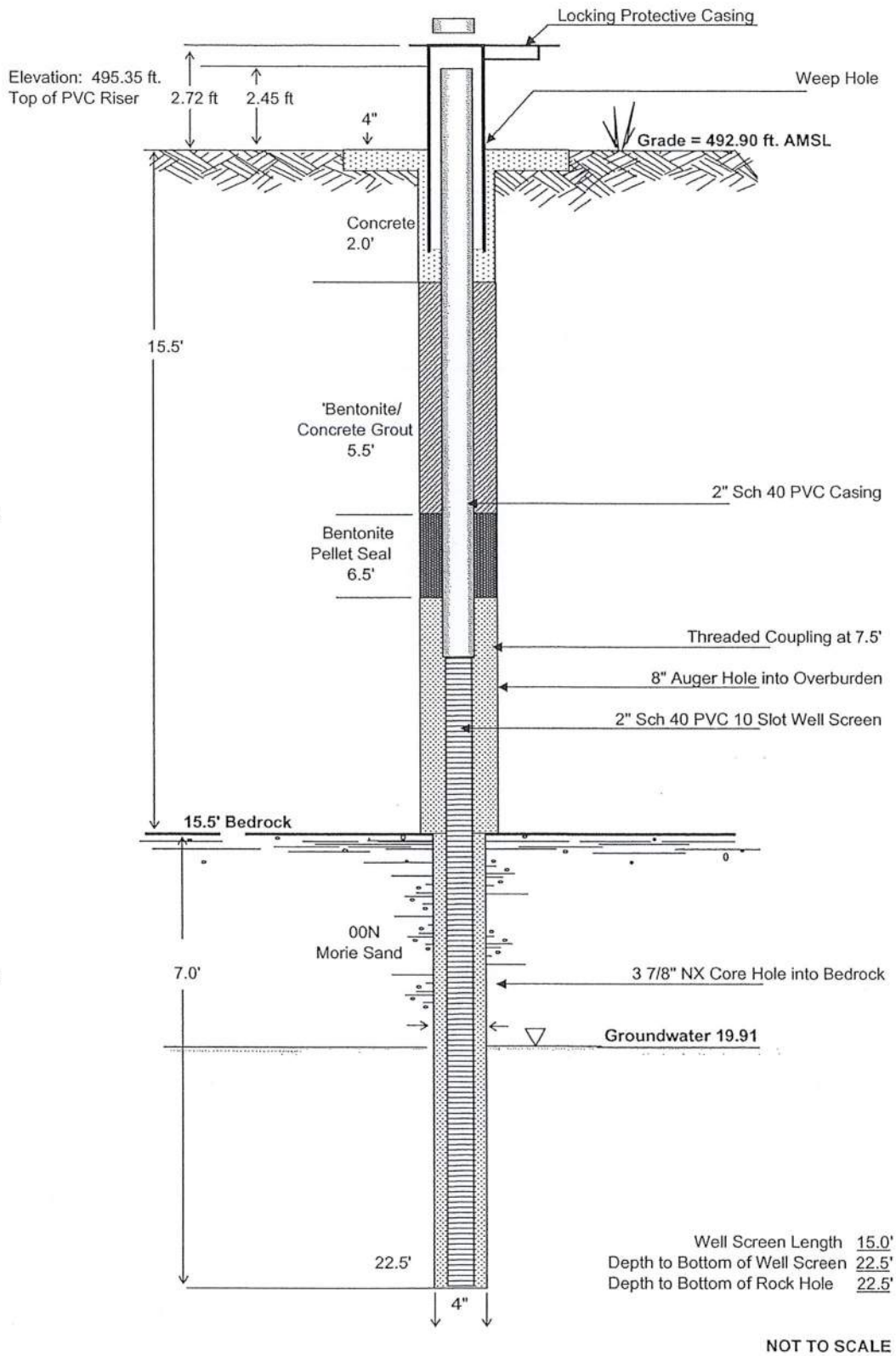
FIGURE 18

Table 8
Groundwater Elevation Measurements
Site B-00129-8
1200 East Main Street
Rochester, NY

Monitoring Well Number	Date Gauged	Total Depth of Well (ft.)	Monitoring Well Diameter (in.)	Top of Casing Reference Elevation (ft.)	Depth to Product (ft.)	Depth to Water (ft.)	Product Thickness (ft.)	Adjusted Groundwater Depth (ft.)	Calculated Groundwater Elevation (ft.)
MW-1	11/8/2016	24.08	2.00	495.35	None	19.58	0.00	19.58	475.77
MW-2	11/8/2016	24.19	2.00	496.02	None	22.34	0.00	22.34	473.68
MW-3	11/8/2016	21.79	2.00	492.02	None	16.30	0.00	16.30	475.72
MW-4	11/8/2016	21.12	2.00	492.00	None	17.19	0.00	17.19	474.81
MW-5	11/8/2016	24.51	2.00	492.70	None	NA	0.00	NA	NA
MW-6	11/8/2016	23.59	2.00	492.65	None	NA	0.00	NA	NA
MW-7R	11/8/2016	22.50	2.00	491.97	None	17.27	0.00	17.27	474.70
MW-8	11/8/2016	22.20	2.00	494.91	None	20.98	0.00	20.98	473.93
MW-9R	11/8/2016	23.47	2.00	492.41	None	13.13	0.00	13.13	479.28
MW-10	11/8/2016	26.49	2.00	496.14	None	NA	0.00	NA	NA
MW-11	11/8/2016	28.80	2.00	495.95	None	19.32	0.00	19.32	476.63
MW-12	11/8/2016	22.03	2.00	491.17	None	NA	0.00	NA	NA
MW-13	11/8/2016	22.80	2.00	490.53	None	NA	0.00	NA	NA
MW-14	11/8/2016	19.70	2.00	489.48	None	NA	0.00	NA	NA
MW-15R	11/8/2016	23.16	2.00	492.54	None	17.50	0.00	17.50	475.04
MW-16	11/8/2016	23.40	2.00	492.50	None	17.85	0.00	17.85	NA

NA = Not Available

STICKUP MONITORING WELL
MW-1



Profile Description

2.0' to 4.0'
Brown sandy silty Clay
no gravel, homogenous,
moist.

4.0' to 6.0'
sandy Clay.
rock in the end of spoon.

6.0' to 8.0'
Brown sandy silty Clay,
trace gravel, moist.

8.0' to 10.0'
Brown sandy Clay,
trace gravel some silt, wet.

10.0' to 12.0'
Brown sandy Clay,
trace gravel, wet.

12.0' to 14.0'
Brown sandy Clay,
trace gravel,wet.
Some Discoloration.

14.0' to 15.5'
Some clay, silt, gravel
and wet.
Discoloration.

15.5; to 18.0'
Decent Core sample.
Little verticle fracturing.

18.0' to 20.0'
Some horizontal fracturing

Core Recovery
76"/84"=90%

RQD
51.75"/84"=62%

20.0' to 22.5'
Smooth surfaced
laminated bedding
medium hard rock.

Bottom of Core at 22.5'.

Well Screen Length 15.0'
Depth to Bottom of Well Screen 22.5'
Depth to Bottom of Rock Hole 22.5'

NOT TO SCALE

BERGMANN associates

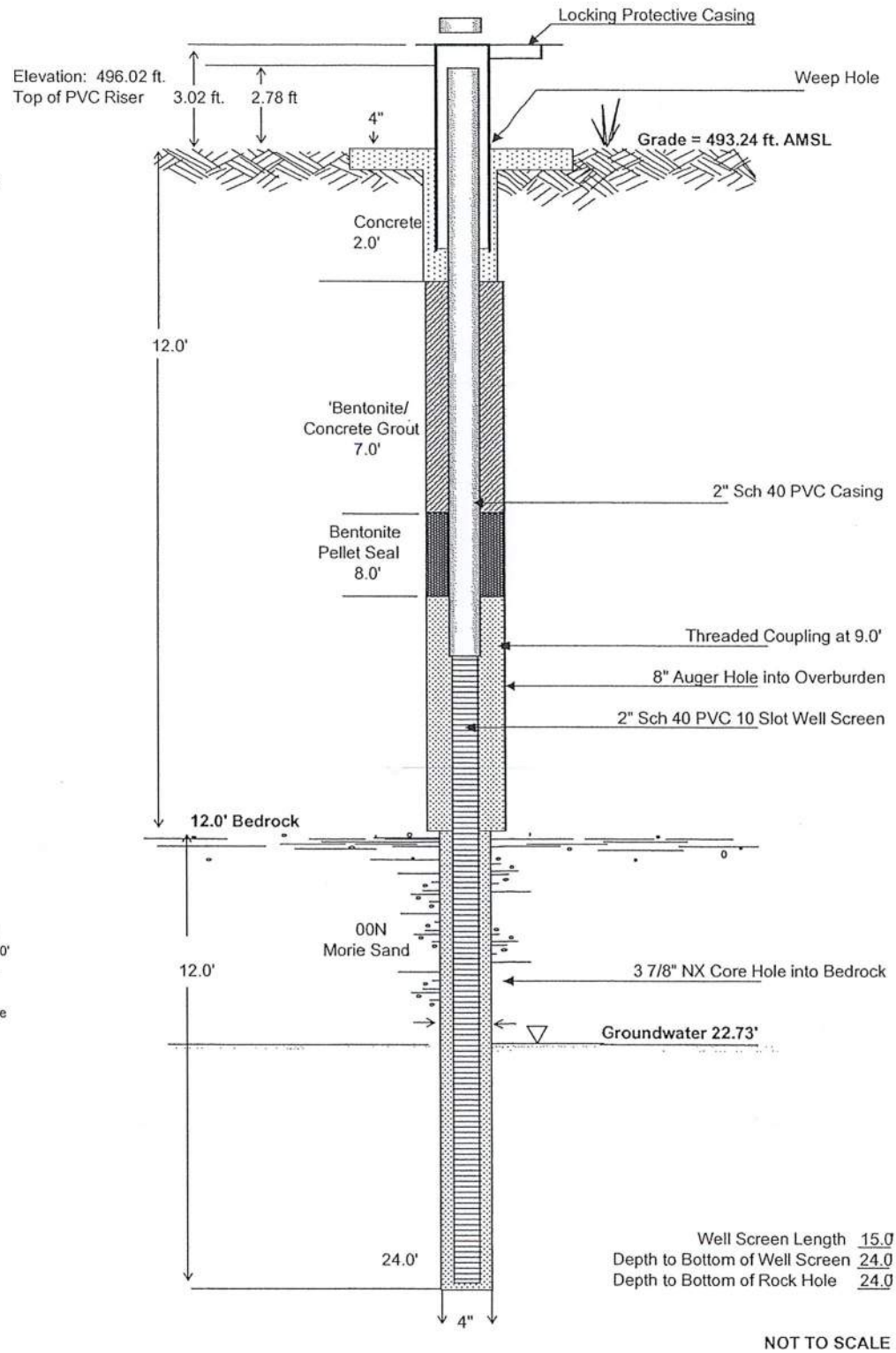
1200 East Main Street
City of Rochester, Monroe County, NY

OVERBURDEN / BEDROCK INTERFACE
MW-1 MONITORING WELL CONSTRUCTION

Date Installed
6-Jul-00

Figure
Well MW-1

STICKUP MONITORING WELL
MW-2



Profile Description

2.0' to 4.0'
sandy Silt, with cobbles.
No odor or staining.

4.0' to 6.0'
silty Sand.
No odor or staining.

6.0' to 8.0'
Sandy material
No odor or staining.

8.0' to 10.0'
Sand, with gravel, wet.
No odor or staining.

10.0' to 12.0'
Sand, with gravel, wet.

12.0' to 24.0'
No visible signs of weekness or deteriation.
Except in the 17.9' to 18.0' range, rock is crumbled.

No visible signs of verticle stressing or cracking.

Core shows no signs of discoloration.

Bottom of core at 24.0'.

Well Screen Length 15.0
Depth to Bottom of Well Screen 24.0
Depth to Bottom of Rock Hole 24.0

NOT TO SCALE

BERGMANN associates

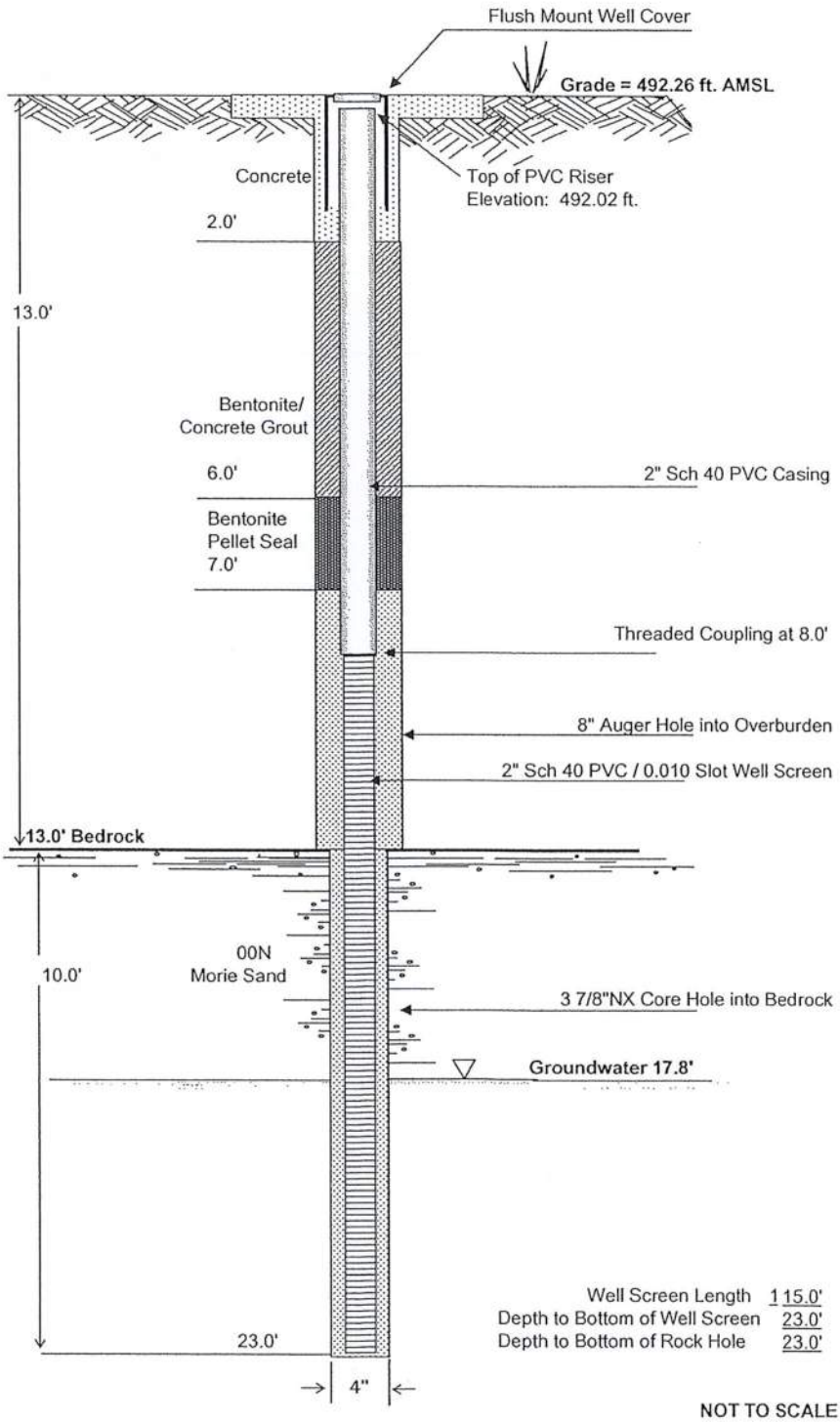
1200 East Main Street
City of Rochester, Monroe County, NY

OVERBURDEN / BEDROCK INTERFACE
MW-2 MONITORING WELL CONSTRUCTION

Date Installed
7-Jul-00

Figure
Well MW-2

FLUSHMOUNT MONITORING WELL
MW-3



Profile Description

2.0 to 13.0 ft
Mostly sandy Clay, some silt no gravel.

13.0' to 19.0'
Some vertical fracturing.
Some horizontal fracturing.

Core Recovery
107.5"/120"=90%

RQD
58.25"/120"=49%

19.0' to 23.0'
Smooth surfaced laminated bedding medium hard rock.

Bottom of core at 23.0'.

Well Screen Length	1 15.0'
Depth to Bottom of Well Screen	23.0'
Depth to Bottom of Rock Hole	23.0'

NOT TO SCALE

BERGMANN associates

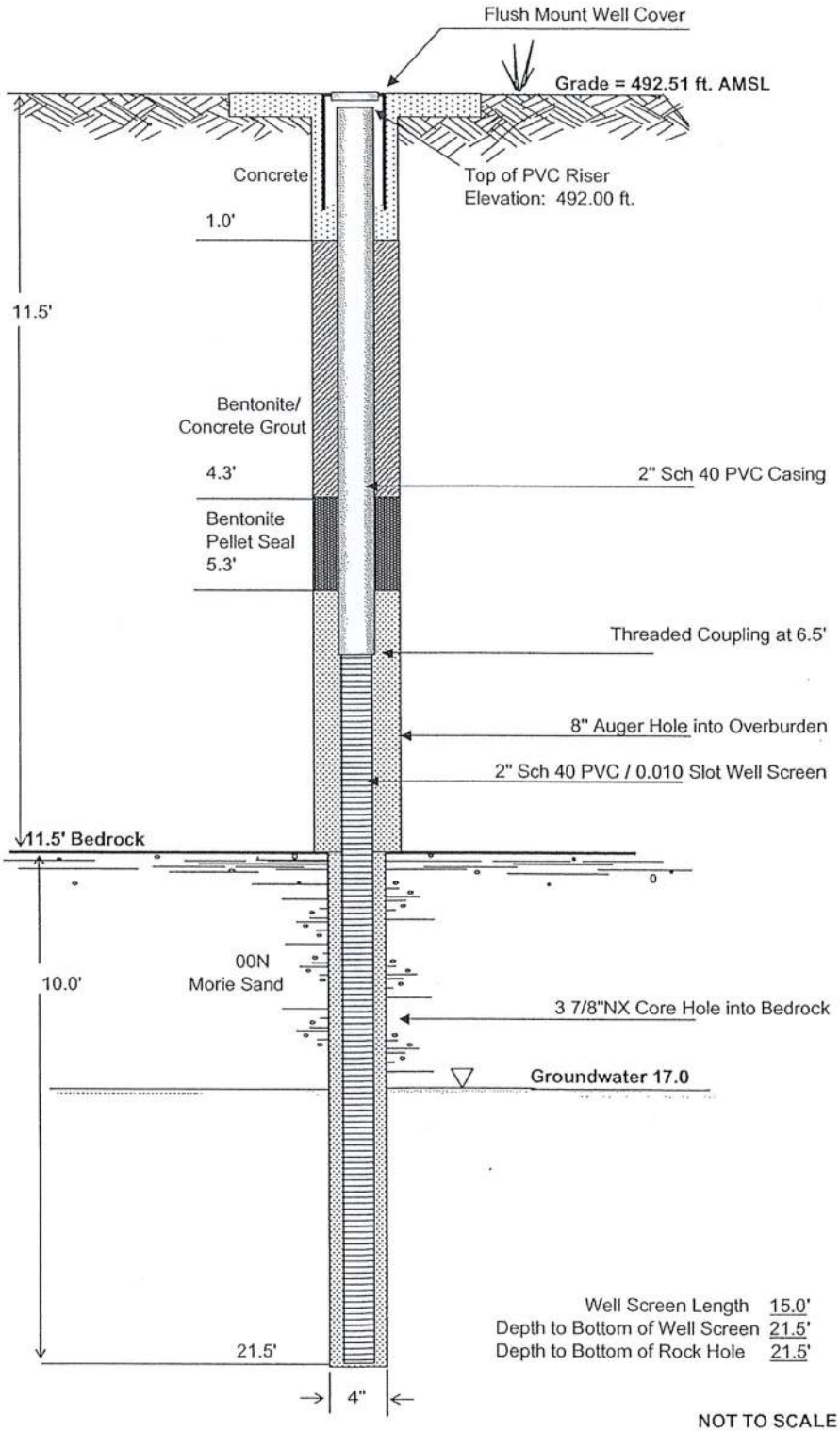
1200 East Main Street
City of Rochester, Monroe County, NY

OVERBURDEN / BEDROCK INTERFACE
MW-3 MONITORING WELL CONSTRUCTION

Date Installed: 10-Jul-00

Figure: Well MW-3

FLUSHMOUNT MONITORING WELL
MW-4



Profile Description

2.0' to 13.0'
Brown mostly sandy Silt,
trace gravel. Moist.
Homogenous to interface.

11.5' to 17.5'
Poor rock
Much vertical fracturing.
Horizontal fracturing.

Core Recovery
109"/120"=90%

RQD
52.5"/120"=44%

17.5' to 21.5'
Smooth surfaced
laminated bedding
medium hard rock.

Bottom of core at 21.5'

Well Screen Length 15.0'
Depth to Bottom of Well Screen 21.5'
Depth to Bottom of Rock Hole 21.5'

NOT TO SCALE

BERGMANN associates

1200 East Main Street
City of Rochester, Monroe County, NY

OVERBURDEN / BEDROCK INTERFACE
MW-4 MONITORING WELL CONSTRUCTION

Date: 12-Jul-00

Figure: Well MW-4

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Monitoring Well MW-5

PROJECT: 1200 East Main Street Rochester, NY | Project No: 4453.02 | Page No. 1 of 1

Start Date: 07/31/2003 | Finish Date: 08/01/2003 | Top of Well: N/A | Boring No: MW-5

Driller: Joe Gardner, Buffalo Drilling | Boring Location: In front of house at 1216 East Main Street

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Not encountered above bedrock

Drilling Method: 4-1/4 inch HAS Augers, Mobil B-61 truck rig | Water Level (Post Drilling): Approximately 15.39 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed through augers via pull back method.

Screened Interval: 25.0 ft. to 13.0 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 25.0 ft to 12.0 ft

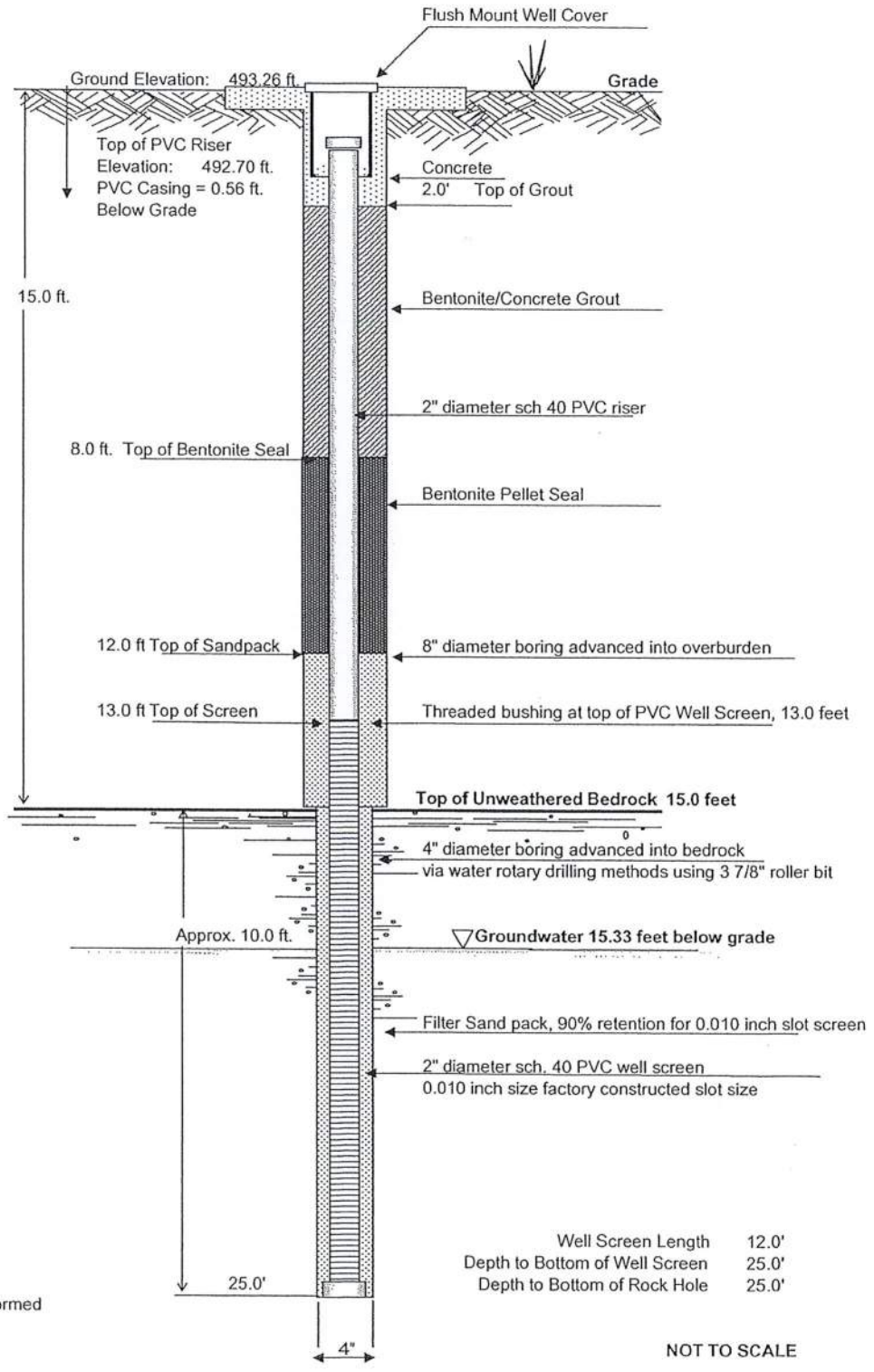
Seal: 12.0 feet to 8.0 feet | Weather Conditions: Sunny, 72 degrees in the morning

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	-	5			9	1	0-2'	soil	42%	Concrete sidewalk surface, fill to 1.0-	ND
			4	4						Damp Br. F. SAND and Silt, tr. Gravel	
	4	3			6	2	2'-4'	soil	67%	V. Moist Br. Loost F. SAND	ND
			3	5						and Silt, Some Gravel	
5	4	10			24	3	4'-6'	soil	71%	Damp Br. M. Dense F SAND	ND
			14	14						and Silt, Some Gravel	
	27	22			52	4	6'-8'	soil	88%	Damp Br. V. Dense F SAND and Silt	ND
			30	25						Some Gravel	
	12	16			25	5	8'-10'	soil	92%	Same, M. Dense, V. Moist at 10'	ND
10			9	19							
	16	24			48	6	10'-12'	soil	63%	Moist Dense F-M SAND, Some Silt,	ND
			24	28						Some Gravel	
	19	18			40	7	12'-14'	soil	50%	Same, M. Dense, moist	ND
			22	20							
15	47	50/5"			50+	8	14'-16'	soil	83%	Damp Br. Dense F-M SAND and Gravel	ND
										some Silt. Rock in split spoon 15'	
										Auger refusal at 15'. Inferred as bedrock	
										Spun casing into bedrock, to 15.0 ft.	
20										Advanced boring through bedrock	
										using 3 7/8" diameter roller bit.	
										No rock core samples collected.	
										Rock cuttings consist of	
25										fine grained grey limestone. 25'	
										Boring terminated at 25 feet	
										2" dia. monitoring well installed in boring	
30											H NU PID with 10.6 ev lamp

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL MW-5



Advanced boring into bedrock
using tri-cone roller bit. No coring performed

Well Screen Length	12.0'
Depth to Bottom of Well Screen	25.0'
Depth to Bottom of Rock Hole	25.0'

NOT TO SCALE

BERGMANN associates

1200 East Main Street
City of Rochester, Monroe County, New York
Supplemental Site Investigation

MW-5 MONITORING WELL CONSTRUCTION

Date Installed
1-Aug-03

Figure
Well MW-5

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: **Monitoring Well MW-6**

PROJECT: 1200 East Main Street Rochester, NY | Project No: 4453.02 | Page No. 1 of 1

Start Date: 07/30/2003 | Finish Date: 07/30/2003 | Top of Well: N/A | Boring No: MW-6

Driller: Joe Gardner, Buffalo Drilling | Boring Location: In the backyard of the house at 1216 East Main St.

Inspector: James marscher, Bergmann Associates | Water Level (During Drilling): Not encountered above bedrock

Drilling Method: 4-1/4 inch HAS Augers, Mobil B-61 truck rig | Water Level (Post Drilling): Approximately 15.4 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed through augers via pull back method.

Screened Interval: 24.0 ft. to 14.0 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 24.0 ft to 11.0 ft

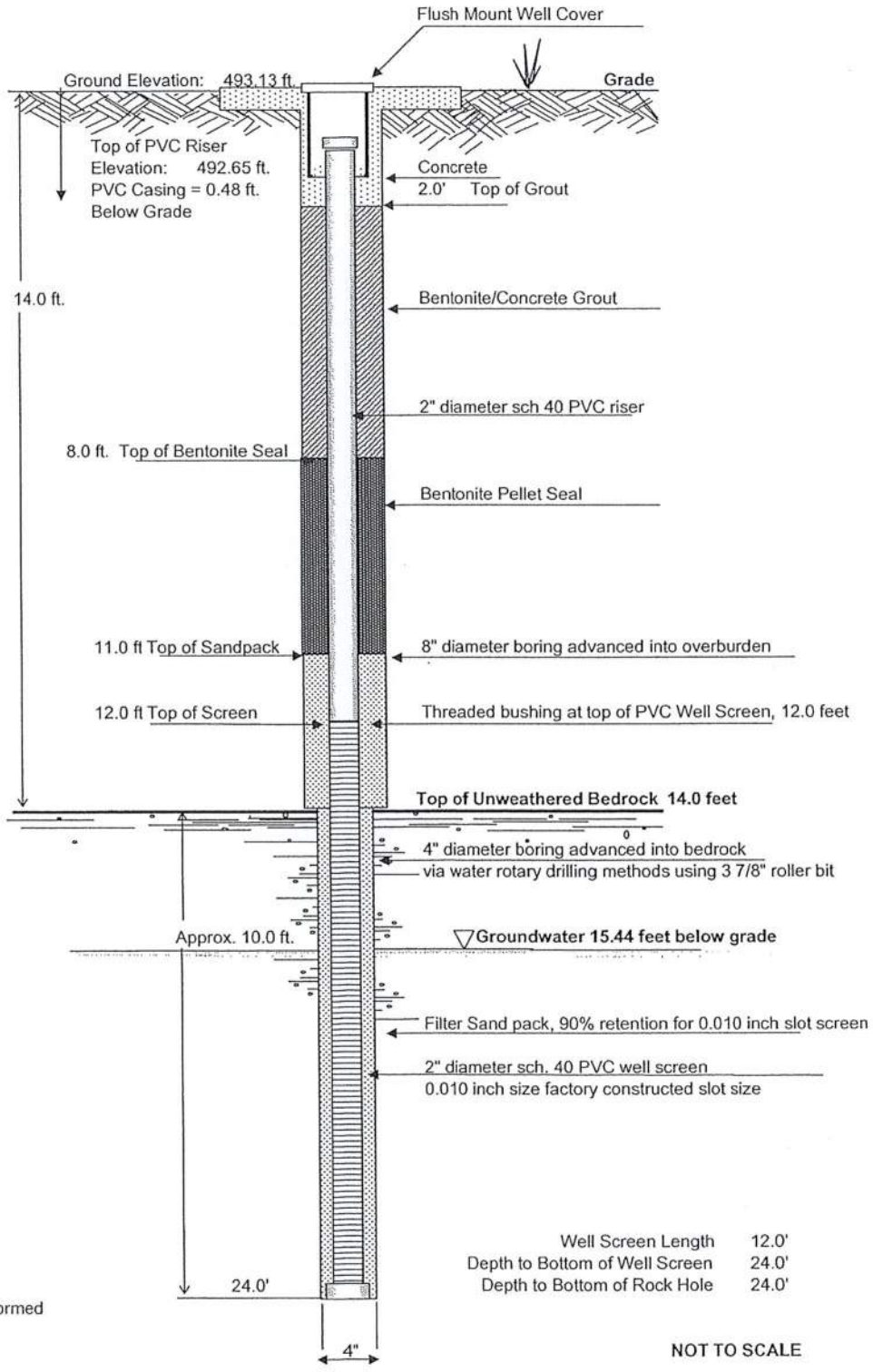
Seal: 11.0 feet to 8.0 feet | Weather Conditions: Sunny, upper 70s, lower 80s

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	3	9			22	1	0-2'	soil	38%	Brown Damp V. Stiff SILT with F. Sand with Gravel	ND
			13	17							
	14	19			38	2	2'-4'	soil	71%	Same, becomes Hard	ND
			19	22							
5	20	20			43	3	4'-6'	soil	50%	Same, Hard	ND
			23	16							
30	30	50/5"			50+	4	6'-8'	soil	91%	Same, becomes Very Hard	ND
	18	20			48	5	8'-10'	soil	88%	Damp Brown Hard SILT, Some Gravel with F. Sand	ND
10			28	18							
	15	17			36	6	10'-12'	soil	50%	Same, Moist	ND
			19	20							
	11	17				67+	12'-14'	soil	25%	Br Moist V. Hard Silt with Gravel	ND
			50/4"							Trace F. Sand. Auger refusal 14' 14.0'	
15						8	14'-16'	soil	83%		ND
										Auger refusal at 14'. Inferred as bedrock	
										Advanced boring through bedrock using 3 7/8" diameter roller bit.	
20											
										No rock core samples collected. Rock cuttings consist of fine grained grey limestone.	
										24'	
25											
										Boring terminated at 24 feet	
										2" dia. monitoring well installed in boring	
30											H NU PID with 10.6 ev lamp

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL MW-6



Advanced boring into bedrock
using tri-cone roller bit. No coring performed

Well Screen Length	12.0'
Depth to Bottom of Well Screen	24.0'
Depth to Bottom of Rock Hole	24.0'

NOT TO SCALE

BERGMANN associates

1200 East Main Street
City of Rochester, Monroe County, New York
Supplemental Site Investigation

MW-6 MONITORING WELL CONSTRUCTION

Date Installed
30-Jul-03

Figure
Well MW-6

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Monitoring Well MW-7

PROJECT: 1200 East Main Street Rochester, NY | Project No: 4453.02 | Page No. 1 of 1

Start Date: 07/28/2003 | Finish Date: 07/28/2003 | Top of Well: N/A | Boring No: MW-7

Driller: Joe Gardner, Buffalo Drilling | Boring Location: at 1200 East. Main St., along south propery line

Inspector: James Marschner, Bergmann Associates | Water Level (During Drilling): Not encountered above bedrock

Drilling Method: 4-1/4 inch HAS Augers, Mobil B-61 truck rig | Water Level (Post Drilling): Approximately 16.9 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed through augers via pull back method.

Screened Interval: 23.0 ft. to 11.0 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 23.0 ft to 10.0 ft

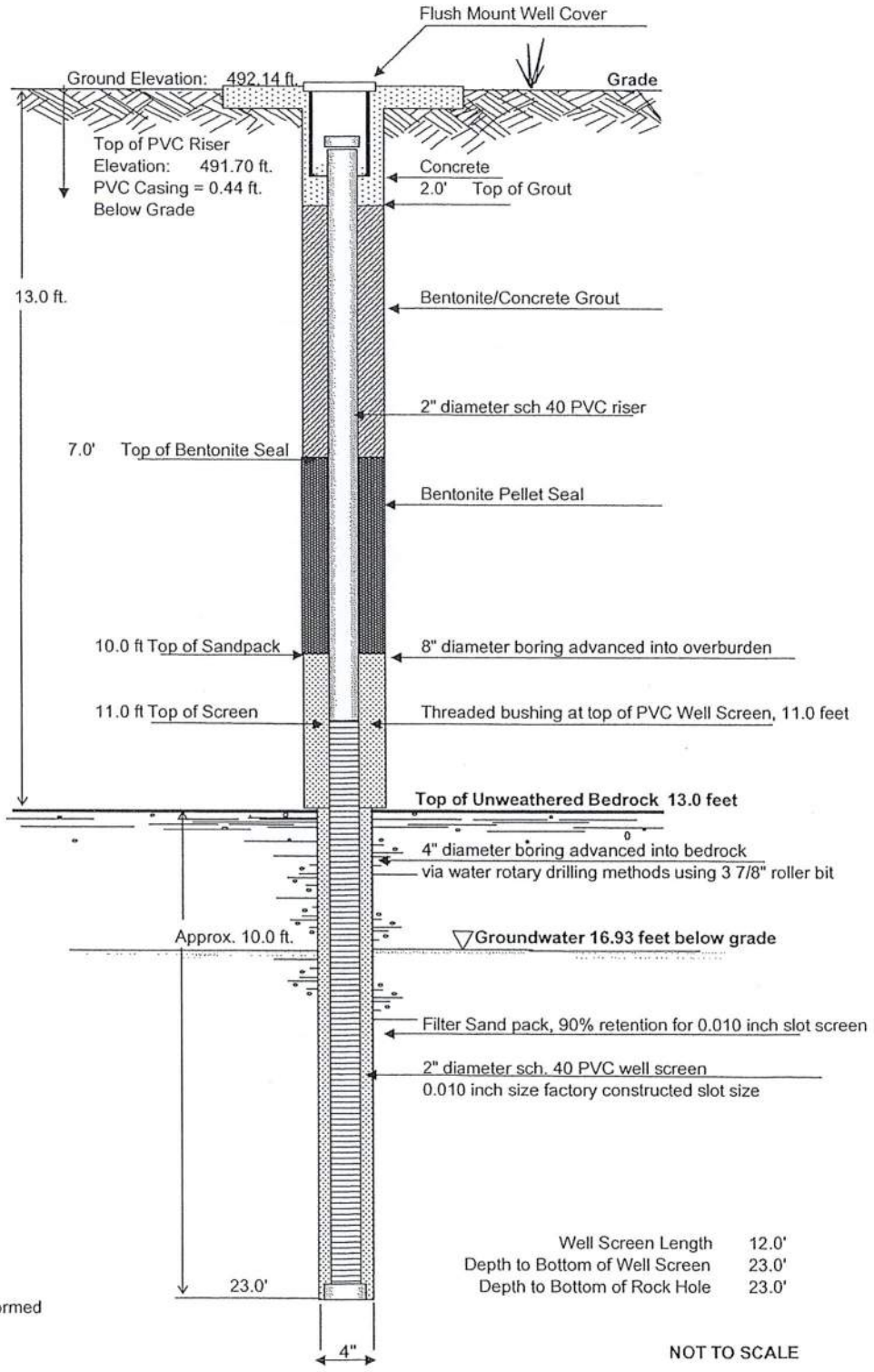
Seal: 10.0 feet to 7.0 feet | Weather Conditions: Sunny, mid-70 degrees

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	-	4			12	1	0-2'	soil	N/A	Concrete surface	ND
			8	32						Brown Moist Stiff SILT, Trace F. Sand	
	1	1			3	2	2'-4'	soil	N/A	Same to 2.4', then	0.9 ppm
			2	3						BR-Gray Moist Soft SILT, Trance F. Sand	petroleum odor
5	1	7			18	3	4'-6'	soil	N/A	Same, becomes V. Stiff, petroleum odor	23.3 ppm
			11	50/2"							petroleum odor
30	12	14			27	4	6'-8'	soil	67%	Brown moist V. Stiff SILT with F. Sand	48.1 ppm
			13	13						and Gravel	
	12	14			27	5	8'-10'	soil	71%	Same, Very Stiff, Moist	131 ppm
10			13	13							petroleum odor
	8	10			19	6	10'-12'	soil	79%	Same, Very Stiff, Moist	137 ppm
			9	7							petroleum odor
	7	50/3"					12'-14'	soil	100%	Same, Hard more gravel present 13'	166 ppm
										Auger refusal at 13.0' inferred as bedrock	petroleum odor
15						8	14'-16'	soil	83%		
										Spun casing into bedrock, to 13.0 ft.	
										Advanced boring through bedrock	
										using 3 7/8" diameter roller bit.	
										No rock core samples collected.	
20										Rock cuttings consist of	
										fine grained grey limestone.	
										23'	
25										Boring terminated at 23.0 feet	
										2" dia. monitoring well installed in boring	
											H NU PID with
30											10.6 ev lamp

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL MW-7



Well Screen Length	12.0'
Depth to Bottom of Well Screen	23.0'
Depth to Bottom of Rock Hole	23.0'

Advanced boring into bedrock
using tri-cone roller bit. No coring performed

NOT TO SCALE

BERGMANN associates	1200 East Main Street City of Rochester, Monroe County, New York Supplemental Site Investigation MW-7 MONITORING WELL CONSTRUCTION	Date Installed 28-Jul-03 Figure Well MW-7

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: **Monitoring Well MW-8**

PROJECT: 1200 East Main Street Rochester, NY | Project No: 4453.02 | Page No. 1 of 1

Start Date: 07/25/2003 Finish Date: 07/25/2003 | Top of Well: N/A | Boring No: MW-8

Driller: Joe Gardner, Buffalo Drilling | Boring Location: at 1200 East. Main St., southwest corner by fence.

Inspector: James Marschner, Bergmann Associates | Water Level (During Drilling): Not encountered above bedrock

Drilling Method: 4-1/4 inch HAS Augers, Mobil B-61 truck rig | Water Level (Post Drilling): Approximately 14.0 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed through augers via pull back method.

Screened Interval: 20.0 ft. to 8.0 ft. Slot Size: 0.010 inch Well Type: 2" dia. PVC Sandpack: 20.0 ft to 7.0 ft

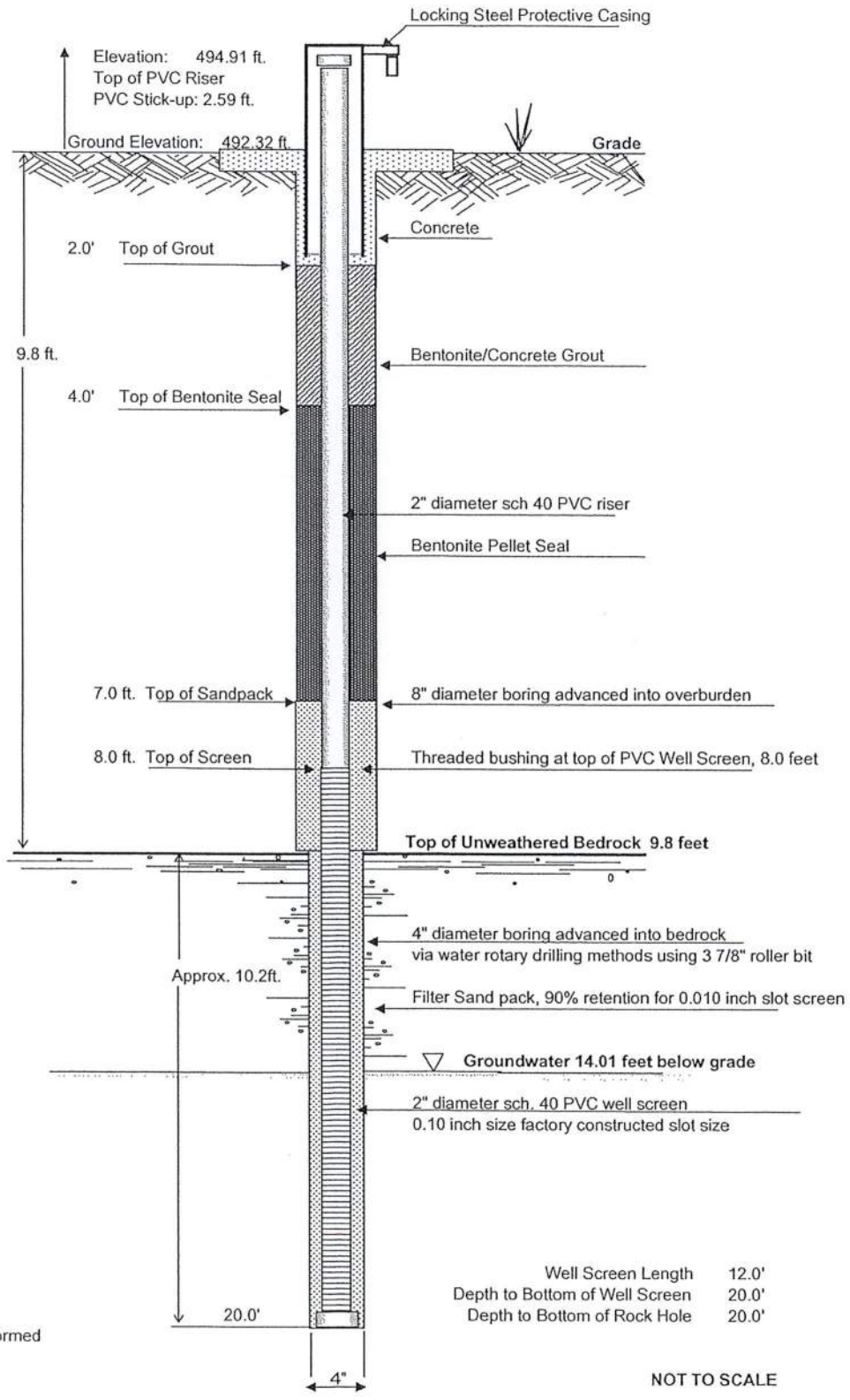
Seal: 7.0 feet to 4.0 feet | Weather Conditions: Sunny, upper 60s in the morning

Protective Steel Casing installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	7	15			26	1	0-2'	soil	58%	Grass surface, Brown Damp Hard SILT	ND
			11	4						with Gravel, Trace F. Sand	
	3	5			10	2	2'-4'	soil	75%	Same to 2.9 feet	ND
			5	8						Brown Moist Stiff SILT with Clay, Tr. Sand	
5	10	12			26	3	4'-6'	soil	8%	Same, becomes Very Stiff	ND
			14	14							
30	14	12			24	4	6'-8'	soil	71%	Same to 7.1 feet	ND
			12	9						Br. Moist F. SAND, Trace Silt	
	7	9			23	5	8'-10'	soil	62%	Brown Wet M. Dense SAND & Silt,	ND
10			14	50/3"						Trace Gravel 9.8'	
	50/0"				0	6	10'-12'	soil	0%		
										Auger refusal at 9.8' inferred as bedrock	
										Spun casing into bedrock, to 10.0 ft.	
15										Advanced boring through bedrock	
										using 3 7/8" diameter roller bit.	
										No rock core samples collected.	
										Rock cuttings consist of	
										fine grained grey limestone.	
20										20'	
										Boring terminated at 20.0 feet	
										2" dia. monitoring well installed in boring	
25											
30											H NU PID with 10.6 ev lamp

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL MW-8



Advanced boring into bedrock
using tri-cone roller bit. No coring performed

Well Screen Length	12.0'
Depth to Bottom of Well Screen	20.0'
Depth to Bottom of Rock Hole	20.0'

NOT TO SCALE

BERGMANN associates

1200 East Main Street
City of Rochester, Monroe County, New York
Supplemental Site Investigation

MW-8 MONITORING WELL CONSTRUCTION

Date Installed
25-Jul-03

Figure
Well MW-8

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Monitoring Well MW-9

PROJECT: 1200 East Main Street Rochester, NY | Project No: 4453.02 | Page No. 1 of 1

Start Date: 07/24/2003 | Finish Date: 07/24/2003 | Top of Well: N/A | Boring No: MW-9

Driller: Joe Gardner, Buffalo Drilling | Boring Location: at 1200 East. Main St., center of old parking lot.

Inspector: James Marschner, Bergmann Associates | Water Level (During Drilling): Aproximately 13.5 feet below grade

Drilling Method: 4-1/4 inch HAS Augers, Mobil B-61 truck rig | Water Level (Post Drilling): Approximately 12.5 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed through augers via pull back method.

Screened Interval: 24.0 ft. to 11.0 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 24.0 ft to 10.0 ft

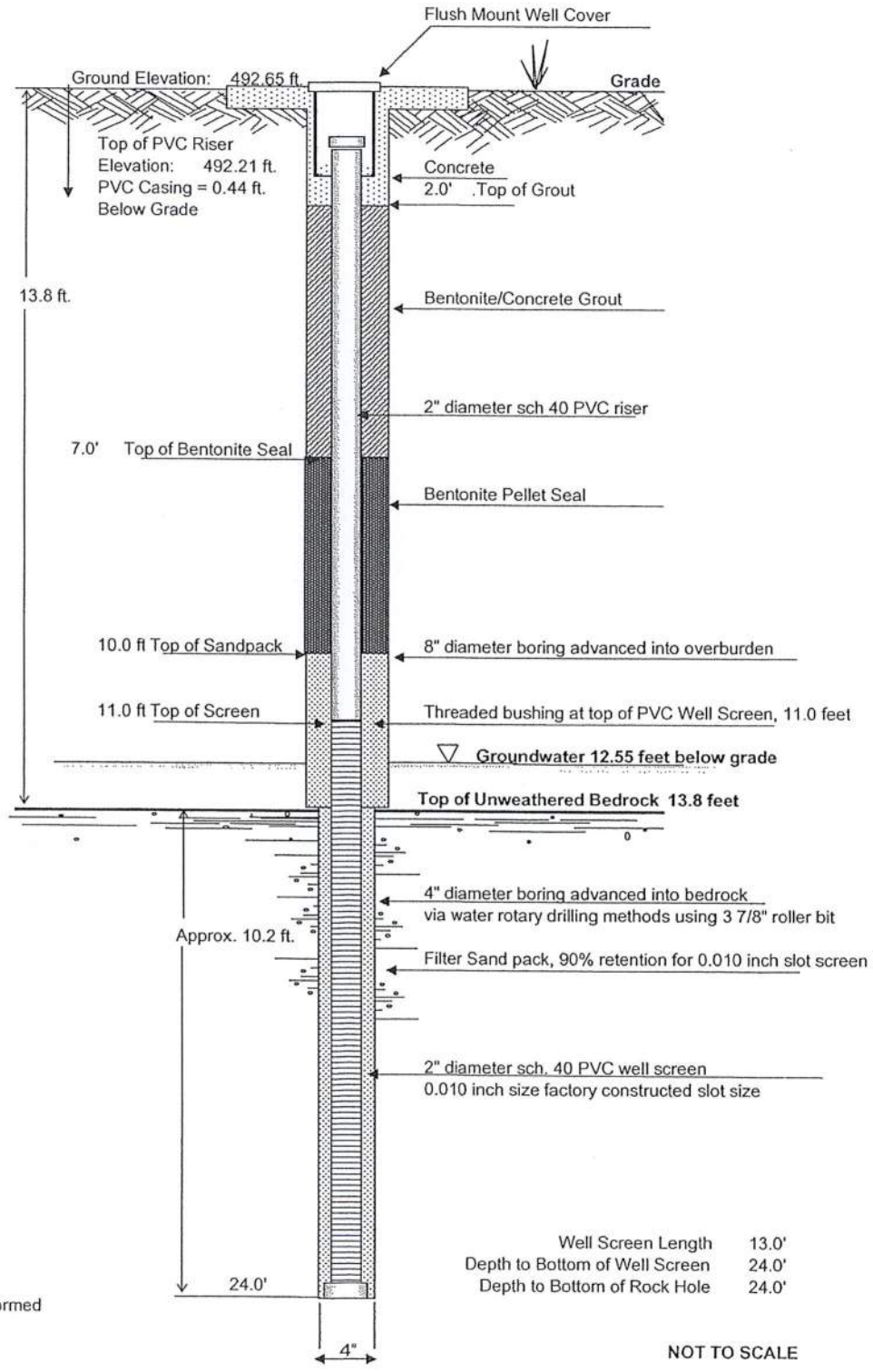
Seal: 10.0 feet to 7.0 feet | Weather Conditions: Sunny, mid-70 degrees

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	-	-			7	1	0-2'	soil	100%	Asphalt surface & gravel sub base to 1ft	ND
			7	8							
	30	27			34	2	2'-4'	soil	42%	Same to 2.4 ft.	ND
			7	50						Dense GRAVEL and C. Sand	
5	2	13			17	3	4'-6'	soil	42%	Brown Damp V. Stiff SILT, Some Gravel,	ND
			4	4						Trace F. Sand	
30	5	12			26	4	6'-8'	soil	42%	Br. Moist V. Stiff SILT, Some F. Gravel	ND
			14	17							
	2	12			24	5	8'-10'	soil	50%	Br. Moist V. Stiff SILT and F. Sand,	1.9 ppm
10			12	16						Trace Gravel	
	10	22			51	6	10'-12'	soil	42%	Same, Moist, Hard, occasional cobbles	0.9 ppm
			29	14							
	11	16			50+	7	12'-14'	soil	not recorded	Brown Wet Hard SILT and Gravel	ND
			50/3"							wet sheen. Refusal at 13.8' 13.8'	
15											
										Auger refusal at 13.8' inferred as bedrock	
										Spun casing into bedrock, to 14'	
										Advanced boring through bedrock	
20										using 3 7/8" diameter roller bit.	
										No rock core samples collected.	
										Rock cuttings consist of	
										fine grained grey limestone.	
										24.0'	
25											
										Boring terminated at 24.0 feet	
										2" dia. monitoring well installed in boring	
											H NU PID with 10.6 ev lamp
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL MW-9



Advanced boring into bedrock
using tri-cone roller bit. No coring performed

Well Screen Length	13.0'
Depth to Bottom of Well Screen	24.0'
Depth to Bottom of Rock Hole	24.0'

NOT TO SCALE

BERGMANN associates

1200 East Main Street
City of Rochester, Monroe County, New York
Supplemental Site Investigation

MW-9 MONITORING WELL CONSTRUCTION

Date Installed
24-Jul-03

Figure
Well MW-9

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Monitoring Well MW-10

PROJECT: 1200 East Main Street Rochester, NY | Project No: 4453.02 | Page No. 1 of 1

Start Date: 07/22/2003 | Finish Date: 07/22/2003 | Top of Well: N/A | Boring No: MW-10

Driller: Joe Gardner, Buffalo Drilling | Boring Location: at 1200 East. Main St., northwest corner of the site

Inspector: James Marschner, Bergmann Associates | Water Level (During Drilling): Approximately 14 feet below grade

Drilling Method: 4-1/4 inch HAS Augers, Mobil B-61 truck rig | Water Level (Post Drilling): Approximately 14.4 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed through augers via pull back method.

Screened Interval: 24.0 ft. to 11.0 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 24.0 ft to 10.0 ft

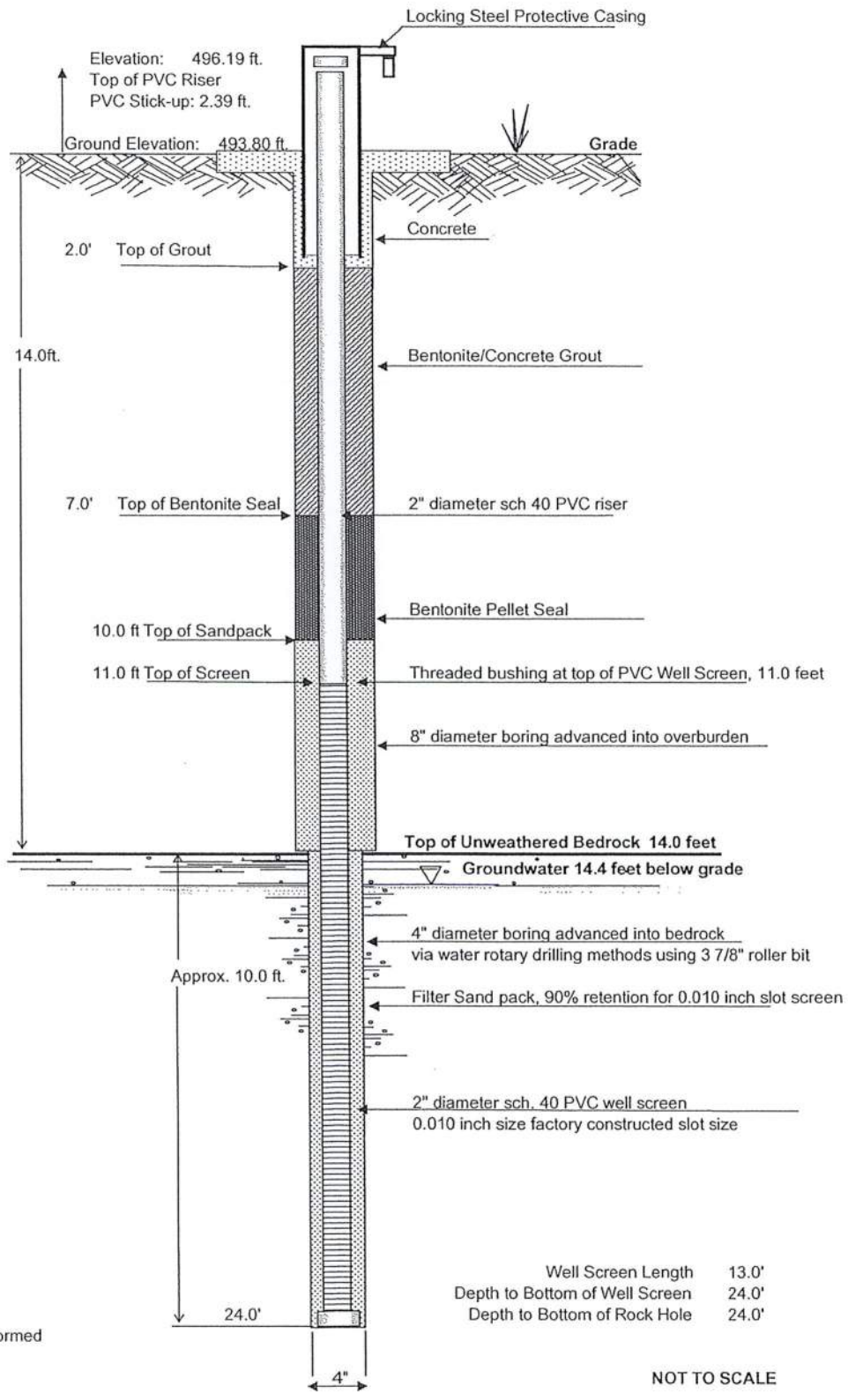
Seal: 10.0 feet to 7.0 feet | Weather Conditions: Cloudy, 70s in the morning

Protective Steel Casing installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	7	8			26	1	0-2'	soil	33%	Gravelly Silt to 0.4 ft. Brown Damp Stiff SILT, Some Gravel, Trace Silt	ND
			18	17							
	8	9			14	2	2'-4'	soil	50%	Same, Stiff, Damp	ND
			5	5						Same to 3.6 feet	
5	11	12			20	3	4'-6'	soil	58%	Dark Br. Damp SILT, Trace Sand to 4.2'	ND
			8	12						At 4.2' begin Brown Damp Stiff SILT,	
30	10	15			65+	4	6'-8'	soil	100%	Some Gravel, trace rootlets	ND
			50/2"							Same, becomes Hard	
	33	26			43	5	8'-10'	soil	29%	Brown Damp Hard SILT and Gravel,	ND
10			17	9						trace F. Sand	
	7	20			36	6	10'-12'	soil	38%	Brown Damp Hard SILT and Sand,	ND
			16	19						some Gravel. Moist at 12'	
	17	25			45	7	12'-14'	soil	46%	Same, Hard, becomes Wet at 14'	ND
			20	18						Gravel stone in shoe. No recovery 14.0'	
15	50/1"				50+	8	14'-16'	soil	none	Auger refusal at 14.0' inferred as bedrock	
							16-'18'	soil	none	Spun casing into bedrock, to 14.1 ft. Advanced boring through bedrock using 3 7/8" diameter roller bit. No rock core samples collected.	
20											
										Rock cuttings consist of fine grained grey limestone.	
										24.0'	
25											
										Boring terminated at 24.0 feet	
										2" dia. monitoring well installed in boring	
											H NU PID with 10.6 ev lamp
30											

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL MW-10



Well Screen Length	13.0'
Depth to Bottom of Well Screen	24.0'
Depth to Bottom of Rock Hole	24.0'

Advanced boring into bedrock
using tri-cone roller bit. No coring performed

NOT TO SCALE

BERGMANN associates	1200 East Main Street City of Rochester, Monroe County, New York Supplemental Site Investigation MW-10 MONITORING WELL CONSTRUCTION	Date Installed 22-Jul-03 Figure Well MW-10

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Monitoring Well MW-11

PROJECT: 1200 East Main Street Rochester, NY | Project No: 4453.02 | Page No. 1 of 1

Start Date: 07/23/2003 | Finish Date: 07/23/2003 | Top of Well: N/A | Boring No: MW-11

Driller: Joe Gardner, Buffalo Drilling | Boring Location: at 1200 East. Main St., northeastern area of the site

Inspector: James Marschner, Bergmann Associates | Water Level (During Drilling): Aproximately 15 feet below grade

Drilling Method: 4-1/4 inch HAS Augers, Mobil B-61 truck rig | Water Level (Post Drilling): Approximately 14.6 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed through augers via pull back method.

Screened Interval: 26.4 ft. to 12.9 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 26.5 ft to 11.8 ft

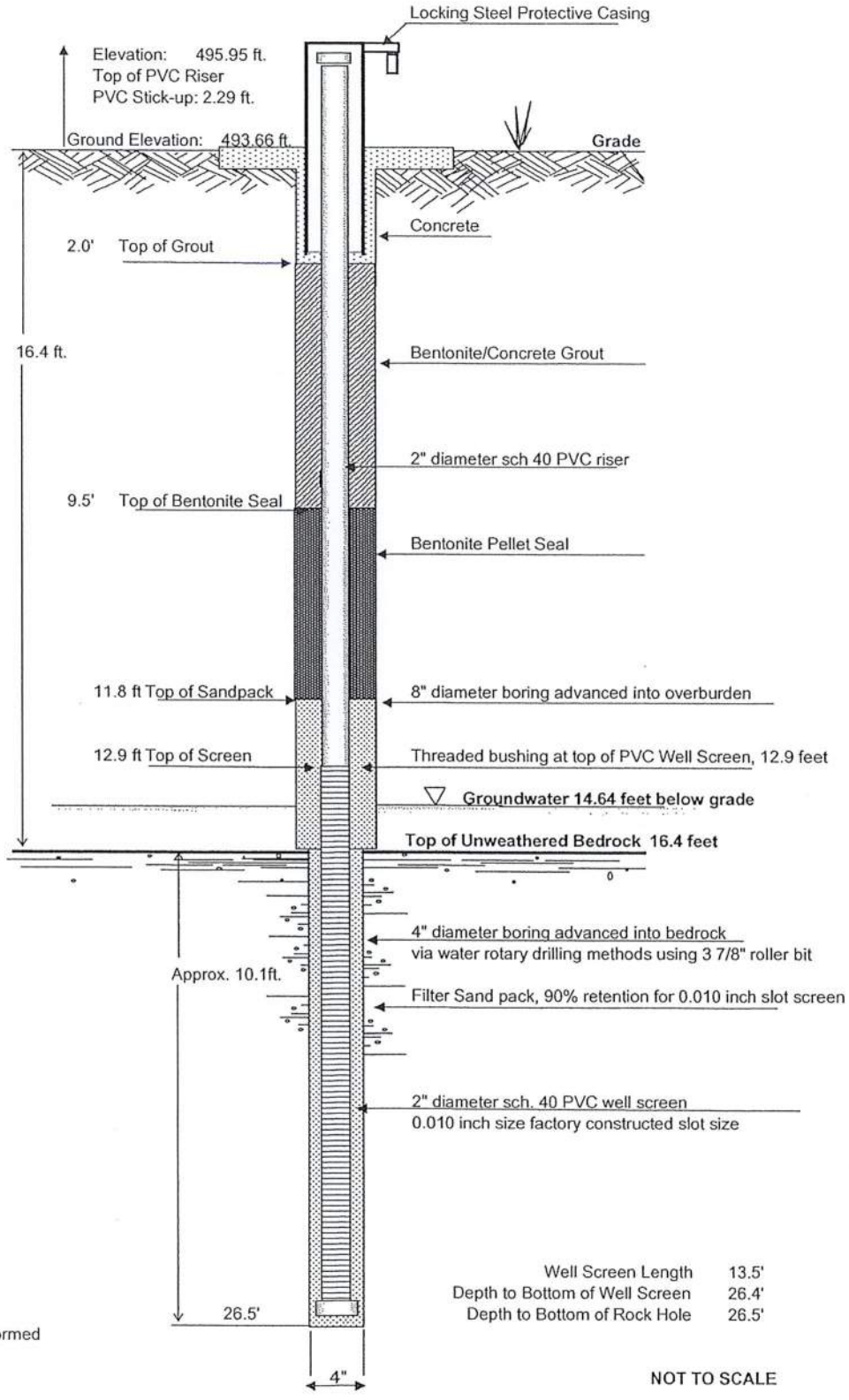
Seal: 11.8 feet to 9.5 feet | Weather Conditions: Sunny, upper 60s in the morning

Protective Steel Casing installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	5	12			21	1	0-2'	soil	63%	Dark Br. Damp Stiff SILT with Gravel	ND
			9	8						Trace F. Sand to 2.1 feet	
	7	10			20	2	2'-4'	soil	75%	at 2.1 ft: Tan Brown Moist Stiff SILT	ND
			10	12						Some Gravel Trace F. Sand	
5	14	28			48	3	4'-6'	soil	75%	Br. Damp Hard SILT and Gravel,	ND
			20	18						Trace F. Sand	
30	6	5			19	4	6'-8'	soil	58%	Brown Damp Stiff SILT with Gravel,	ND
			14	10						Trace F. Sand	
	3	5			10	5	8'-10'	soil	58%	Same, becomes Medium Stiff, Moist	ND
10			5	10							
	5	14			31	6	10'-12'	soil	63%	Same, Very Stiff	ND
			17	15							
	7	14			37	7	12'-14'	soil	42%	Brown Wet Hard SILT and Gravel,	ND
			23	15						with F. Sand	
15	39	18			32		14'-16'	soil	13%	Brown wet Dense GRAVEL, water sheen	0.1 ppm
			14	14						16.4'	Slight petroleum
	50/4"						16-'18'	soil	none	Auger refusal at 16.4' inferred as bedrock	odor
										Spun casing into bedrock, to 16.5 ft.	
20										Advanced boring through bedrock	
										using 3 7/8" diameter roller bit.	
										No rock core samples collected.	
										Rock cuttings consist of	
										fine grained grey limestone.	
25											
										26.5'	
										Boring terminated at 26.5 feet	
										2" dia. monitoring well installed in boring	H NU PID with
30											10.6 ev lamp

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL MW-11



Well Screen Length	13.5'
Depth to Bottom of Well Screen	26.4'
Depth to Bottom of Rock Hole	26.5'

Advanced boring into bedrock
using tri-cone roller bit. No coring performed

NOT TO SCALE

BERGMANN associates	1200 East Main Street City of Rochester, Monroe County, New York Supplemental Site Investigation MW-11 MONITORING WELL CONSTRUCTION	Date Installed 23-Jul-03 Figure Well MW-11

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: Monitoring Well MW-12

PROJECT: 1200 East Main Street Rochester, NY | Project No: 4453.02 | Page No. 1 of 1

Start Date: 07/29/2003 | Finish Date: 07/29/2003 | Top of Well: N/A | Boring No: MW-12

Driller: Joe Gardner, Buffalo Drilling | Boring Location: In sidewalk along south side of East Main St.

Inspector: James Marschner, Bergmann Associates | Water Level (During Drilling): Not encountered above bedrock

Drilling Method: 4-1/4 inch HAS Augers, Mobil B-61 truck rig | Water Level (Post Drilling): Approximately 17.4 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed through augers via pull back method.

Screened Interval: 22.5 ft. to 10.5 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 22.5 ft to 9.5 ft

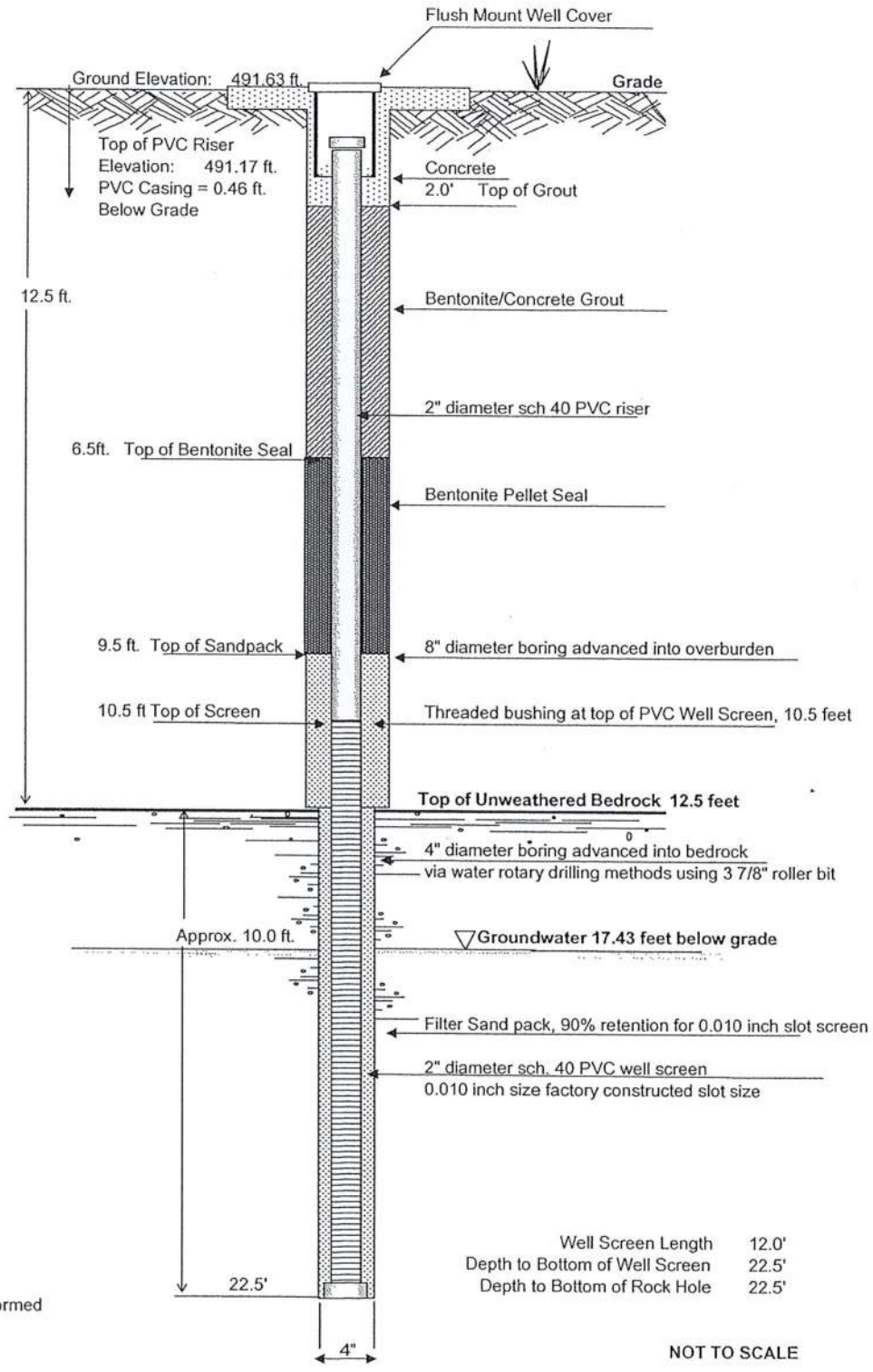
Seal: 9.5 feet to 6.5 feet | Weather Conditions: Sunny, mid-70 degrees

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	-	4			6	1	0-2'	soil	0%	Concrete sidewalk to 6"	ND
			2	3						No recovery of soil sample	
	8	7			15	2	2'-4'	soil	42%	Brown F. SAND to 2.4'	ND
			8	9						Brown Moist SILT with Sand and Gravel	
5	2	5			11	3	4'-6'	soil	25%	Same SILT, Stiff	ND
			6	3							
30	3	4			10	4	6'-8'	soil	58%	Br. Moist Loose SAND, Trace Silt	ND
			6	3						Trace Gravel	
	6	11			31	5	8'-10'	soil	38%	Same to 10.7', becomes M. Dense	ND
10			20	33						Brown Moist Hard SILT and Gravel, Tr. Sand	
	16	50/2"			50+	6	10'-12'	soil	13%	Same SILT and Gravel, V. Hard	ND
										Auger refusal encountered at 12.5'	
											ND
										Auger refusal at 12.5' inferred as bedrock	
15						8	14'-16'	soil	83%		ND
										Spun casing into bedrock, to 12.5 ft.	
										Advanced boring through bedrock	
										using 3 7/8" diameter roller bit.	
										No rock core samples collected.	
20										Rock cuttings consist of	
										fine grained grey limestone.	
										22.5'	
										Boring terminated at 22.5 feet	
25										2" dia. monitoring well installed in boring	
30											H NU PID with 10.6 ev lamp

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL MW-12



Advanced boring into bedrock
using tri-cone roller bit. No coring performed

Well Screen Length	12.0'
Depth to Bottom of Well Screen	22.5'
Depth to Bottom of Rock Hole	22.5'

NOT TO SCALE

BERGMANN associates

1200 East Main Street
City of Rochester, Monroe County, New York
Supplemental Site Investigation

MW-12 MONITORING WELL CONSTRUCTION

Date Installed
29-Jul-03

Figure
Well MW-12

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: MW-13

PROJECT: 1200 East Main Street Rochester, NY | Project No: 4453.03 | Page No. 1 of 1

Start Date: 05/26/04 | Finish Date: 05/26/04 | Top of Well: 490.53 ft. | Boring No: MW-13

Driller: Buffalo Drilling, Larry Schroeder, Driller | Boring Location: Back yard of 427 Hayward Avenue.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): approx. 11 feet below grade

Drilling Method: 2-1/4 inch HAS Augers, Mobil B-61 truck rig | Water Level (Post Drilling): approx. 8 ft 3inches below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed through augers via pull back method.

Screened Interval: 23.3 ft. to 8.3 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 24.3 ft to 7.4ft

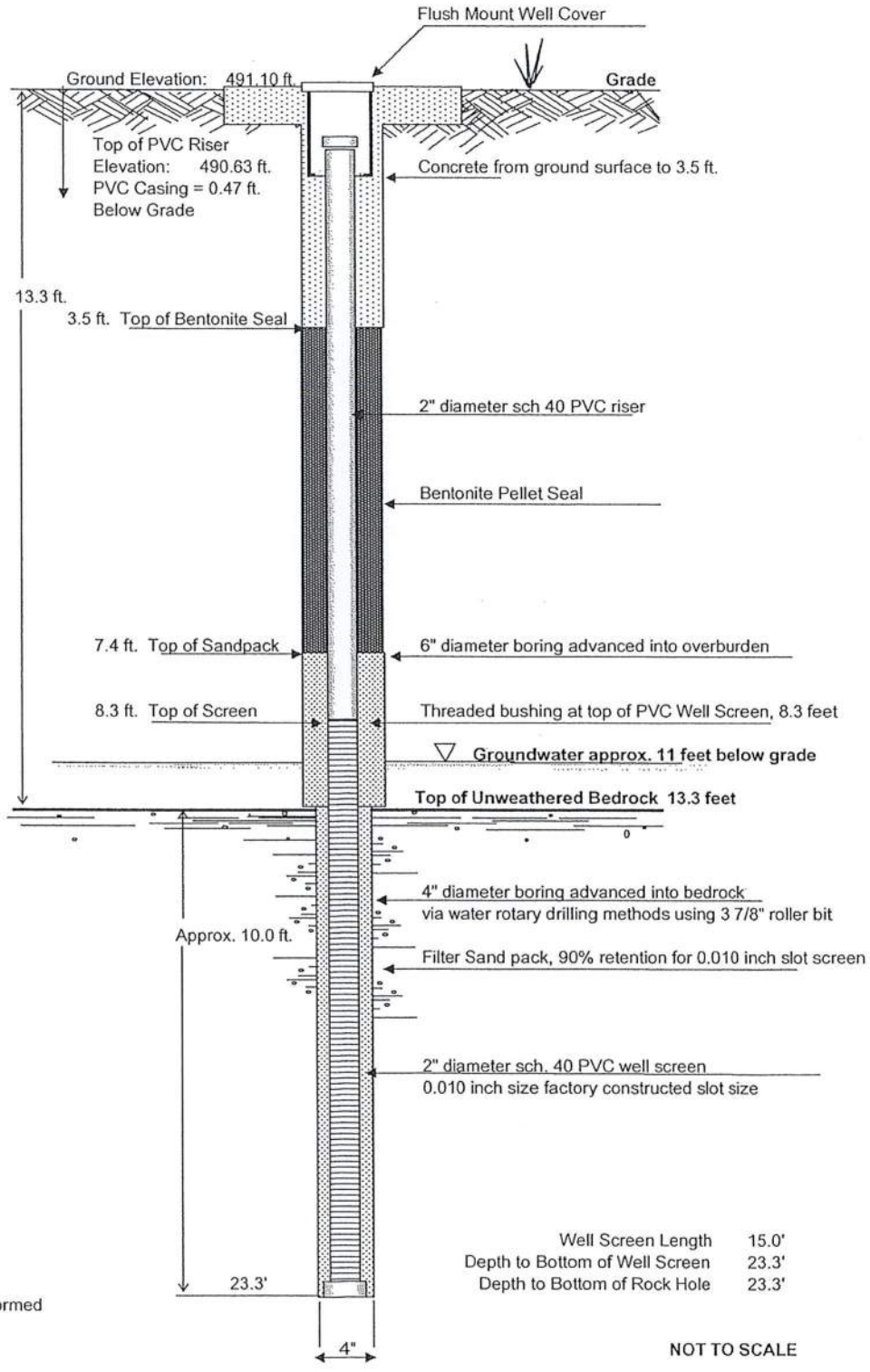
Seal: 7.4 feet to 3.5 feet | Weather Conditions: Overcast, fog, 60s in the morning

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	3	4			8	1	0-2'	soil	63%	Dirt parking lot surface. Topsoil to 6"	ND
			4	7						Damp Orange Br. Loose F SAND & Silt	
	6	8			17	2	2'-4'	soil	67%	Little Gravel, roots. Becomes M. Dense	ND
			9	10						Same, Damp, M. Dense. Glacial Till	
5	36	20			36	3	4'-6'	soil	58%	Same, damp, Dense to 5'6"	ND
			16	37						Brown damp F-M SAND	
30	50/4"				50+	4	6'-8'	soil	0%	No recovery 6 ft-8', encountered cobble	ND
										or rock fragment in till. Easily augered	
	21	30			49	5	8'-10'	soil	63%	V. Moist to wet Dense F. SAND	ND
10			19	15						and Silt, some Gravel. Till	
	20	28			62	6	10'-12'	soil	79%	Same, V. Moist to Wet, Very Dense.	ND
			34	31						Till	
	49	17			67	7	12'-14'	soil	53%	Same, V. Dense, saturated with water.	ND
			50/3"							Refusal at 13.5 ft. Rock fragment in shoe	
15										Auger refusal encountered at 13.5 ft.	
										inferred as bedrock	No VOCs measured
										Spun casing into bedrock at 13.5 ft	on bedrock
										Advanced boring through bedrock	rock cuttings
20										using 3 7/8" diameter roller bit.	flushed to
										Drilling mud flushed up cuttings.	surface
										No rock core samples collected.	Faint petroleum
										Rock cuttings consist of	like odor
										fine grained grey limestone. 23.3 ft	noticed in rock
25											cuttings
										Boring terminated at 23.3 feet	flushed from
										2" dia. monitoring well installed in boring	the boring.
											H NU PID with
30											10.6 ev lamp

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL MW-13



Advanced boring into bedrock
using tri-cone roller bit. No coring performed

Well Screen Length	15.0'
Depth to Bottom of Well Screen	23.3'
Depth to Bottom of Rock Hole	23.3'

NOT TO SCALE

BERGMANN associates

1200 East Main Street
City of Rochester, Monroe County, New York
Supplemental Site Investigation

MW-13 MONITORING WELL CONSTRUCTION

Date Installed
26-May-04

Figure
Well MW-13

DRILLING LOG

BERGMANN associates

BORING/WELL NUMBER: MW-14

PROJECT: 1200 East Main Street Rochester, NY | Project No: 4453.03 | Page No. 1 of 1

Start Date: 05/27/04 | Finish Date: 05/27/04 | Top of Well: 489.48 ft. | Boring No: MW-14

Driller: Buffalo Drilling, Larry Schroeder, Driller | Boring Location: Back yard of 405 Hayward Avenue.

Inspector: Edward Jones, Bergmann Associates | Water Level (During Drilling): Not encountered above bedrock

Drilling Method: 2-1/4 inch HAS Augers, Mobil B-61 truck rig | Water Level (Post Drilling): approx. 9 feet below grade

Remarks: Advanced test borings via Hollow Stem Augers. Monitoring well installed through augers via pull back method.

Screened Interval: 19.7 ft. to 4.7 ft. | Slot Size: 0.010 inch | Well Type: 2" dia. PVC | Sandpack: 20 ft to 4 ft

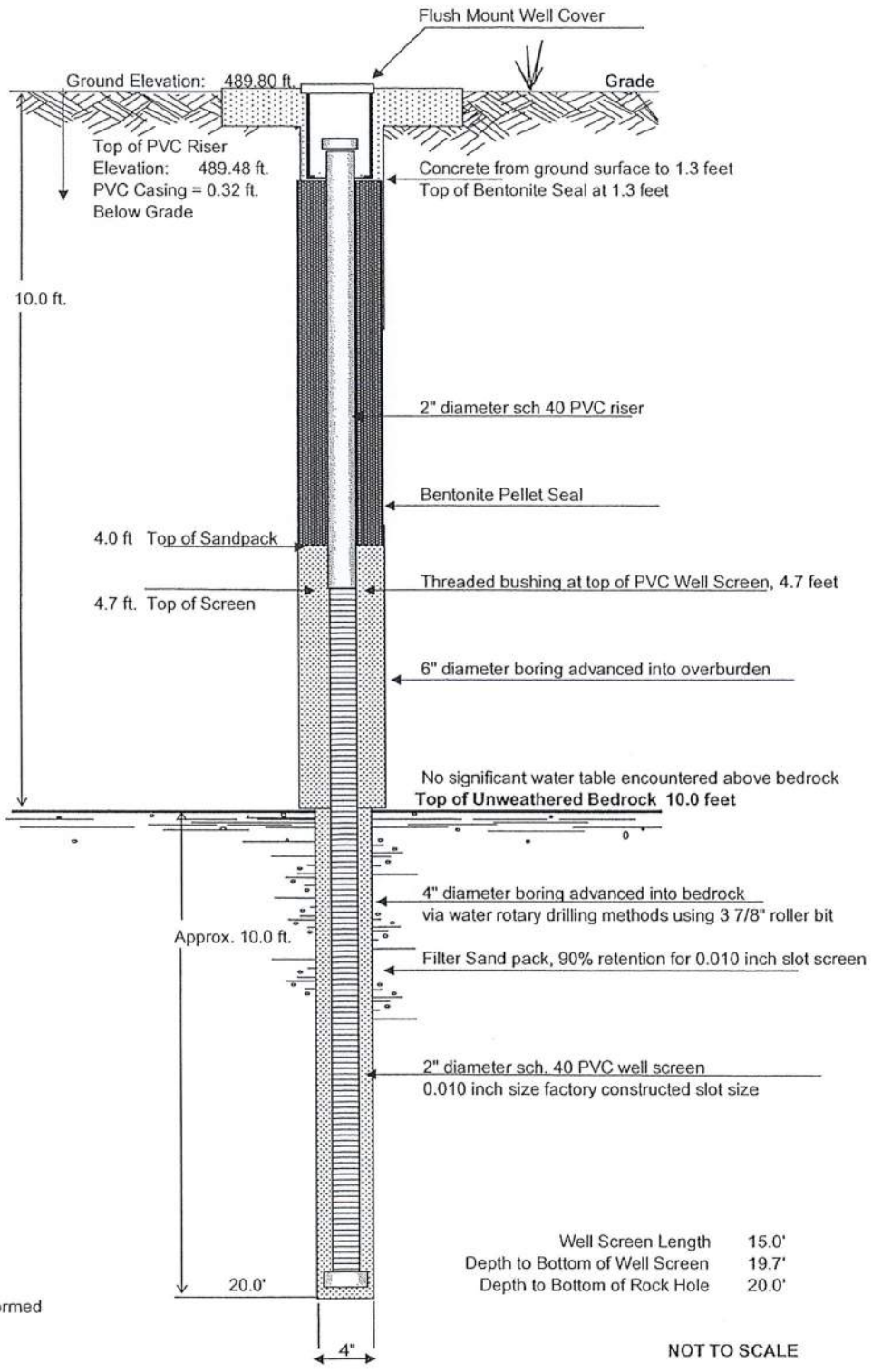
Seal: 4.0 feet to 1.3 feet | Weather Conditions: Clear & sunny in morning, 70s

Flush to grade roadway box installed over the monitoring well.

DEPTH	BLOWS ON SAMPLER				SAMPLE					SOIL AND ROCK INFORMATION	Field Screening for VOCs, ppm, using PID
0	0"/6"	6"/12"	12"/18"	18"/24"	N	NO.	Depth	Type	Recovery		
	4	4			7	1	0-2'	soil	42%	Grass yard surface. Black topsoil to 6"	ND
			3	5						Damp Orange Br. Loose F SAND & Silt	
	5	5			10	2	2'-4'	soil	50%	Little Gravel, roots. Same, Damp, Loose	ND
			5	6						Glacial Till	
5	15	24			65	3	4'-6'	soil	42%	Same, damp, becomes Very Dense	ND
			41	29						Brown damp F-M SAND & Silt, Gravel	
30	28	24			59	4	6'-8'	soil	79%	Same, damp, V. Dense. Till	ND
			35	28							
	47	50/2"			50+	5	8'-10'	soil	75%	Same but becomes moist to v. moist	ND
10										V. Dense F. SAND & Silt, little Gravel	
	45	50/2"			50+	6	10'-12'	soil	75%	Damp grey limestone fragments. 10.0 ft	ND
										may be weathered bedrock surface	
										Auger refusal encountered at 10.0 ft,	
										inferred as bedrock	
15										Spun casing into bedrock, at 10.0 ft.	
										Advanced boring through bedrock	No VOCs
										using 3 7/8" diameter roller bit.	measured
										Drilling mud flushed up cuttings.	on bedrock
										No rock core samples collected.	rock cuttings
20										Rock cuttings consist of	flushed to
										fine grained grey limestone. 23.20.0 ft	surface
											Faint petroleum
										Boring terminated at 20.0 feet	like odor
										2" dia. monitoring well installed in boring	noticed in rock
25											cuttings
											flushed from
											the boring.
											H NU PID with
30											10.6 ev lamp

N=No. of Blows to Drive 2" Spoon 12" with 140 lb wt. Hammer 30" Each Blow

MONITORING WELL MW-14

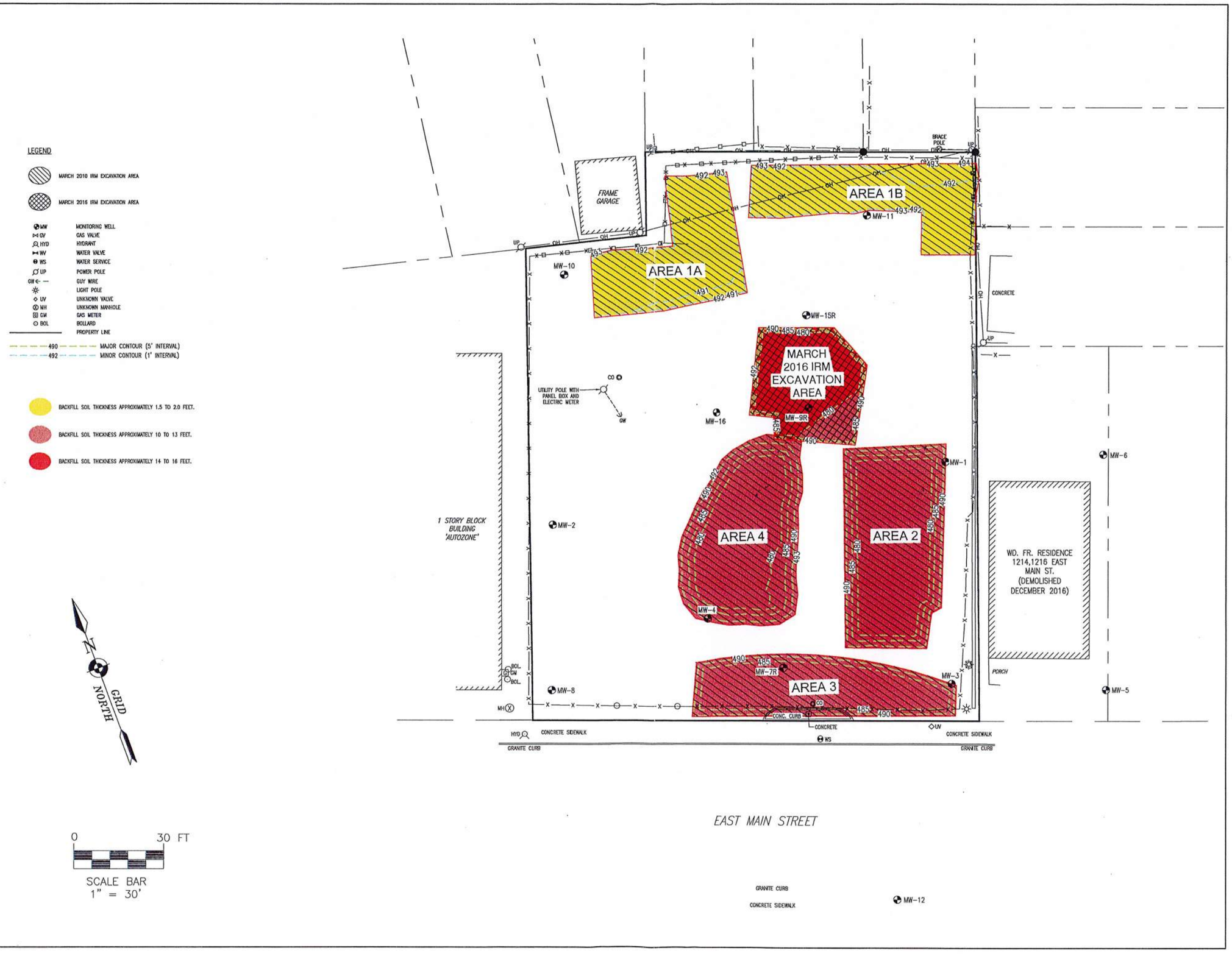


Advanced boring into bedrock
using tri-cone roller bit. No coring performed

Well Screen Length	15.0'
Depth to Bottom of Well Screen	19.7'
Depth to Bottom of Rock Hole	20.0'

NOT TO SCALE

BERGMANN associates	1200 East Main Street City of Rochester, Monroe County, New York Supplemental Site Investigation MW-14 MONITORING WELL CONSTRUCTION	Date Installed 27-May-04 Figure Well MW-14



I:\City of Rochester\0044453.05 CITY OF ROCH-1200 E MAIN ST ERP -C303409\3.0 Design\3.8 Reports\Final FER June 2017\2 FINAL FER Figures\FIGURE 4.dwg

CITY OF ROCHESTER

1200 East Main St.
Rochester, NY
14614

FINAL ENGINEERING REPORT NYSDEC SITE NUMBER B-00129-B

BERGMANN
ARCHITECTS ENGINEERS PLANNERS

Bergmann Associates, Architects, Engineers, Landscape Architects & Surveyors, D.P.C.
280 East Broad Street
Suite 200
Rochester, NY 14604

office: 585.232.5135
fax: 585.232.4652

www.bergmannpc.com

REVISIONS

NO.	DATE	DESCRIPTION	REV.	CK'D

Project Manager: S. DEMEO	Checked By: S. DEMEO
Designed By:	Drawn By: C. WOOD
Date Issued: 04/10/2018	Scale: 1" = 30'
Project Number: 4453.05	

CONTOUR MAP OF EXCAVATION AND BACKFILL THICKNESS

Drawing Number:

FIGURE 4

LEGEND

GV	GAS VALVE
HYD	HYDRANT
WV	WATER VALVE
WS	WATER SERVICE
UP	POWER POLE
GW	GUY WIRE
	LIGHT POLE
UV	UNKNOWN VALVE
MH	UNKNOWN MANHOLE
GM	GAS METER
BOL	BOLLARD
	PROPERTY LINE

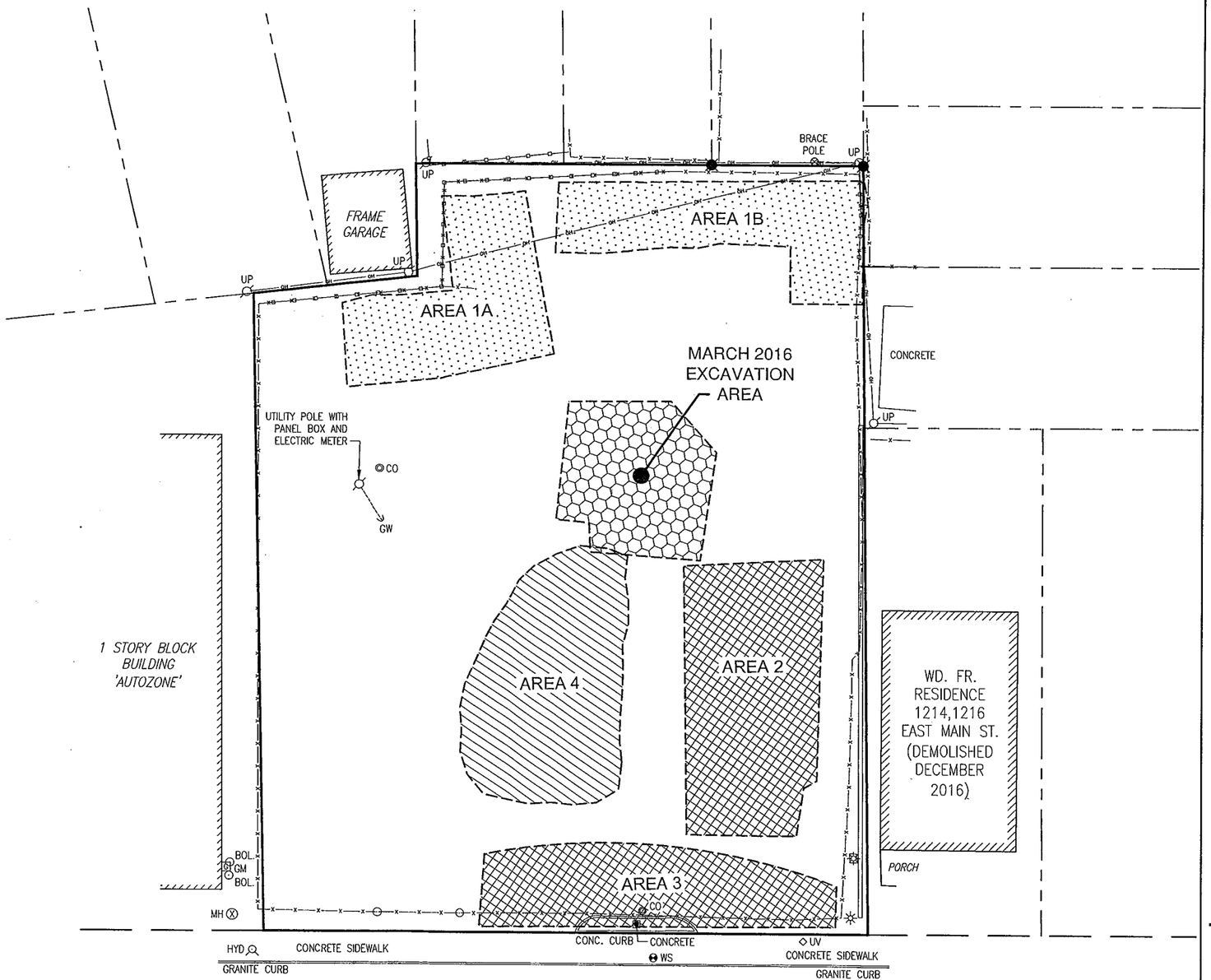
QUANTITIES AND DESTINATIONS

IMPORTED APPROVED BACKFILL FROM 1315 S. PLYMOUTH AVE. AND RE-USED AREA 4 SOILS

ON-SITE REUSED SOIL FROM AREA 2, AREA 3, AREA 4 AND FROM 1315 S. PLYMOUTH AVE.

ON-SITE REUSED SOIL FROM AREA 4

IMPORTED BACKFILL FROM THE DOLOMITE GROUP WALWORTH NY AND ON-SITE SOILS FROM EXCAVATION AREAS.
(795 TONS TOTAL FROM THE DOLOMITE GROUP)
(70 TONS TOTAL FROM THIS EXCAVATION)



0 30 FT

SCALE BAR
1" = 30'

GRID NORTH

GRANITE CURB

CONCRETE SIDEWALK

CITY OF ROCHESTER

1200 EAST MAIN ST.
ROCHESTER, NY
14614

REMEDIATION PROGRAM

BERGMANN associates
Engineers / Architects / Surveyors

REVISIONS

NO.	DATE	DESCRIPTION	REV.	CK'D

NOTE:
Unauthorized alteration or addition to this drawing is a violation of the New York State Education Law Article 145, Section 7209.

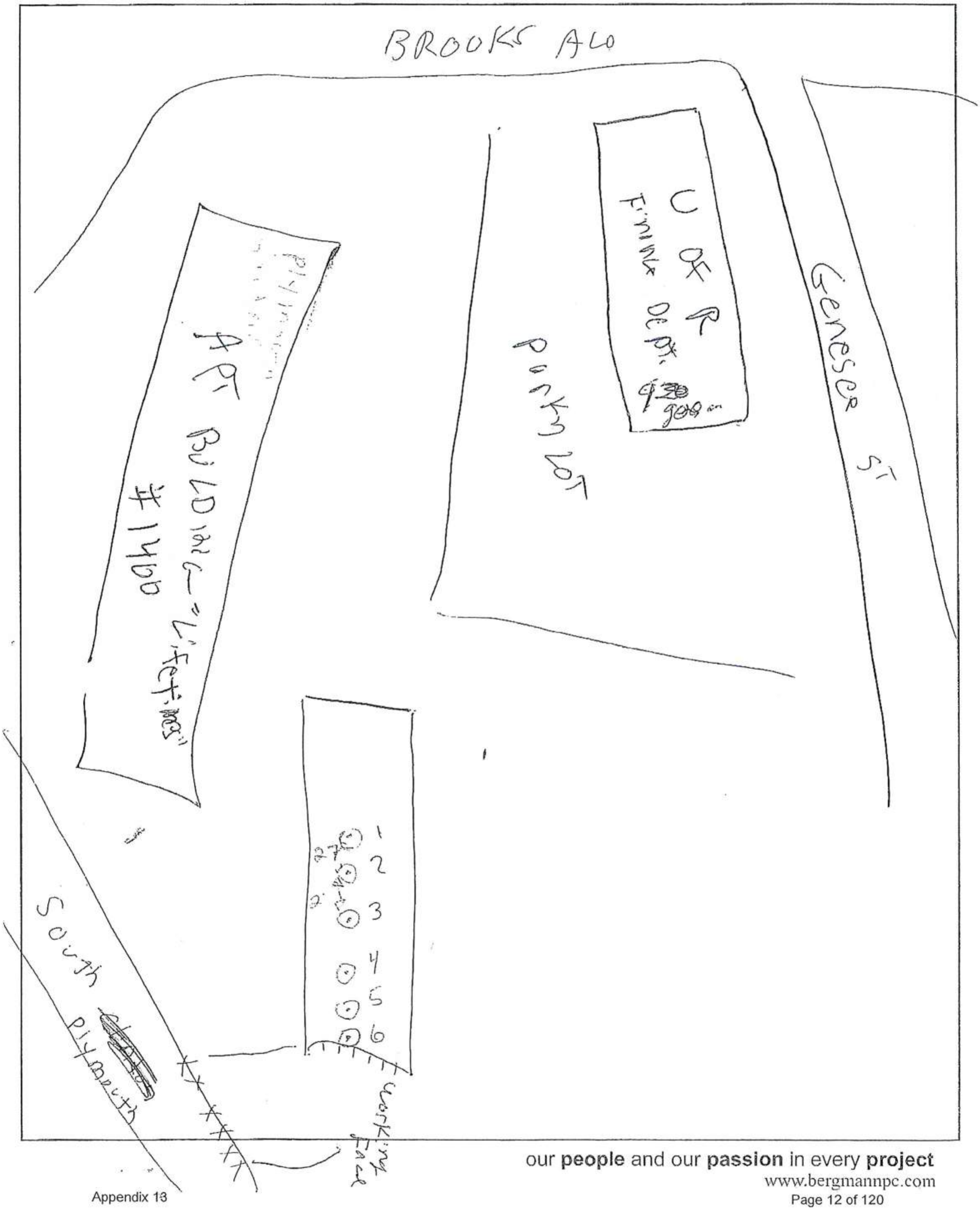
REUSED BACKFILL MATERIAL

Project Manager: S. DEMEO
Designed by:
Drawn by: C. WOOD
Checked by: S. DEMEO
Date Issued: MARCH 2017
Scale: 1"=30'
Date
Project Number: 4453.05
File Name: I:\City of Rochester\004453.05\3.0\3.6\Final FER March 2017\FINAL FER Figures
Drawing Number:

FIGURE 5

of

BY EJJ	DATE Thurs 7/30/09	Bergmann associates architects // engineers // planners	PROJ. NO. 1315 S. Plymouth	SHT	OF
CKD	DATE		PROJ. NAME 4453.04		



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TEST PIT LOG

BERGMANN associates

TEST PIT NUMBER: BTP-1

PROJECT: 1315 South Plymouth Borrow Pile PROJECT #: 4453.04 PAGE 1 of 6

SITE DESCRIPTION: Staged pile of soil at 1315 South Plymouth Avenue, proposed borrow pile for 1200 East Main St.

START DATE: 07/31/09 8:00 AM COMPLETED: 08/31/09 CONTRACTOR: TREC Environmental, Paul Willy

INSPECTOR Edward Jones, Bergmann Associates EXCAVATION EQUIPMENT: Komatsu PC 35 MR Track Mounted Excavator

TEST PIT LOCATION: Test Pit #1, southern most test pit at the staged pile at 1315 South Plymouth Ave.

TEST PIT SIZE: 10 feet long, 3 ft wide by 7.0 feet deep. MONITORING EQUIPMENT: H Nu DL 101 Photo Ionization Detector, 10.6 ev lamp

WEATHER: Overcast, light rain early in morning, 74 ° F Background = 0.5 ppm

GROUNDWATER ENCOUNTERED: Not encountered BEDROCK ENCOUNTERED: Not Encountered

SAMPLES COLLECTED FOR TESTING: Samples from each test pit - see Chain of Custody.

DEPTH BELOW GROUND SURFACE	DESCRIPTION OF SOIL ENCOUNTERED	FIELD SCREENIN	COMMENTS
	Moist brown fine to coarse SAND and F-C Gravel at surface.		
1.0 feet	Concrete fragments up to 12 inches encountered.	PID measurements	no odors
	Cobbles 6 inches to 12 inches encountered.	of VOCs in pit:	
2.0 feet	At 2 ft: Encountered asphalt-road or parking lot pieces,	0.3 ppm to 0.4 ppm	
	12 inches and larger in size. Red bricks also encountered.	less than bkgd	
3.0 feet		Bkgd = 0.5 ppm	
4.0 feet			no odors
		No VOCs above	
5.0 feet	At 5 feet: large limestone boulder, 3 feet in size in fill.	background	
6.0 feet	No odors, no staining, no measurable VOCs in the test pit.		
	At 7 ft: slightly darker color, a few red bricks encountered.	No VOCs above	
7.0 feet	Moist Brown F-C SAND and F-C Gravel, some cobbles & bricks	background.	no odors
	Bottom of test pit 7.0 feet		
8.0 feet	Test pit terminated at 7.0 feet below grade.		
	Still in Fill at 7.0 feet		
9.0 feet			
	Collected composite soil sample BTP-1 from spoil pile		
10.0 feet	of material excavated from test pit BTP-1		
11.0 feet	Test pit backfilled with spoil after observation and sampling.		
12.0 feet			
13.0 feet			
14.0 feet			
15.0 feet			

TEST PIT LOG

BERGMANN associates

TEST PIT NUMBER: BTP-2

PROJECT: 1315 South Plymouth Borrow Pile PROJECT #: 4453.04 PAGE 2 of 6

SITE DESCRIPTION: Staged pile of soil at 1315 South Plymouth Avenue, proposed borrow pile for 1200 East Main St.

START DATE: 07/31/09 8:36 AM COMPLETED: 07/31/09 CONTRACTOR: TREC Environmental, Paul Willy

INSPECTOR Edward Jones, Bergmann Associates EXCAVATION EQUIPMENT: Komatsu PC 35 MR Track Mounted Excavator

TEST PIT LOCATION: 2nd test pit, placed north of test pit BTP-1.

TEST PIT SIZE: 9 feet long, 3 ft wide by 7.0 feet deep. MONITORING EQUIPMENT: H Nu DL 101 Photo Ionization Detector, 10.6 ev lamp

WEATHER: Overcast, light rain early in morning, 74 ° F Background = 0.5 ppm

GROUNDWATER ENCOUNTERED: Not encountered BEDROCK ENCOUNTERED: Not Encountered

SAMPLES COLLECTED FOR TESTING: Samples from each test pit - see Chain of Custody.

DEPTH BELOW GROUND SURFACE	DESCRIPTION OF SOIL ENCOUNTERED	FIELD SCREENING	COMMENTS
	Very sparse vegetative cover, Sand and gravel.		
1.0 feet	Brick and brick fragments in the fill at ground surface, exposed.	PID measurements	no odors
	At 1 ft, piece of concrete 3 ft in size,	of VOCs in pit:	
2.0 feet	mixed with moist brown fine-coarse SAND and Fine-coarse Gravel	0.4 ppm	
	Cobbles up to 12 inches in size.	less than bkgd	
3.0 feet	at 3 ft: several pieces of asphalt-former parking lot encountered.	Bkgd = 0.5 ppm	
4.0 feet	At 4 ft: plastic poly sheeting, former cover.		no odors
	Large piece of asphalt, 2 feet by 3.5 feet in size, 6 inches thick.	No VOCs above	
5.0 feet	Fragment of road base,	background	
	Encounter orange bricks and additional asphalt and concrete.		
6.0 feet	Estimate fill is 20 % brick, concrete and asphalt		
	mixed with re-worked earth type fill.	No VOCs above	
7.0 feet	Still in Fill at 7.0 feet	background.	no odors
	Bottom of test pit 7.0 feet		
8.0 feet	Test pit terminated at 7.0 feet below grade.		
9.0 feet			
	Collected composite soil sample BTP-2 from spoil pile		
10.0 feet	of material excavated from test pit BTP-2		
11.0 feet	Test pit backfilled with spoil after observation and sampling.		
12.0 feet			
13.0 feet			
14.0 feet			
15.0 feet			

TEST PIT LOG

BERGMANN associates

TEST PIT NUMBER: **BTP-3**

PROJECT: 1315 South Plymouth Borrow Pile PROJECT #: 4453.04 PAGE 3 of 6

SITE DESCRIPTION: Staged pile of soil at 1315 South Plymouth Avenue, proposed borrow pile for 1200 East Main St.

START DATE: 07/31/09 9:00 AM COMPLETED: 07/31/09 CONTRACTOR: TREC Environmental, Paul Willy

INSPECTOR Edward Jones, Bergmann Associates EXCAVATION EQUIPMENT: Komatsu PC 35 MR Track Mounted Excavator

TEST PIT LOCATION: 3rd test pit, placed north of test pit PT-2

TEST PIT SIZE: 8 feet long, 3 ft wide by 7.0 feet deep. MONITORING EQUIPMENT: H Nu DL 101 Photo Ionization Detector, 10.6 ev lamp

WEATHER: Overcast, light rain early in morning, 74 ° F Background = 0.4 ppm

GROUNDWATER ENCOUNTERED: Not encountered BEDROCK ENCOUNTERED: Not Encountered

SAMPLES COLLECTED FOR TESTING: Samples from each test pit - see Chain of Custody.

DEPTH BELOW GROUND SURFACE	DESCRIPTION OF SOIL ENCOUNTERED	FIELD SCREENING	COMMENTS
	2 blocks of concrete exposed just below ground surface.		
1.0 feet	Damp Brown Fine to Coarse SAND and Fine to Coarse Gravel, some cobbles 4" to 8" in sixe, with concrete	PID measurements of VOCs in pit:	no odors
2.0 feet	At 2 ft: Same fill with thin metal rods -rebar from concrete	0.2 ppm less than bkgd	
3.0 feet	at 3 ft: chunks of concrete 2 ft by 3 ft in size.	Bkgd = 0.4 ppm	
4.0 feet	At 4 ft: Encounter Grey Silt mixed with Sand and gravel fill.		no odors
5.0 feet	no odors, no staining, no VOCs	No VOCs above background	
6.0 feet	At 6 ft: Same fill, encounter red bricks. No asphalt encountered.		
7.0 feet	Chuck of concrete 3 ft by 3 ft, 8 inches thick at base of test pit.	No VOCs above background.	no odors
	Bottom of test pit 7.0 feet		
8.0 feet	Test pit terminated at 7.0 feet below grade.		
9.0 feet			
10.0 feet	Collected composite soil sample BTP-3 from spoil pile of material excavated from test pit BTP-3		
11.0 feet	Test pit backfilled with spoil after observation and sampling.		
12.0 feet			
13.0 feet			
14.0 feet			
15.0 feet			

TEST PIT LOG

BERGMANN associates

TEST PIT NUMBER: BTP-4

PROJECT: 1315 South Plymouth Borrow Pile PROJECT #: 4453.04 PAGE 4 of 6

SITE DESCRIPTION: Staged pile of soil at 1315 South Plymouth Avenue, proposed borrow pile for 1200 East Main St.

START DATE: 07/31/09 9:20 AM COMPLETED: 07/31/09 CONTRACTOR: TREC Environmental, Paul Willy

INSPECTOR Edward Jones, Bergmann Associates EXCAVATION EQUIPMENT: Komatsu PC 35 MR Track Mounted Excavator

TEST PIT LOCATION: 4th test pit, placed north of test pit PT-3, beneath overhead Cable TV line.

TEST PIT SIZE: 8 feet long, 3 ft wide by 8.0 feet deep. MONITORING EQUIPMENT: H Nu DL 101 Photo Ionization Detector, 10.6 ev lamp Background = 0.4 ppm

WEATHER: Overcast, light rain early in morning, 74 ° F

GROUNDWATER ENCOUNTERED: Not encountered BEDROCK ENCOUNTERED: Not Encountered

SAMPLES COLLECTED FOR TESTING: Samples from each test pit - see Chain of Custody.

DEPTH BELOW GROUND SURFACE	DESCRIPTION OF SOIL ENCOUNTERED	FIELD SCREENIN(	COMMENTS
	Very sparse ground vegetation, Brown sand and gravel fill.		
1.0 feet	At 1 ft: Asphalt pieces, 6" to 12 " in size, road base fill pieces of orange brick. No VOCs, all VOCs < background.	PID measurements of VOCs in pit: 0.2 ppm less than bkgd Bkgd = 0.4 ppm	no odors
2.0 feet			
3.0 feet	At 3 ft: more brick mixed in fill, pieces of clay sewer tile pipe.		
4.0 feet	At 4 ft: Asphalt pieces in fill, road or parking lot debris.		no odors
5.0 feet	At 5 ft: Asphalt pieces, cobles 4" to 6" in size in the fill.	No VOCs above background	
6.0 feet	At 6 ft: Bricks in fill. Small pieces of glass encountered.		
7.0 feet	At 7 feet: Same fill with bricks.	No VOCs above background.	no odors
8.0 feet	At 8 ft: Asphalt pieces, flat lying, may be bottom of fill.		
	Bottom of test pit 8.0 feet		
9.0 feet	Test pit terminated at 8.0 feet below grade.		
10.0 feet			
11.0 feet	Collected composite soil sample BTP-4 from spoil pile of material excavated from test pit BTP-4		
12.0 feet	Test pit backfilled with spoil after observation and sampling.		
13.0 feet			
14.0 feet			
15.0 feet			

TEST PIT LOG

BERGMANN associates

TEST PIT NUMBER: BTP-5

PROJECT: 1315 South Plymouth Borrow Pile PROJECT #: 4453.04 PAGE 5 of 6

SITE DESCRIPTION: Staged pile of soil at 1315 South Plymouth Avenue, proposed borrow pile for 1200 East Main St.

START DATE: 07/31/09 9:35 AM COMPLETED: 07/31/09 CONTRACTOR: TREC Environmental, Paul Willy

INSPECTOR Edward Jones, Bergmann Associates EXCAVATION EQUIPMENT: Komatsu PC 35 MR Track Mounted Excavator

TEST PIT LOCATION: 5th test pit, placed north of test pit PT-4.

TEST PIT SIZE: 7 feet long, 3 ft wide by 8.0 feet deep. MONITORING EQUIPMENT: H Nu DL 101 Photo Ionization Detector, 10.6 ev lamp

WEATHER: Overcast, light rain early in morning, 74 ° F Background = 0.4 ppm

GROUNDWATER ENCOUNTERED: Not encountered BEDROCK ENCOUNTERED: Not Encountered

SAMPLES COLLECTED FOR TESTING: Samples from each test pit - see Chain of Custody.

DEPTH BELOW GROUND SURFACE	DESCRIPTION OF SOIL ENCOUNTERED	FIELD SCREENING	COMMENTS
	Sand and gravel fill at surface, sparse vegetation cover.		
1.0 feet	1 ft: chunks of asphalt up to 3 ft, parking lot debris at surface. Asphalt mixed with brown sand and gravel fill.	PID measurements of VOCs in pit:	no odors
2.0 feet	At 2 ft: red bricks in the fill.	0.3 ppm less than bkgd	
3.0 feet	Same sand and gravel fill, asphalt fragments and bricks.	Bkgd = 0.4 ppm	
4.0 feet	No odor, no staining, no measurable VOCs in the test pit.		no odors
5.0 feet	At 5 ft: Same fill. No concrete encountered, just asphalt, and bricks in the fill.	No VOCs above background	
6.0 feet	At 6 ft; clumps of silty sand mixed with asphalt and bricks.		
7.0 feet	At 7 ft: Dray grey to black silt and gravel, may be road base.	No VOCs above background.	no odors
8.0 feet	Black crushed stone at silt at 8 feet. May be original road base.		
	Bottom of test pit 8.0 feet		
9.0 feet	Test pit terminated at 8.0 feet below grade.		
10.0 feet			
11.0 feet	Collected composite soil sample BTP-5 from spoil pile of material excavated from test pit BTP-5		
12.0 feet	Test pit backfilled with spoil after observation and sampling.		
13.0 feet			
14.0 feet			
15.0 feet			

TEST PIT LOG

BERGMANN associates

TEST PIT NUMBER: **BTP-6**

PROJECT: 1315 South Plymouth Borrow Pile PROJECT #: 4453.04 PAGE 5 of 6

SITE DESCRIPTION: Staged pile of soil at 1315 South Plymouth Avenue, proposed borrow pile for 1200 East Main St.

START DATE: 07/31/09 10:00 AM COMPLETED: 07/31/09 CONTRACTOR: TREC Environmental, Paul Willy

INSPECTOR Edward Jones, Bergmann Associates EXCAVATION EQUIPMENT: Komatsu PC 35 MR Track Mounted Excavator

TEST PIT LOCATION: 6th test pit, placed north of test pit PT-5. Northern most test pit, at the northern end of the pile.

TEST PIT SIZE: 7 feet long, 3 ft wide by 6.0 feet deep. MONITORING EQUIPMENT: H Nu DL 101 Photo Ionization Detector, 10.6 ev lamp

WEATHER: Overcast, light rain early in morning, 74 ° F Background = 0.4 ppm

GROUNDWATER ENCOUNTERED: Not encountered BEDROCK ENCOUNTERED: Not Encountered

SAMPLES COLLECTED FOR TESTING: Samples from each test pit - see Chain of Custody.

DEPTH BELOW GROUND SURFACE	DESCRIPTION OF SOIL ENCOUNTERED	FIELD SCREENING	COMMENTS
1.0 feet	No vegetative cover. Brown Sand and Gravel at ground surface. At 1 ft: orange bricks in the fill.	PID measurements of VOCs in pit: 0.3 ppm less than bkgd Bkgd = 0.4 ppm	no odors
2.0 feet	At 2 ft: Encountered concrete and masonry blocks mixed in brown sand and gravel earth-type fill		
3.0 feet	At 3 ft: encounter asphalt fragments mixed in the earth-type fill.		
4.0 feet	At 4 ft: Encounter black sewer pipe fragments in the fill.	No VOCs above background	no odors
5.0 feet	At 5 ft: Same type of fill, mixed with orange bricks and cobbles.		
6.0 feet	At 6 feet: Same earth type fill, may be road base. Did not encounter native soil at 6 ft.		
7.0 feet	Bottom of test pit 6.0 feet Test pit terminated at 6.0 feet below grade.	No VOCs above background.	no odors
8.0 feet			
9.0 feet	Collected composite soil sample BTP-6 from spoil pile of material excavated from test pit BTP-6.		
10.0 feet	Test pit backfilled with spoil after observation and sampling.		
11.0 feet			
12.0 feet			
13.0 feet			
14.0 feet			
15.0 feet			