



# Phase II Environmental Site Assessment

Location:

Bullshead Plaza  
835-855 West Main Street  
Rochester, New York

Prepared for:

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LaBella Project No. 2172124

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## **1.0 INTRODUCTION**

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LaBella Associates, D.P.C. (“LaBella”) was retained by the City of Rochester to conduct a Phase II Environmental Site Assessment (ESA) at the property known as “Bullshead Plaza”, located at 835-855 West Main Street in the City of Rochester, Monroe County, New York, hereinafter referred to as the “Site” (see Figure 1A). This Phase II ESA has been performed in conformance with the scope and limitations of ASTM Practice E 1903-11.

### **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 P171613.02 dated September 13, 2017 and LaBella’s Master Services Agreement (MSA) #128099 with the City.

### **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 Associates, D.P.C., 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**

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### **2.1 Site Description & Features**

The Site comprises approximately 4.2 acres of land and is currently developed with one (1) 85,899-square-foot (sq-ft) building utilized for commercial (retail and office) purposes although currently, the building contains four (4) tenants occupying three (3) different locations in the building with the remaining portions vacant. The building was constructed in 1951 and includes a partial second floor and a partial basement. The basement is located in the southern portion of the building and includes a sump. The Site is located southeast of the intersection of West Main Street and Genesee Street. Current occupants include Kicks & Caps (clothing store); Chase Bank; University of Rochester Center for Health and Behavioral Training; and, a Monroe County Department of Health Clinic (refer to Figure 2 for tenant locations).

### **2.2 Physical Setting**

The Site is located on West Main Street in the City of Rochester within an urban area. The Site consists of generally level land with the nearest water body, the Genesee River, located approximately 6,000 feet east of the Site. According to the U.S. Department of Agriculture, soils at the Site consist mainly of Urban Land which is defined as areas that have been altered or obscured by urban works and structures to the point that identification of the soils is not feasible. Refer to Section 5.1 for additional information regarding Site Geology.



### 2.3 Site History & Land Use

Based on the review of historical information, it appears that the Site has been developed since at least 1875 and has been utilized/occupied for the following environmentally relevant operations:

- 1875 – 1941: St. Mary’s Orphan Asylum
- 1892: A “nursery” depicted on the northwestern corner of the Site. It should be noted that it is unknown if the nursery was associated with children or plants.
- 1892: A lumber yard, laundry and bakery located on the central portion of the Site.
- 1892: Residential dwellings located on the southwestern portion of the Site until at least 1941 and northeastern portion of the Site until at least 1994.
- 1912: A “vegetable house” located on the northern portion of the Site.
- 1912 – 1938: A laundry facility located on the western portion of the Site.
- 1912 – 1938: A machine shop is located on the southwestern portion of the Site. One (1) gasoline tank was depicted located next to the machine shop on the 1912 Sanborn Map.
- 1926: Commercial structures including a laundry facility on the southwestern portion of the Site.
- 1950: A structure utilized for used automotive sales located on the western portion of the Site.
- 1950: The northern portion of the Site appears undeveloped; however, it is labeled as “used car sales”. It is unclear if automotive repair operations occurred as part of the automotive sales business.
- 1951 – Present day: Developed with Bullshead Plaza and included the following:
  - The 2009 Environmental Screen prepared by Day Environmental, Inc. (Day) stated that the portion of the Site addressed as 6 Genesee Street was occupied by Beck Cleaners from at least 1953 until at least 1958.
  - 1955: Pratt & Whitney machine manufacturers (845 West Main Street)
  - 1960 – 1985 Bullshead Laundromat self-serve laundry (36 and 38 Genesee Street)
  - 1965: Westinghouse Dry Cleaners (18 Genesee Street)
  - 1971 – 1984: Cadet Cleaners (847 West Main Street)

Refer to attached Figure 1B for approximate locations of environmentally-relevant historical operations.

### 2.4 Adjacent Property Use

The Site is bordered by the following properties:

Direction	Land Use
Northwest beyond West Main Street	Western Regional Off Track Betting (886 Brown Street)
Northeast beyond West Main Street	Bambi’s Takeout (806 Brown Street) and undeveloped land (816 Brown Street)
East beyond Churchlea Place	Rite Aid retail/drugstore (792 West Main Street) and undeveloped land (816-856 West Main Street)
South beyond Clifton Street	Unity Pediatrics (819 West Main Street), residential dwelling (10 Churchlea Place) and People Inc. Finger Lakes (160 Clifton Street)
Southwest	Canopy Coil Laundry (68 Genesee Street)



<b>West beyond Genesee Street</b>	Rochester Regional Health – St. Mary’s Campus and Residence Facility (29 and 89 Genesee Street)
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## 2.5 Summary of Previous Studies

The following reports were reviewed by LaBella prior to completion of this Phase II ESA Report:

### Environmental Screen – September 2009 – Day Environmental, Inc

An Environmental Screen was prepared by Day dated September 2009. The environmental screen was conducted to assess the potential for RECs at the Bullshead Project Area which included 103 contiguous parcels of land in Rochester, New York. The Site, addressed as 835-855 West Main Street and identified as section block lot #120.500-200-2002, was listed as an adjacent property to Day’s study area with the potential for RECs. Day’s report identified occupants of concern at the Site as Pratt and Whitney machinery manufacturing in at least 1953; Beck Cleaners from at least 1953 until at least 1958; Bullshead Laundromat from at least 1963 to at least 1988; Westinghouse Dry Cleaners in at least 1963; Industrial Equipment & Service and repairs in at least 1978; and, Cadet Cleaners from at least 1983 until at least 1984.

### Limited Subsurface Investigation Report – April 28, 2015 – Bock and Clark Environmental, LLC

This report was prepared by Bock and Clark Environmental, LLC (B&C) dated April 28, 2015. The report indicated that a Phase I ESA was previously prepared by B&C which identified the following two (2) RECs associated with the Site:

- The former on-site dry cleaning facility located at 18 Genesee Street (i.e., suspect AOC #10 on Figure 1B); and,
- The former off-site dry cleaning facility located on an adjoining property at 68 Genesee Street (i.e., suspect AOC #1 on Figure 1B).

Based on the RECs, D&B Engineers and Architect, PC (D&B) was reportedly contracted by B&C to perform a limited subsurface investigation to evaluate the subsurface at the Site. D&B reportedly advanced eight (8) soil borings at various locations on the property, although primarily focused in the vicinity of the former dry cleaner in the northern portion of the Site (i.e., Westinghouse Dry Cleaners). Boring depths ranged from 3-feet (ft) to 6-ft below ground surface (bgs) and groundwater was reportedly planned to be collected; however, groundwater was not encountered during the investigation due to shallow bedrock. As such, no groundwater samples were collected. Five (5) soil samples were reportedly collected and analyzed for TCL VOCs. The report indicated that acetone (a VOC) was detected in two (2) soil samples and tetrachloroethylene (PCE), was detected in one (1) soil sample (SB-5) at concentrations below Part 375 Unrestricted Use SCOs. PCE is commonly used in dry cleaning operations and this soil sample was collected directly southwest of the former Westinghouse Dry Cleaners (refer to Figure 2).

The report concluded that evidence of contamination was not observed and that analytical data did not indicate elevated concentrations of VOCs exist in the soil within the investigated area. It should be noted that borings were not advanced within the Site Building as part of D&B’s investigation.



Phase I Environmental Site Assessment Update – September 30, 2016 – B&C

A Phase I ESA Update was prepared by B&C dated September 30, 2016 which indicated that according to Environmental Data Resources, Inc., Bullshead Laundromat Inc. was historically located on the Site from at least 1960 until at least 1985. Based on LaBella's research, this laundromat was located in the north-central portion of the Site building (refer to Figure 1B). The report indicated that the facility was reportedly utilized as a self-serve laundry and therefore, no impacts are likely to have occurred at the Site. The update indicated that "a significant potential for RECs" was not identified.

Environmental Screen Report – October 31, 2016 – LaBella Associates

An Environmental Screen Report for the Site and surrounding area was prepared by LaBella dated October 31, 2016 which identified the following potential RECs:

- Based on the review of historical Sanborn Fire Insurance Maps, it appeared the Site was occupied by a used car sales lot in at least 1950 in addition to the uses identified in Section 2.3. Potential concerns associated with the historical use of the Site included the contamination of soil and/or groundwater if leaks/spills or improper handling/disposal of petroleum products had occurred.

The report also noted that review of historical Street Directories and City of Rochester property cards indicated that the Site was occupied by Cadet Cleaner's dry cleaning from at least 1979 until approximately 1984 (refer to Figure 1B). However, based on review of the 2004 NYSDEC Master Dry Cleaning list, Cadet Cleaners only had one (1) main dry cleaning plant as of 2004 and it was located in Buffalo, New York. Cadet Cleaners also reportedly had a dry cleaning plat at 420 Norton Street in Rochester. It is unknown if the main dry cleaning plant in Buffalo or on Norton Street in Rochester was in operation from 1979 until 1984 when Cadet Cleaners appears to have occupied the Site.

It was also noted in the report that potential RECs were identified on adjoining parcels. As such, the report identified the potential for migration of residual subsurface impairment to the Site from the adjoining properties as well as NYS vapor intrusion guidelines that could require future vapor intrusion studies or mitigation at the Site.

Phase I Environmental Site Assessment – September 1, 2017 – LaBella Associates

A Phase I ESA report was prepared by LaBella dated September 1, 2017 which identified the following RECs:

**Historical Use of the Site**

The following potential areas of concern have been identified at the Site:

- 1892: A "nursery" depicted on the northwestern corner of the Site associated with the former orphan asylum. It should be noted that it is unknown if the nursery is associated with children or plants.
- 1892: A lumber yard, laundry and bakery located on the central portion of the Site.
- 1912: A "vegetable house" located on the northern portion of the Site.
- 1912 – 1938: A laundry facility located on the western portion of the Site.
- 1912 – 1938: A machine shop is located on the southwestern portion of the Site. One (1)



- gasoline tank was depicted located next to the machine shop on the 1912 Sanborn Map.
- 1926: A “laundry” facility on the southwestern portion of the Site.
  - 1950: A structure utilized for used automotive sales located on the western portion of the Site. The northern portion of the Site appears undeveloped; however, it is labeled as “used car sales”. It is unclear if the automotive repair operations occurred as part of the automotive sales business.
  - 1951 – Present day: Developed with Bullshead Plaza and included the following:
    - At least 1953 – 1958: Beck Cleaners (6 Genesee Street)
    - 1955: Pratt & Whitney machine manufacturers (845 West Main Street)
    - 1960 – 1985 Bullshead Laundromat self-serve laundry (36 and 38 Genesee Street)
    - 1965: Westinghouse Dry Cleaners (18 Genesee Street)
    - 1971 – 1984: Cadet Cleaners (847 West Main Street)

Refer to Figure 1B for approximate locations of environmentally relevant historical operations.

Based on results of the Limited Subsurface Investigation Report by D&B dated April 28, 2015, PCE was detected in a soil sample collected immediately west of the former Westinghouse dry cleaning operations. Although the concentration detected was below NYCRR Part 375 Unrestricted Use SCOs, this detection could be indicative of more substantial impacts at the Site and thus LaBella identified an apparent REC related to a potential soil vapor intrusion concern in the occupied spaces.

Hazardous substances and petroleum products were observed in the garage during the Site visit and the nature of the usage of the products is reportedly unknown. It was LaBella’s understanding that these hazardous substances and petroleum products may have been historically utilized for the service and/or repair of automobiles in the garage at the Site for an unreported amount of time. In addition, floor drains were observed in the garage at the time of the Site visit. Discharge locations and integrity of the floor drains was reportedly unknown.

In addition, it is uncertain if the foundations of structures previously located at the Site (e.g., multi-story orphanage) are still in place and/or the nature of material that may have been utilized to fill basements or other subsurface features associated with these former structures.

### **Historical Use of the Northeastern Adjacent Property**

Based on review of available historical resources, the northeastern adjacent property appears to have included the following environmentally relevant operations:

- 1935 – 1945: Swan Cleaners Inc. (842 West Main Street)
- 1950: Snyder Jewelers (842 West Main Street)
- 1965: “Mr Filters Inc Sales” oil and industrial filters (850 West Main Street)

Based on the historical usage of the northeastern adjacent property, there is a potential for soil and/or groundwater at the Site to be impacted from the likely former use of petroleum products and/or other hazardous substances associated with the former automotive repair shop and used car lot. In addition, based on the historical use of the property as a jeweler, there is the potential for the soil and/or groundwater at the Site to have been impacted from the heavy metals and/or VOCs potentially utilized during jewelry cleaning operations. In addition, based on the use of this adjacent property as a “cleaner” (i.e., Swan Cleaners), it is possible that PCE was utilized in the historical



activities at this northeastern adjacent property. Based on the potential for the historical usage of chlorinated solvents (i.e. VOCs) at the northeastern adjacent property, there is the potential for chlorinated solvents (i.e. VOCs) to have been released to the soils and groundwater in the vicinity of the Site. As such, LaBella identified an apparent REC associated with the historical usage of the northeastern adjacent property.

#### **Historical Use of the Eastern Adjacent Property**

Based on the review of readily available historical resources, it appears the eastern adjacent property has included the following operations:

- 1938: Automobile sales (819 West Main Street)
- 1950: Gasoline filling station (819 – 827 West Main Street)

Based on the historical usage of the eastern adjacent property, there is a potential for soil and/or groundwater at the Site to be impacted from the former presence of petroleum products and/or other hazardous substances associated with the former automotive repair shop and used car lot. As such, LaBella identified an apparent REC associated with the historical usage of the eastern adjacent property.

#### **Historical Use of the Southwestern Adjacent Property**

Based on readily available historical resources, it appears the southwestern adjacent property, addressed as 68-92 Genesee Street, was utilized for automobile service and/or repair from at least 1938 until at least 1965. The property appears to have been occupied by United Cleaners and Launderers (68 Genesee Street) from at least 1968 until at least 2011.

In addition, LaBella completed a Phase II ESA at the 68-92 Genesee Street property for the City of Rochester in 2016. The Phase II ESA identified chlorinated solvent impacts in soil and groundwater, with the apparent source in the northeastern portion of this adjacent property (refer to Figure 3B). PCE concentrations were identified in bedrock groundwater at this adjacent property as high as 36 micrograms per liter (mg/l). The source of “worst-case” impacts appeared to be a former dry well in the northeastern portion of this adjacent property, located within fifty (50) feet of the Site’s southwestern property boundary. Two (2) petroleum underground storage tanks (USTs) were also identified at this property as part of the Phase II ESA and subsequently removed. Residual petroleum impacts may be present associated with these former USTs.

Based on the known impacts at this adjacent property and the potential for these impacts to have migrated to the Site, LaBella identified an apparent REC at the Site.

#### **Lack of Closure Documentation for USTs at the Western Adjacent Property**

According to NYSDEC PBS (#8-118117) listing for this adjacent property (89 Genesee Street) two (2), 10,000 gallon fuel oil USTs were reportedly closed at the property in 1996. However, no closure documentation was provided to LaBella as of the date of the Phase I ESA report submission associated with the 10,000 gallon fuel oil USTs.





Based on the lack of closure documentation associated with the two (2), 10,000 gallon fuel oil USTs historically located at this adjacent property, there is a potential for any soil and/or groundwater contamination present at this property to migrate to the Site. As such, LaBella identified an apparent REC associated with the lack of closure documentation for the former 10,000 gallon fuel oil USTs at the western adjacent property.

Based on the RECs summarized above, the report concluded that further assessment of the Site appeared warranted.

### 3.0 OBJECTIVE

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The objective of this Phase II ESA was to conduct an evaluation of subsurface conditions based on RECs associated with the historical use of the Site and its adjacent properties.

### 4.0 SCOPE OF WORK

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The Phase II ESA scope of work completed as part of this project is detailed in this section. Investigation locations were selected based on historical features/operations, results of prior investigation and to provide Site-wide coverage. Note that investigation points could not be completed in spaces currently occupied by tenants.

The Phase II ESA generally consisted of the following:

- Advancement of seven (7) test pits;
- Advancement of thirty-three (33) overburden soil borings (including borings advanced as part of bedrock well installation);
- Installation of (6) temporary overburden monitoring wells;
- Installation of nine (9) bedrock monitoring wells;
- Submittal of twenty-nine (29) soil samples and nine (9) groundwater samples for laboratory analysis; and,
- Preliminary geotechnical evaluation.

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

- Prior to the initiation of subsurface work, an underground utility stake-out, via *Dig Safely New York*, was completed at the Site (ticket number 10267-542-290) to locate utilities in the areas where the subsurface assessment would take place.
- Test pits were advanced between October 31 and November 1, 2017 to assess for subsurface impairment and as part of the preliminary geotechnical evaluation. Seven (7) test pits were advanced throughout the Site to equipment refusal ranging from 3.5 to 5.6 feet bgs (refer to Figure 2 for test pit locations). Test pits were backfilled and tamped in 12-inch lifts with excess soils (approximately 3-cubic yards) staged for characterization and disposal. Backfilled soils were capped with stone and the test pit locations were subsequently repaved with asphalt on November 2, 2017. Photos of test pits are included in Appendix 6.
- Following characterization of the staged soils from the test pitting program, LaBella requested a Contained-In Determination of the NYSDEC for disposal of these soils as non-hazardous waste. Refer to Section 5.5 for additional information regarding investigation





derived waste.

- A direct push soil boring and sampling program of the overburden at the Site was implemented between November 6 and November 13, 2017. Soil borings were advanced using a combination of a track-mounted Geoprobe® Systems Model 54LT and 6620DT direct-push sampling systems as well as a jackhammer for two (2) interior borings. The use of direct-push technology allows for rapid sampling, observation, and characterization of overburden soils. The Geoprobe utilizes a 4 or 5-foot MacroCore® sampler with disposable polyethylene sleeves. Soil cores are retrieved in 4 or 5-foot sections and can be easily cut from the polyethylene sleeves for observation and sampling. The MacroCore® sampler was decontaminated between boring locations using an Alconox® and potable water solution. A total of 27 soil borings were advanced at the Site as part of the overburden assessment to depths ranging from 2.5-ft to 7.4-ft bgs. Soil boring locations are depicted on Figure 2.
- Soils from the borings and test pits 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.”
- Six (6) soil borings were converted to temporary overburden groundwater monitoring wells. Each well was completed with an appropriate length of 0.010-slot well screen connected to an appropriate length of solid PVC well riser to complete the well. The annulus was sand packed with quartz sand to a nominal depth of 1-ft above the screen section. A 1-ft bentonite seal was placed above the sand pack. Wells were completed with flush-mounted curbboxes or left as a PVC stick-up. No groundwater was encountered in the overburden wells during development and sampling attempts; therefore, overburden groundwater samples were not collected.
- Nine (9) shallow bedrock wells were installed approximately 10-ft into competent bedrock between November 27 and December 5, 2017 (refer to Figure 2 for bedrock well locations). As part of the bedrock well installation, overburden soils at locations where no previous soil boring was advanced were continuously sampled with 2-foot split-spoon samplers to bedrock. Split-spoon samplers were decontaminated between uses. In locations of previous borings, overburden soils were drilled with augers to top of bedrock. Hollow-stem augers were advanced approximately 1 to 2-ft into competent bedrock and 4-inch steel casings were grouted in place to seal out the overburden. The grout was allowed to set for at least 24-hours prior to coring bedrock. Bedrock was cored using an H core barrel. Wells were constructed in bedrock with 10-ft of PVC well screen connected to the appropriate length of riser to the surface. Based on the low competency of shallow bedrock, PVC well screen and risers were utilized to prevent collapse. The annulus was sand packed to approximately 1-2 feet above each screened section and sealed with bentonite. Wells were completed with flush-mounted curb boxes. Depth of bedrock wells ranged from 16-21.5 feet bgs. Refer to Appendix 1 for monitoring well construction logs.
- Bedrock core descriptions were recorded on logs that included observations on rock type, the presence of natural and mechanical breaks, and the presence of any suspect odors, elevated ppbRAE PID readings, or staining. Photos of rock cores are included in Appendix 6.
- A preliminary geotechnical evaluation was completed by Foundation Design, P.C. (Foundation Design) at the Site simultaneously with environmental bedrock well installations and consisted of documentation of standard penetration testing, classifying soil and bedrock,



calculating rock quality designations (RQDs) of bedrock, and observing bedrock drilling. Note that this evaluation was preliminary and additional geotechnical evaluation may be recommended following completion of a Site redevelopment plan.

- Between November 30 and December 5, 2017, bedrock wells were developed using dedicated bailers by purging a minimum of five (5) well volumes in addition to any water lost during drilling procedures. Development water was containerized in 55-gallon drums on-Site. Refer to Section 5.5 for information regarding investigation derived waste.
- Between December 4 and December 6, 2017, bedrock groundwater monitoring wells were sampled using low-flow techniques (i.e., bladder pump). Wells were monitored for non-aqueous phase liquid (NAPL) before sampling, which was not identified. Water quality parameters including turbidity, pH, temperature, specific conductivity, dissolved oxygen, and depth to water were recorded at five (5) minute intervals during sampling until the parameters stabilized within the specified ranges below, at which time the samples were collected:
  - Turbidity ( $\leq 50$  NTU, +/- 10%)
  - pH (+/- 0.1)
  - Temperature (+/- 3%)
  - Specific Conductivity (+/- 3%)
  - Dissolved Oxygen (+/- 10%)

Refer to Appendix 1 for low-flow sampling logs.

Soil and groundwater samples were placed in a cooler on ice and sent under standard chain of custody procedures to Alpha Analytical Laboratories in Tonawanda, New York. The following laboratory analysis was performed:

**Soil**

Sample ID	Sample Depth (ft bgs)	Max PID Reading (ppb)	Laboratory Analysis						
			VOCs <sup>1</sup>	SVOCs <sup>2</sup>	Metals <sup>3</sup>	PCBs <sup>4</sup>	Pesticide <sup>5</sup>	Cyanide <sup>6</sup>	TOC <sup>7</sup>
TP-03	4.5-5.5	0	x	x	x	x	x	x	
TP-05	5.0-5.6	300	x	x	x	x	x	x	
SB-02	1.0-2.5	0					x		
SB-02	5.7-5.9	20	x						
SB-04	2.0-2.2	0	x						
SB-05	6.3-6.5	518	x						
SB-09	4.8-5.0	12	x						
SB-10	3.7-3.9	2192	x						
SB-12	4.8-5.0	4	x						
SB-13	5.0-5.2	0	x						
SB-16	0.6-1.4	0		x					
SB-17	1.1-6.8	0	x	x	x	x	x	x	x
SB-18	4.9-5.1	9	x						



Sample ID	Sample Depth (ft bgs)	Max PID Reading (ppb)	Laboratory Analysis							
			VOCs <sup>1</sup>	SVOCs <sup>2</sup>	Metals <sup>3</sup>	PCBs <sup>4</sup>	Pesticides <sup>5</sup>	Cyanide <sup>6</sup>	TOC <sup>7</sup>	
SB-19	4.2-4.4	1167	x							
SB-20	3.0-4.0	264	x							
SB-21	3.5-5.3	468	x							x
SB-22	5.7-5.9	264	x							
SB-23	0.5-2.7	0						x		
SB-23	4.8-5.0	0	x							
SB-24	1.4-5.0 (VOCs 4.5-5.0)	537	x	x	x	x	x	x	x	
SB-26	4.8-5.1	0	x							
SB-27	4.5-4.9	12	x							
BWB-01	4.0-4.9	0	x							
BWB-02	5.4-5.9	356	x							
BWB-04 (0.7-1.5)	0.7-1.5	3053	x							
BWB-04 (5-5.7)	5.0-5.7	33	x							
BWB-05	0.8-1.4	230	x							
BWB-07	6.0-6.5	0	x							
BWB-09	4.5-5.0	2492	x							

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. TCL and CP-51 List SVOC analysis performed via USEPA Method 8270
3. Target analyte list (TAL) metals analysis performed via USEPA Method 6010/7470/7471
4. Polychlorinated Biphenyls (PCBs) analysis performed via USEPA Method 8082
5. Pesticides analysis performed via USEPA Method 8081
6. Cyanide analysis performed via USEPA Method 9012
7. Total Organic Carbon (TOC) analysis performed via Walkley Black method for remedial design purposes.

Groundwater

Sample ID/Exploration Location	Screened Interval (ft bgs)	Laboratory Analyses									
		VOCs <sup>1</sup>	SCOVs <sup>2</sup>	Metals <sup>3</sup>	PCBs <sup>4</sup>	Pesticides <sup>5</sup>	Cyanide <sup>6</sup>	Fe & Mn <sup>7</sup>	Nitrate <sup>8</sup>	Sulfate <sup>8</sup>	
BWB-01	6-16	x						x	x	x	
BWB-02	7-17	x	x	x	x	x	x				
BWB-03	7-17	x									
BWB-04	6-16	x									
BWB-05	7-17	x									
BWB-06	11.5-21.5	x						x	x	x	
BWB-07	7.5-17.5	x	x	x	x	x	x				
BWB-08	6.5-16.5	x									



Sample ID/Exploration Location	Screened Interval (ft bgs)	Laboratory Analyses									
		VOCs <sup>1</sup>	SCOVs <sup>2</sup>	Metals <sup>3</sup>	PCBs <sup>4</sup>	Pesticides <sup>5</sup>	Cyanide <sup>6</sup>	Fe & Mn <sup>7</sup>	Nitrate <sup>8</sup>	Sulfate <sup>8</sup>	
BWB-09	7-17	x									

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. TCL and CP-51 List SVOC analysis performed via USEPA Method 8270
3. Target analyte list (TAL) metals analysis performed via USEPA Method 6010/7470/7471
4. Polychlorinated Biphenyls (PCBs) analysis performed via USEPA Method 8082
5. Pesticides analysis performed via USEPA Method 8081
6. Cyanide analysis performed via USEPA Method 9012
7. Iron (Fe) and Manganese (Mn) analysis performed via USEPA Method 6010 for remedial design purposes.
8. Nitrate and Sulfate analysis performed via USEPA Method 9056 for remedial design purposes.

## 5.0 FINDINGS

### 5.1 Site Geology and Hydrology

Site geology and hydrology was interpreted as part of the following methods of investigation between October 31 and December 5, 2017:

- Seven (7) test pits designated TP-01 through TP-07
- Twenty-seven (27) soil borings designated SB-01 through SB-27
- Nine (9) bedrock borings designated BWB-01 through BWB-09

Soil borings extended to depths ranging from 2.5 to 7.4-ft bgs. Test pits extended to depths ranging from 3.5 to 5.7-ft bgs. Top of bedrock was generally encountered between 5.0-ft and 6.5-ft throughout the Site, with a few sporadic exceptions.

Soils at the Site consisted generally of gray to brown sand and gravel underlain by red-brown to brown silt with sand and gravel. Trace amounts of clay were generally seen outside of the Site structure footprint.

Fill materials consisting of a combination of bricks, concrete, asphalt, glass, wood, plastic, coal, ash, coke, and/or cinders were observed in most testing locations (TP-01, TP-02, TP-05, TP-06, TP-07, SB-02, SB-03, SB-06, SB-08, SB-11, SB-13, SB-14, SB-16, SB-17, SB-18, SB-21, SB-22, SB-23, SB-24, SB-25, SB-27, BWB-02, BWB-03, BWB-04, BWB-05, BWB-07) throughout the Site (refer to Figure 7). Thickness of fill material at the Site ranges from approximately 0.1-ft to 4-ft. Broken shale pieces mixed with silt and sand was found immediately underlying asphalt in all seven (7) test pits and appear to have been used for parking lot construction.

Bedrock was cored in two (2) bedrock well installation locations (BWB-01 and BWB-05) to observe bedrock and for geotechnical purposes. A roller-bit was used at all other bedrock well locations (BWB-02, BWB-03, BWB-04, BWB-06, BWB-07, BWB-08, and BWB-09) to reach the desired depth for well construction. The top of bedrock was encountered during the bedrock drilling at depths ranging



from 4.9 to 6.5-ft bgs, with the exception of bedrock at BWB-06. Highly weathered bedrock was encountered in BWB-06 at 7.5-ft to 8-ft followed by silt with broken bedrock and trace sand to 10.5-ft bgs where bedrock became more competent. As such, the auger was advanced from 10.5-ft to 11.5-ft bgs in bedrock and the steel casing was set at 11.5-ft bgs. Based on known regional geology and observations made at the Site, Decew Dolostone appears to have been encountered immediately below overburden soils in wells BWB-01 and BWB-05. Mineralization (apparent calcite) and several vugs were observed in the dolostone recovered from rock cores at the Site. The dolostone appeared gray and sandy in composition. According to the United States geological Survey (USGS), Decew Dolostone was formed in the Early Silurian Period.

Bedrock wells extended to depths ranging from 16 to 21.5-ft bgs. Based on Foundation Design's report, RQD values ranged from 37% to 68% which indicates poor rock quality and corresponds with the heavily fractured rock.

Elevated PID readings above 1.0 ppm were observed in four (4) soil borings (SB-10, SB-19, BWB-04, and BWB-09). No elevated PID readings were encountered during the test pitting study. Areas of elevated PID readings include to the west, east, and southeast of the former on-Site Westinghouse Dry Cleaners, to the northeast of the 68-92 Genesee Street property, and to the southeast of the Site building, immediately adjacent to Clifton Street. The highest PID reading (3,053 ppb) was encountered in BWB-04 at 0.7-1.5-ft bgs. BWB-04 was advanced approximately 125-ft east of the former Westinghouse Dry Cleaners, in the center of the Site parking lot. Additional evidence of impairment (i.e., staining, odors, etc.) was not noted in these borings. Refer to Section 5.2 for additional information regarding field screening results.

Bedrock groundwater was encountered at the Site from depths ranging from 6.71 to 9.29-ft below top of PVC casing (measured on December 19, 2017) which is within bedrock. Bedrock wells were surveyed utilizing a GPS unit capable of capturing elevation, and groundwater elevations were calculated from the December 19, 2017 static water level measurements ranging from 532.87 to 535.67 feet above mean sea level (fmsl). Refer to Table 3 for a list of all on-Site bedrock well static water depths and elevations. Bedrock groundwater elevations were also measured in wells BW-01 through BW-05 at the adjacent 68-92 Genesee Street property and used to develop the model depicted on Figure 6. Groundwater flow direction was modeled and groundwater flow at the Site appears to vary substantially based on location and proximity to hydraulic controlling features. Potential hydraulic controlling features which *may* be influencing groundwater flow at the Site include the following:

- Sewers located beneath surrounding streets.
- A catch basin located in the northwestern portion of the Site which appears to be built into bedrock. Although piping was observed entering this catch basin, the purpose of the basin is unknown and it was not identified on any available utility mapping. A photo of the catch basin is included in Appendix 6.
- A sump located within the basement in the southern portion of the Site building. Note that this sump was observed by LaBella in August 2017 and did not appear to be operating at that time.
- An underground parking structure at the eastern adjacent property (160 Clifton Street). Although construction details have not been obtained by LaBella, the parking structure is likely built into bedrock and dewatering via one (1) or more pumps is likely required to prevent flooding within the structure.



These features are depicted on attached Figure 6.

It should be noted that groundwater flow direction can change seasonally and due to precipitation events. Groundwater was only encountered in bedrock wells; no recoverable groundwater was encountered during overburden soil borings or during test pitting activities.

Six (6) temporary 1-inch overburden groundwater monitoring wells (designated as MW-01 through MW-06) were installed at the Site within soil boreholes SB-09, SB-10, SB-13, SB-19, SB-21, and SB-26 respectively. The wells were completed with 1 to 5-ft of 0.01-in slotted screen below PVC risers, to total depths of 5.0-ft, 3.9-ft, 5.2-ft, 4.7-ft, 5.5-ft and 5.0-ft bgs, respectively. The areas surrounding the wells were filled with quartz sand. As noted previously, groundwater was not encountered in overburden wells.

Testing locations are shown on Figure 2. Copies of the Soil Boring, Test Pit, and Monitoring Well Logs are included in Appendix 1.

## 5.2 Field Screening Results

The table below summarizes PID readings obtained at various depth intervals from the soil borings:

**Test Pit/Boring Summary and Soil PID Readings (ppb)**

Testing ID	Sample Interval (ft bgs)					
	0-2	2-4	4-6	6-8	8-10	10-12
TP-01	0.0	0.0	0.0	--	--	--
TP-02	0.0	0.0	0.0	--	--	--
TP-03	0.0	0.0	0.0	--	--	--
TP-04	0.0	0.0	0.0	--	--	--
TP-05	0.0	0.0	300	--	--	--
TP-06	0.0	0.0	--	--	--	--
TP-07	0.0	0.0	0.0	--	--	--
SB-01	0.0	0.0	0.0	0.0	--	--
SB-02	0.0	0.0	20	--	--	--
SB-03	0.0	0.0	0.0	--	--	--
SB-04	0.0	0.0	0.0	--	--	--
SB-05	130	78	90	518	--	--
SB-06	132	12	131	417	--	--
SB-07	811	182	182	--	--	--
SB-08	302	422	--	--	--	--
SB-09	0.0	0.0	12	--	--	--
SB-10	185	2192	--	--	--	--
SB-11	25	12	0.0	--	--	--
SB-12	0.0	0.0	4	--	--	--
SB-13	0.0	0.0	0.0	--	--	--



Testing ID	Sample Interval (ft bgs)					
	0-2	2-4	4-6	6-8	8-10	10-12
SB-14	0.0	0.0	--	--	--	--
SB-15	0.0	0.0	90	98	--	--
SB-16	0	5	5	--	--	--
SB-17	0.0	0.0	0.0	0.0	--	--
SB-18	0.0	0.0	9	--	--	--
SB-19	416	1167	190	--	--	--
SB-20	149	264	--	--	--	--
SB-21	305	468	239	--	--	--
SB-22	128	185	264	--	--	--
SB-23	0.0	0.0	0.0	--	--	--
SB-24	0.0	46	573	--	--	--
SB-25	48	0.0	0.0	--	--	--
SB-26	0.0	0.0	0.0	--	--	--
SB-27	0.0	0.0	12	--	--	--
BWB-01	0.0	0.0	0.0	--	--	--
BWB-02	0.0	0.0	356	--	--	--
BWB-03	0.0	0.0	0.0	--	--	--
BWB-04	3053	34	33	--	--	--
BWB-05	230	107	98	--	--	--
BWB-06	0.0	0.0	12	0.0	0.0	0.0
BWB-07	0.0	0.0	0.0	--	--	--
BWB-08	0.0	46	573	--	--	--
BWB-09	632	1367	2492	--	--	--

Notes:

1. All PID readings were collected utilizing a ppbRAE photoionization detector and are expressed in parts per billion.
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 or insufficient recovery occurred at specified depth.
4. BWB-08 installed in the same location as SB-24. PID readings for SB-24 are listed for BWB-08.
5. BW-06 installed in the same location as SB-27. PID readings for SB-27 are listed for BWB-06.

### 5.3 Preliminary Geotechnical Evaluation

A preliminary geotechnical evaluation was completed as part of this Phase II ESA by Foundation Design. Foundation Design assessed soil borings, test pits, and bedrock drilling activities completed at the Site as part of this preliminary evaluation. The following is a summary of conclusions included in Foundation Design's report:





- The in-place rubble laden fill is not suitable to support foundations or floors. For conceptual planning, foundation will require removing the in-place fill down to the native soils.
- Wood or steel-framed residential housing; steel framed office/commercial uses; and multi-level high rise mixed-use structure can likely be supported on traditional spread footing foundations.
- The Site has a seismic classification of A (Hard Rock profile).
- The pavement subgrades will be in-place fill material or native soils and can expect less time before cracking, waviness, and potholes start to form and maintenance is required.
- New underground utilities and light pole bases will likely be required. Bedrock was encountered within ten feet of the ground surface. Excavations will likely require mechanical fracturing to penetrate bedrock.
- Basements are not advised due to conflicts with the bedrock surface and groundwater table which could make installing basements cost prohibitive.

Refer to Appendix 2 for Foundation Design's report and full listing of conclusions.

## 5.4 Laboratory Analytical Results

### 5.4.1 Soil

Soil sample results were compared to New York Codes, Rules, and Regulations (NYCRR) Part 375-6 Unrestricted Use Soil Cleanup Objectives (SCOs), Commercial Use SCOs, and Protection of Groundwater SCOs in analytical summary tables. These SCOs were selected for comparison purposes based on the current and future anticipated use of the Site and the surrounding area.

The following is a summary of soil sample results. Soil sample data are also summarized on attached Tables 1A through 1E and Figure 4.

#### VOCs:

Twenty-six (26) soil samples were analyzed for VOCs. As shown in Table 1A, VOCs were detected above laboratory method detection limits (MDLs) in all 26 samples; however, the concentrations detected do not exceed NYCRR Unrestricted Use, Commercial Use or Protection of Groundwater SCOs.

Although not detected above the appropriate NYCRR SCOs, it should be noted that the chlorinated VOCs PCE and trichloroethene (TCE) were detected above laboratory MDLs in several samples. These samples were generally located in the vicinities of the following areas:

- Former on-site Westinghouse dry cleaning facility;
- Former off-site dry cleaning facility at 68-92 Genesee Street;
- Former Cadet Cleaners and Pratt & Whitney machine shop in southeastern portion of Site, which are also in the vicinity of 68-92 Genesee Street.

Acetone was also identified in several soil samples above laboratory MDLs but below appropriate NYCRR SCOs. Most of these detections were orders of magnitude below the Unrestricted Use and Protection of Groundwater SCO for acetone of 0.05 mg/kg, which is not unexpected due to the extensive utilization of acetone in laboratory operations. Samples in





which the detected concentration was below but within the same order of magnitude as the Unrestricted Use and Protection of Groundwater SCO were generally collected from the northern and western portions of the Site, with the highest concentration (0.035 mg/kg) detected in the soil sample collected from 0.7-ft to 1.5-ft bgs in boring BWB-04. These concentrations combined with slightly elevated groundwater concentrations (refer to Section 5.4.2) may be indicative of the presence of acetone at elevated levels in the Site subsurface.

SVOCs:

Five (5) soil samples were analyzed for SVOCs. As shown in Table 1B, SVOCs were detected in four (4) of the five (5) soil samples above laboratory MDLs. SVOC concentrations detected in sample locations TP-05 (5.5-ft bgs) and SB-16 (0.6-1.4-ft bgs) exceed Commercial Use SCOs for benzo(a)pyrene, and exceed Protection of Groundwater SCOs for benzo(a)anthracene, benzo(b)fluoranthene, and chrysene. In addition, sample SB-16 (0.6-1.4-ft bgs) exceeds Commercial Use SCOs for benzo(a)anthracene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene, and exceeds Protection of Groundwater SCOs for benzo(k)fluoranthene. Additional PAHs were also identified in these two (2) samples at concentrations above Unrestricted Use SCOs.

TP-05 was advanced within the footprint of a former building within the central portion of the property and SB-16 was advanced through the floor slab of a former automotive repair garage on the western portion of the property.

The compounds identified at elevated levels in these samples are also known as polyaromatic hydrocarbons (PAHs) and are typically generated as a byproduct of the combustion of fossil fuels (e.g., wood, coal, petroleum) or other organic substances. PAHs are commonly found in certain petroleum products and also in urban fill materials including cinders, ash, asphalt, etc. Urban fill materials were identified in several investigation locations at the Site (refer to Section 5.1), including TP-05 and SB-16.

Metals:

Four (4) soil samples were analyzed for metals. As shown in Table 1C, metals were detected in each of the four (4) soil samples above laboratory MDLs. Furthermore, lead and mercury were detected in each of the four (4) locations above Unrestricted Use SCOs and zinc was detected in three (3) of the four (4) locations above Unrestricted Use SCOs.

Mercury was detected in sample SB-17 (1.1-6.8-ft bgs) at a concentration that also exceeds Commercial Use SCOs and Protection of Groundwater SCOs. Sample SB-17 was collected from directly beneath the concrete floor slab in the portion of the Site building previously occupied by a machine shop.

In addition, iron and calcium were identified in the four (4) soil samples at concentrations which exceed NYSDEC Commissioner Policy 51 (CP-51) Supplemental Soil Cleanup Objectives (SSCOs) for Protection of Ecological Species and Residential Use, respectively. There are currently no NYCRR Part 375 SCOs for these compounds.

Cyanide:

Four (4) soil samples were analyzed for cyanide. As shown in Table 1C, cyanide was detected above laboratory MDLs in one sample (SB-17), however the concentration detected was



below NYCRR SCOs. Sample SB-17 was collected from directly beneath the concrete floor slab in the portion of the Site building previously occupied by a machine shop.

Pesticides:

Six (6) soil samples were analyzed for pesticides. As shown in Table 1D, pesticides were detected in three (3) of the six (6) soil samples above laboratory MDLs. TP-05 (5.5-ft bgs) and SB-17 (1.1-6.8-ft bgs) exceed Unrestricted Use SCOs for the compound 4,4'-DDT. SB-02 (5.7-5.9-ft bgs) exceeds Unrestricted Use SCOs for the compound Dieldrin. No compounds were found to exceed Commercial Use or Protection of Groundwater SCOs.

PCBs:

Four (4) soil samples were analyzed for PCBs. As shown in Table 1E, PCBs were not detected above laboratory MDLs with the exception of the result for the Blind Duplicate (SB-24). PCB Aroclor 1248 was detected in this duplicate sample at an estimated concentration of 0.00476 but was not detected in the parent sample or the laboratory blank. Note that the laboratory MDL for this Aroclor was identified as 0.0397, which is an order of magnitude greater than the estimated concentration in sample Blind Duplicate (SB-24). The concentration of PCBs in the Blind Duplicate sample (SB-24) was below NYCRR SCOs.

Total Organic Carbon:

Two (2) samples (SB-17 and SB-21) were analyzed for TOC for remedial design purposes. The laboratory runs each sample twice to generate an average value for TOC. The average TOC values for SB-17 and SB-21 were 0.9425% and 6.865%, respectively. The SB-17 sample was collected from a depth in which urban fill material (i.e., concrete, ash and glass) was observed while the sample from SB-21 was collected from a depth beneath the urban fill layer, which could account for the order of magnitude differences in TOC concentrations.

Refer to Table 1 for a summary of detected compounds in soil and refer to Figure 4 for a summary of compounds exceeding SCOs. The laboratory reports are included as Appendix 3.

5.4.2 *Groundwater*

As noted in prior sections, overburden groundwater was not encountered during the Phase II ESA and thus groundwater sampling was limited to shallow bedrock groundwater.

Prior to sampling, BWB-01 through BWB-09 were purged of approximately five (5) well volumes of water in addition to water lost during the drilling process. The table below shows the amount of water lost in each well and the quantity of water removed from each well during development.

Well ID	Water Lost During Well Installation (gals)	Water Removed During Development (gals)
BWB-01	2.5	9.0
BWB-02	2.0	9.0
BWB-03	4.5	11.5
BWB-04	3.5	10.0
BWB-05	1.0	10.0
BWB-06	5.0	16.5
BWB-07	5.0	12.0
BWB-08	5.0	12.0
BWB-09	2.0	10.0



Groundwater results were compared to NYCRR Part 703 Groundwater Quality Standards.

VOCs:

Nine (9) groundwater samples were analyzed for VOCs. VOCs were detected in each of the nine (9) groundwater samples above laboratory MDLs. PCE was detected in three (3) of the (9) groundwater samples at concentrations that exceed NYCRR Part 703 standards. Concentrations of PCE exceedances detected in groundwater ranged from 36 ug/L in BWB-06 to 12,000 ug/L in BWB-08. A concentration of 5,000 ug/L was detected in BWB-01. Well BWB-08 is located immediately southwest of the former on-site Westinghouse dry cleaning facility while wells BWB-01 and BWB-06 are located immediately southeast and northwest of the former dry cleaning facility located at the adjacent 68-92 Genesee Street property.

In addition to PCE exceedances, concentrations of TCE and cis-1,2-dichloroethene were detected above NYCRR Part 703 standards in samples BWB-01 and BWB-08. Vinyl Chloride was also detected at concentrations exceeding NYCRR Part 703 standards in sample BWB-08. TCE, cis-1,2-dichloroethene and vinyl chloride are breakdown products of PCE and thus their elevated presence in groundwater may be due to natural attenuation. However, based on the ratios of these apparent breakdown products to PCE (average of 3.5% total breakdown products per sample), substantial natural attenuation does not appear to be occurring.

In addition to the chlorinated VOCs, acetone was detected above the NYCRR Part 703 standards (i.e., 50 ug/L) in wells BWB-03, BWB-04, and BWB-07 at concentrations of 170 ug/L, 72 ug/L and 410 ug/L, respectively. Although acetone is a common laboratory contaminant, the level of acetone detected in wells BWB-03 and BWB-07 is slightly above what may typically be attributed to laboratory contamination. These concentrations combined with slightly elevated soil concentrations (refer to Section 5.4.1) may be indicative of the presence of acetone at elevated levels in the Site subsurface.

SVOCs:

Two (2) groundwater samples were analyzed for SVOCs. SVOCs were detected above laboratory MDLs in both samples; however, concentrations did not exceed NYCRR Part 703 Groundwater Quality Standards in these samples.

Metals and Cyanide:

Two (2) groundwater samples were analyzed for metals and cyanide. Metals were detected above laboratory MDLs in both samples. Aluminum and sodium were detected in wells BWB-02 and BWB-07 at concentrations exceeding NYCRR Part 703 standards. Magnesium and thallium were also detected in BWB-07 at concentrations exceeding NYCRR Part 703 standards. Turbidity at the time of sampling in wells BWB-02 and BWB-07 were 26.4 NTUs and 46.4 NTUs, respectively. It should be noted that aluminum, sodium and magnesium are all naturally occurring metals found in soil and sedimentary rock.

Cyanide was not detected above laboratory MDLs in either sample.

In addition, a sample from well BWB-06 was analyzed for iron and manganese as well as inorganic compounds nitrate and sulfate for the purpose of preliminarily evaluating remedial



technologies.

PCBs and Pesticides:

Two (2) groundwater samples were analyzed for PCBs and Pesticides. PCBs and Pesticides were not detected above laboratory MDLs in either sample.

Refer to Table 2 for a summary of detected compounds in groundwater. The laboratory report is included as Appendix 3. Refer to Figure 5 for a summary of groundwater data exceeding standards.

### 5.5 Investigation Derived Waste

Investigation derived waste generated as part of the implementation of this Phase II ESA consisted of the following:

- Approximately 3-cubic yards of soil from test pitting spoils and soil cuttings from the soil boring program.
- Five (5) 55-gallon drums containing development water generated during bedrock well installation and sampling activities.

The soil was staged on and covered by plastic sheeting during the characterization period. Based on the presence of chlorinated VOCs in this material apparently associated with the former use of dry cleaning solvents, this soil was initially classified as hazardous waste by default, despite the presence of these compounds at relatively low concentrations. LaBella requested a Contained-In Determination of the NYSDEC based on the waste characterization and investigation data generated. This request was granted by the NYSDEC on January 8, 2018 and the soil pile was disposed of as non-hazardous waste at the Mill Seat Landfill in Bergen, New York on February 1, 2018. A copy of the Contained-In Determination Request approval letter from the NYSDEC and disposal documentation are included in Appendix 5.

The five (5) drums of development water were removed from the Site on January 17, 2018 and disposed of as hazardous waste at the Cycle Chem, Inc. facility in Lewisberry, Pennsylvania. Disposal documentation is included in Appendix 5.

## 6.0 COMMUNITY AIR MONITORING

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The NYSDOH Generic Community Air Monitoring Plan (CAMP) was utilized during bedrock drilling activities. Air monitoring consisted of monitoring VOCs and particulates at locations upwind and downwind from the area of the work being conducted. In addition, dust suppression techniques were utilized to containerize dust generated during the use of air rotary drilling methods. Exceedances of particulate and VOC levels designated in the CAMP were not measured during the implementation of this Phase II ESA. CAMP data is included as Appendix 4.

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

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LaBella was retained by City of Rochester to conduct a Phase II ESA at the property known as "Bullshead Plaza", located at 835-855 West Main Street City of Rochester, Monroe County, New York. The ESA consisted of the advancement of thirty-three (33) overburden soil borings, installation of nine (9) bedrock groundwater monitoring wells, advancement of seven (7) test pits, laboratory



analysis of twenty-nine (29) soil and nine (9) groundwater samples and completion of groundwater flow modeling. A preliminary geotechnical evaluation was also completed as part of this project.

This Phase II ESA was performed to evaluate the Site subsurface based on the historical uses of the Site. The following conclusions have been made:

- Chlorinated VOCs (primarily PCE) have been detected in soil and groundwater at the Site. These compounds have not been identified in soil above NYCRR Part 375 SCOs; however, they have been identified in three (3) bedrock groundwater samples above NYCRR Part 703 Groundwater Quality Standards. There appear to be at least two (2) potential sources of the chlorinated VOC groundwater impacts identified at the Site:
  1. The former on-site Westinghouse dry cleaning facility previously located in the northern portion of the Site building (refer to Figure 1B). PCE was detected in bedrock groundwater at concentrations up to 12,000-ug/L in this location (i.e., BWB-08). Attached Figure 3A shows PCE plume modeling limited to the northwestern portion of the Site and Figure 6 shows groundwater flow modeling. Although the use of chlorinated VOCs in former dry cleaning operations at this facility has not been confirmed, the presence of these compounds in this area of the Site could be indicative of a release from the former Westinghouse facility.
  2. The former adjacent dry cleaning facility located at 68-92 Genesee Street (refer to Figure 1B). Impacts appear to be migrating from this adjacent property onto the Site. PCE was detected in bedrock groundwater at concentrations of 36-ug/L and 5,000-ug/L in locations immediately northwest (BWB-06) and southeast (BWB-01) of this adjacent property. The highest PCE concentration in bedrock groundwater identified at this adjacent property as part of LaBella's 2016 Phase II ESA for 68-92 Genesee Street was 36,000 ug/L. Attached Figure 3B shows PCE plume modeling limited to the southwestern portion of the Site and Figure 6 shows groundwater flow modeling.
- The presence of elevated concentrations of VOCs in the Site subsurface groundwater may present an SVI concern within the Site building and potentially to buildings on surrounding properties.
- Acetone was detected in three (3) groundwater samples above NYCRR Part 703 standards. Although acetone is a common laboratory contaminant, the concentrations of acetone identified in two (2) of these samples combined with slightly elevated concentrations of acetone in soil samples may be indicative of the presence of acetone at elevated levels in the Site subsurface.
- Five (5) soil samples were analyzed for SVOCs; SVOCs were detected at concentrations above Commercial Use SCOs in two (2) locations, TP-05 and SB-16. Four (4) soil samples were analyzed for metals; mercury was detected above the Commercial Use SCO in one (1) location, SB-17. Urban fill material was identified in these locations as well as several other locations at the Site in which samples were not analyzed for PAHs or metals. As such, the detections of these compounds at elevated levels may also indicate their presence in fill material elsewhere on Site.

The presence of urban fill is likely attributed to the historical use of this material as fill, which was common in urban environments in the early and mid-1900's. Compounds commonly found at elevated levels in this material (i.e., heavy metals and PAHs) typically adhere to the



soil matrix and are not readily soluble in groundwater. Heavy metals and PAHs typically associated with urban fill were not identified at elevated concentrations in groundwater samples collected at the Site.

- Pesticides were detected in the soil above Unrestricted Use SCOs but don't appear to be a consistent Site-wide issue and may be the result of their use in the region historically. These slightly elevated detections of pesticides were all identified in locations in which urban fill was also encountered.
- Heavy metals including sodium, aluminum, magnesium and/or thallium were identified in groundwater from wells BWB-02 and BWB-07 at concentrations exceeding NYCRR Part 703 standards. The presence of sodium, aluminum and magnesium may represent naturally occurring elevated concentrations of these metals in the region and generally correspond to groundwater data collected from the adjacent 68-92 Genesee Street parcel as part of LaBella's 2016 Phase II ESA at that property. Sodium and magnesium are also common constituents of road salt. Thallium is commonly found in the environment as a byproduct of lead and zinc smelting and also as an ingredient in rat poison (use of thallium-based poison is currently banned in the United States). Based on the lack of thallium identified above laboratory MDLs in the other groundwater samples or soil samples and the relatively high turbidity measured during sampling of BWB-07 (46.4 NTUs), the presence of thallium in this sample may not be representative of dissolved groundwater conditions.
- Refer to the attached Pre-Development Assessment report completed by Foundation Design for a preliminary evaluation of geotechnical conditions at the Site.

Soil and groundwater impacts associated with chlorinated VOCs and apparent urban fill material have been identified at the Site. As such, LaBella recommends additional investigation to define the nature and extent of these impacts and assess for potential soil vapor intrusion concerns in any occupied portions of the Site building.

## 8.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

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Report Prepared By:



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Alexander Brett  
Environmental Engineer

Report Reviewed By:



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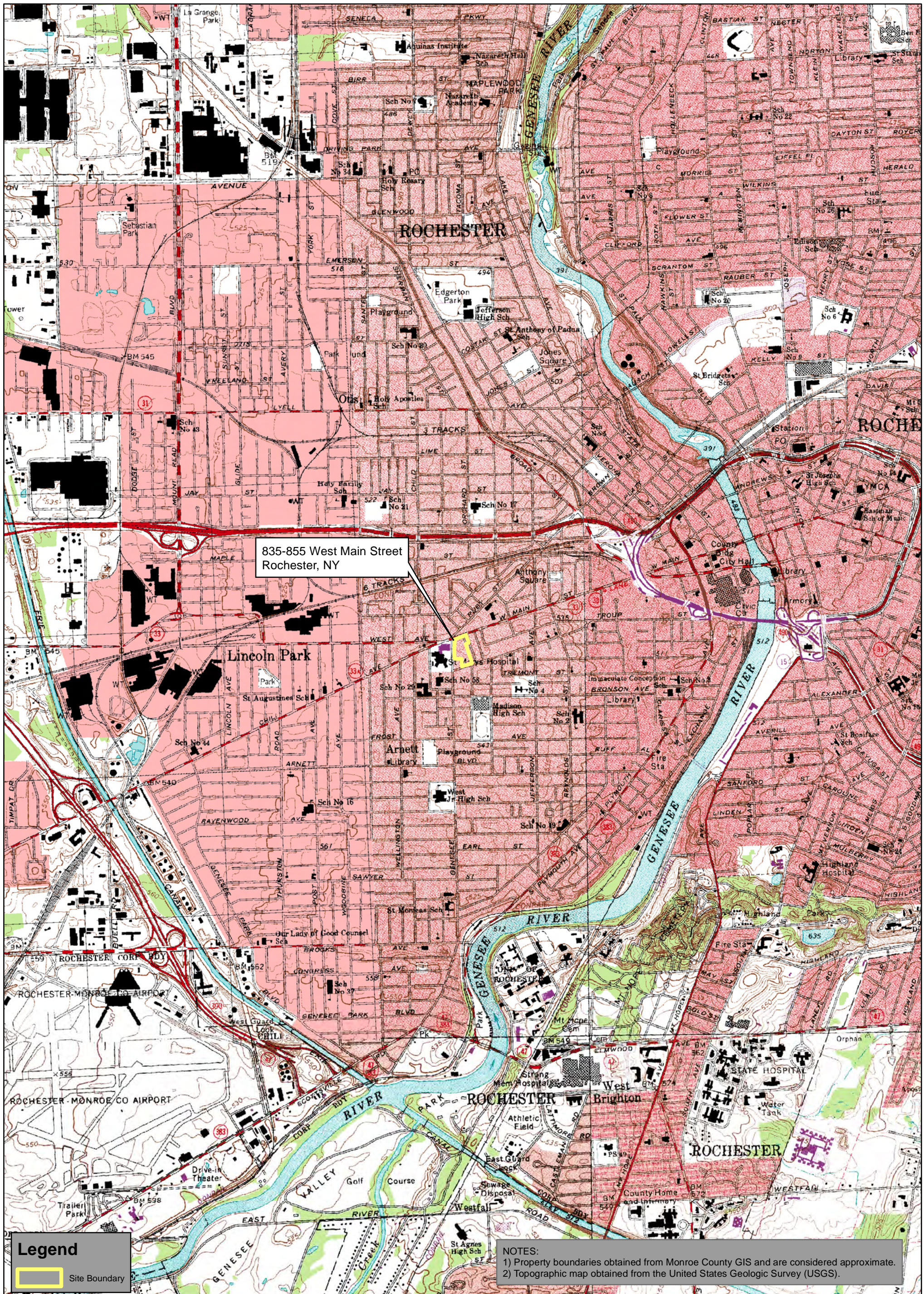
Jennifer Gillen, PG  
Project Manager





# FIGURES





835-855 West Main Street  
Rochester, NY


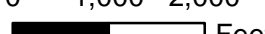
**Legend**  
 Site Boundary

**NOTES:**  
 1) Property boundaries obtained from Monroe County GIS and are considered approximate.  
 2) Topographic map obtained from the United States Geological Survey (USGS).

PROJECT/DRAWING NUMBER:  
 [ 2172414 ]  
 [ FIGURE 1A ]

PROJECT:  
**PHASE II ESA**  
**835-855 WEST MAIN STREET**  
**ROCHESTER, NEW YORK**  
 DRAWING NAME:  
**SITE LOCATION**

CLIENT:  
**CITY OF ROCHESTER**

  
 0 1,000 2,000  
  
 Feet  
 1 inch = 2,000 feet  
 INTENDED TO PRINT AS: 11" X 17"



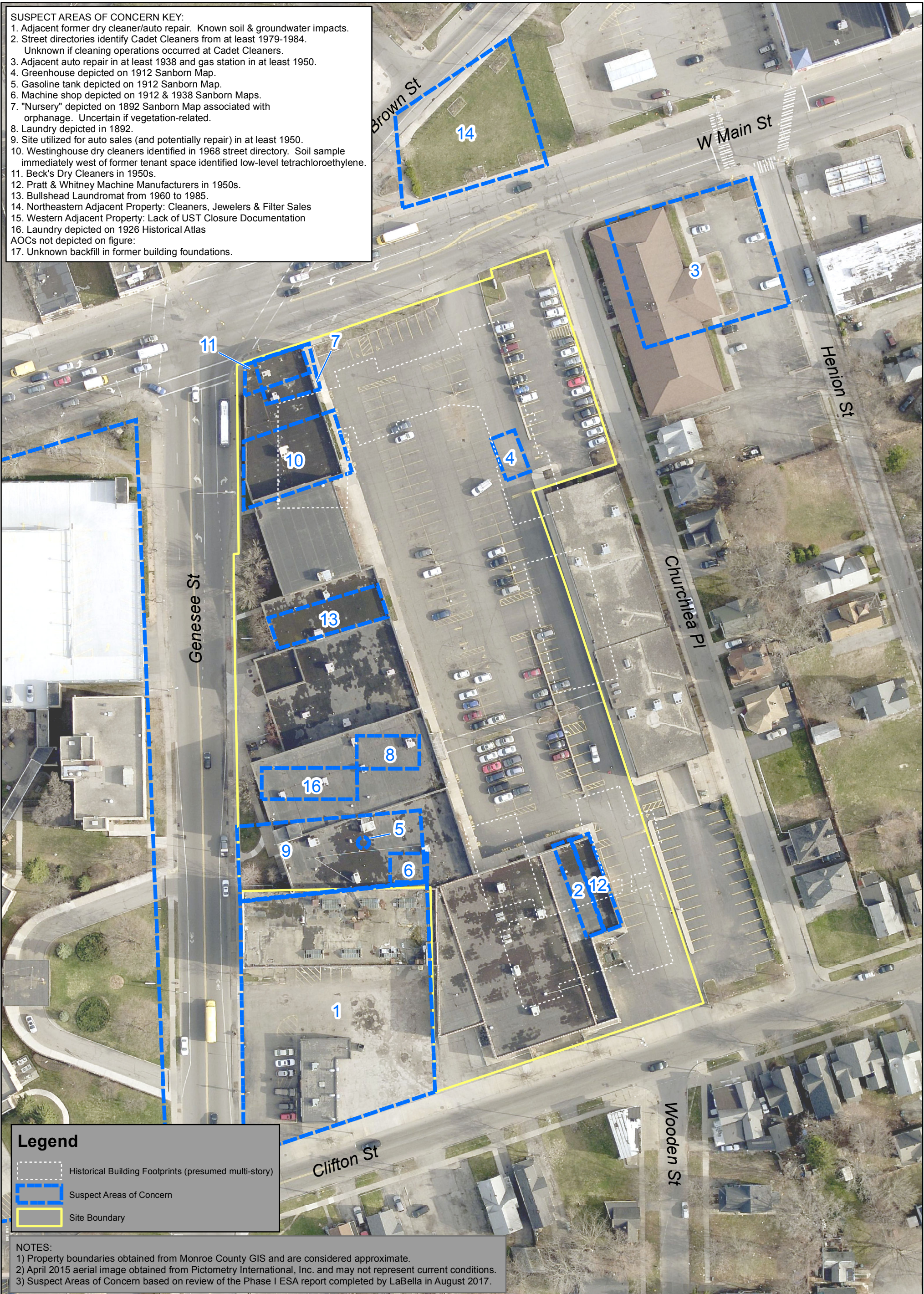


**SUSPECT AREAS OF CONCERN KEY:**

1. Adjacent former dry cleaner/auto repair. Known soil & groundwater impacts.
2. Street directories identify Cadet Cleaners from at least 1979-1984. Unknown if cleaning operations occurred at Cadet Cleaners.
3. Adjacent auto repair in at least 1938 and gas station in at least 1950.
4. Greenhouse depicted on 1912 Sanborn Map.
5. Gasoline tank depicted on 1912 Sanborn Map.
6. Machine shop depicted on 1912 & 1938 Sanborn Maps.
7. "Nursery" depicted on 1892 Sanborn Map associated with orphanage. Uncertain if vegetation-related.
8. Laundry depicted in 1892.
9. Site utilized for auto sales (and potentially repair) in at least 1950.
10. Westinghouse dry cleaners identified in 1968 street directory. Soil sample immediately west of former tenant space identified low-level tetrachloroethylene.
11. Beck's Dry Cleaners in 1950s.
12. Pratt & Whitney Machine Manufacturers in 1950s.
13. Bullshead Laundromat from 1960 to 1985.
14. Northeastern Adjacent Property: Cleaners, Jewelers & Filter Sales
15. Western Adjacent Property: Lack of UST Closure Documentation
16. Laundry depicted on 1926 Historical Atlas

AOCs not depicted on figure:

17. Unknown backfill in former building foundations.



**Legend**

- Historical Building Footprints (presumed multi-story)
- Suspect Areas of Concern
- Site Boundary

**NOTES:**

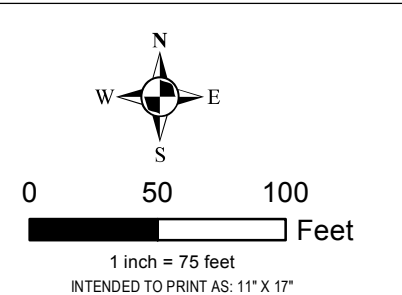
- 1) Property boundaries obtained from Monroe County GIS and are considered approximate.
- 2) April 2015 aerial image obtained from Pictometry International, Inc. and may not represent current conditions.
- 3) Suspect Areas of Concern based on review of the Phase I ESA report completed by LaBella in August 2017.

PROJECT/DRAWING NUMBER:  
2172414  
FIGURE 1B

PROJECT:  
**PHASE II ESA**  
**835-855 WEST MAIN STREET**  
**ROCHESTER, NEW YORK**

DRAWING NAME:  
**PRE-INVESTIGATION SUSPECT**  
**AREAS OF CONCERN**

CLIENT:  
**CITY OF ROCHESTER**







**Legend**

- 2017 Bedrock Well
- 2017 Soil Boring
- 2017 Test Pit
- 2015 Ph. II ESA Soil Borings
- Occupied Buildings
- Site Boundary

**NOTES:**

- 1) Property boundaries obtained from Monroe County GIS and are considered approximate.
- 2) April 2015 aerial image obtained from Pictometry International, Inc. and may not represent current conditions.
- 3) Investigation locations determined using GPS (Carlson S320) or by measuring from Site features.

PROJECT/DRAWING NUMBER:

2172414

FIGURE 2

PROJECT:

**PHASE II ESA  
835-855 WEST MAIN STREET  
ROCHESTER, NEW YORK**

DRAWING NAME:

**INVESTIGATION LOCATIONS**

CLIENT:

**CITY OF ROCHESTER**



0 30 60  
Feet

1 inch = 60 feet  
INTENDED TO PRINT AS: 11" X 17"

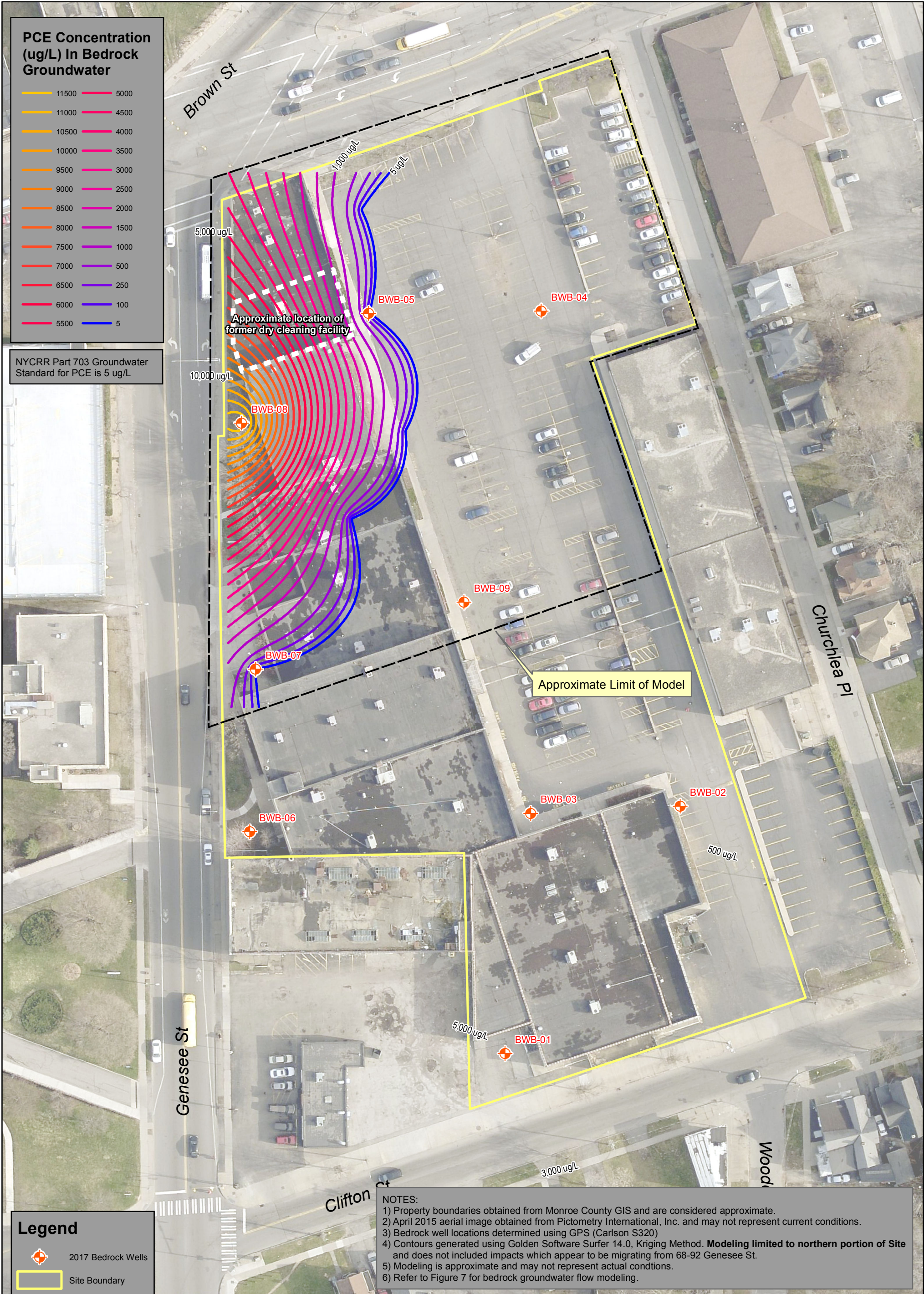




**PCE Concentration (ug/L) In Bedrock Groundwater**



NYCRR Part 703 Groundwater Standard for PCE is 5 ug/L



**Legend**



**NOTES:**

- 1) Property boundaries obtained from Monroe County GIS and are considered approximate.
- 2) April 2015 aerial image obtained from Pictometry International, Inc. and may not represent current conditions.
- 3) Bedrock well locations determined using GPS (Carlson S320)
- 4) Contours generated using Golden Software Surfer 14.0, Kriging Method. **Modeling limited to northern portion of Site** and does not include impacts which appear to be migrating from 68-92 Genesee St.
- 5) Modeling is approximate and may not represent actual conditions.
- 6) Refer to Figure 7 for bedrock groundwater flow modeling.

PROJECT/DRAWING NUMBER:

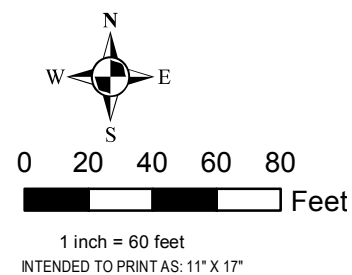
**2172414**  
**FIGURE 3A**

PROJECT:  
**PHASE II ESA**  
**835-855 WEST MAIN STREET**  
**ROCHESTER, NEW YORK**

DRAWING NAME:  
**TETRACHLOROETHYLENE (PCE)**  
**IN BEDROCK GROUNDWATER:**  
**NORTHWESTERN PLUME**

CLIENT:

**CITY OF ROCHESTER**



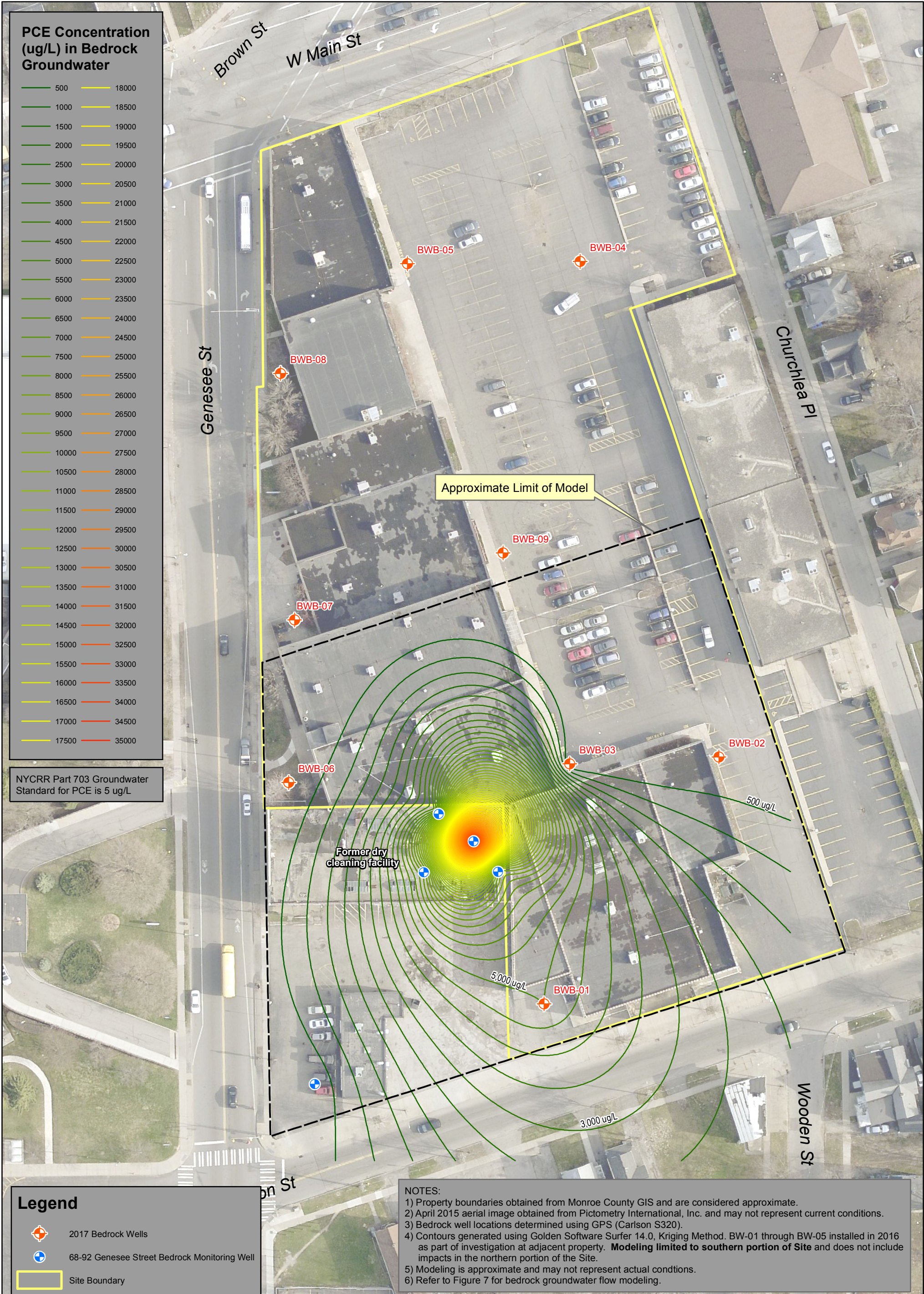
**LaBella**  
Powered by partnership.



**PCE Concentration (ug/L) in Bedrock Groundwater**

500	18000
1000	18500
1500	19000
2000	19500
2500	20000
3000	20500
3500	21000
4000	21500
4500	22000
5000	22500
5500	23000
6000	23500
6500	24000
7000	24500
7500	25000
8000	25500
8500	26000
9000	26500
9500	27000
10000	27500
10500	28000
11000	28500
11500	29000
12000	29500
12500	30000
13000	30500
13500	31000
14000	31500
14500	32000
15000	32500
15500	33000
16000	33500
16500	34000
17000	34500
17500	35000

NYCRR Part 703 Groundwater Standard for PCE is 5 ug/L



**Legend**

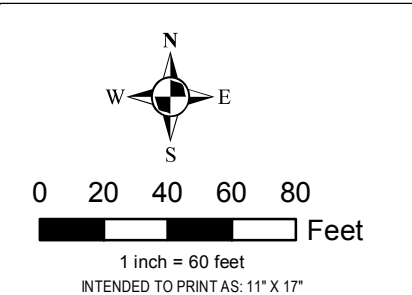
- 2017 Bedrock Wells
- 68-92 Genesee Street Bedrock Monitoring Well
- Site Boundary

**NOTES:**  
 1) Property boundaries obtained from Monroe County GIS and are considered approximate.  
 2) April 2015 aerial image obtained from Pictometry International, Inc. and may not represent current conditions.  
 3) Bedrock well locations determined using GPS (Carlson S320).  
 4) Contours generated using Golden Software Surfer 14.0, Kriging Method. BW-01 through BW-05 installed in 2016 as part of investigation at adjacent property. **Modeling limited to southern portion of Site** and does not include impacts in the northern portion of the Site.  
 5) Modeling is approximate and may not represent actual conditions.  
 6) Refer to Figure 7 for bedrock groundwater flow modeling.

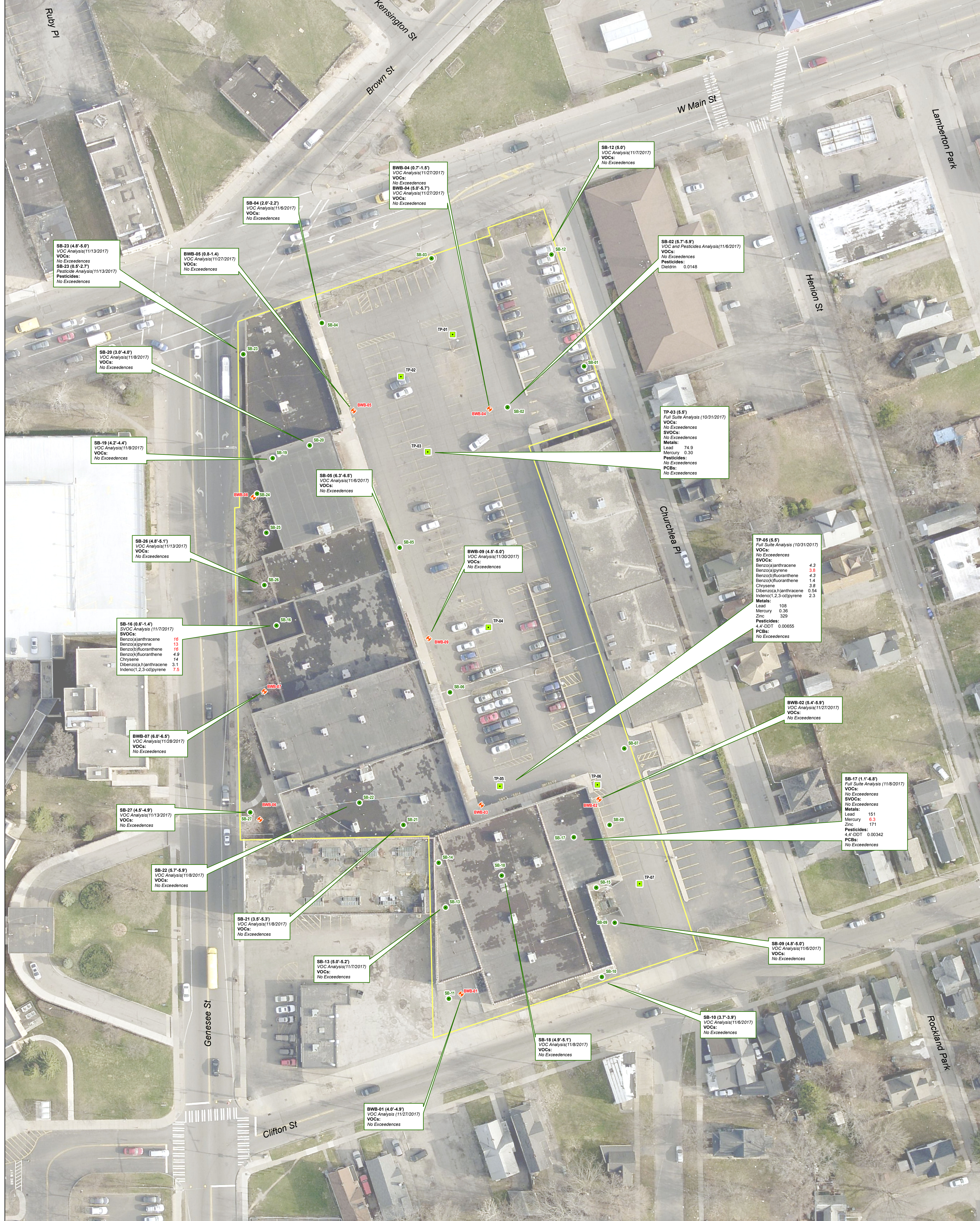
PROJECT/DRAWING NUMBER:  
 [ 2172414 ]  
 [ **FIGURE 3B** ]

PROJECT:  
**PHASE II ESA**  
**835-855 WEST MAIN STREET**  
**ROCHESTER, NEW YORK**  
 DRAWING NAME:  
**TETRACHLOROETHYLENE (PCE)**  
**IN BEDROCK GROUNDWATER:**  
**SOUTHWESTERN PLUME**

CLIENT:  
**CITY OF ROCHESTER**







**Legend**

- 2017 Soil Boring
- 2017 Test Pit
- ◆ 2017 Bedrock Wells
- Site Boundary

**NOTES:**

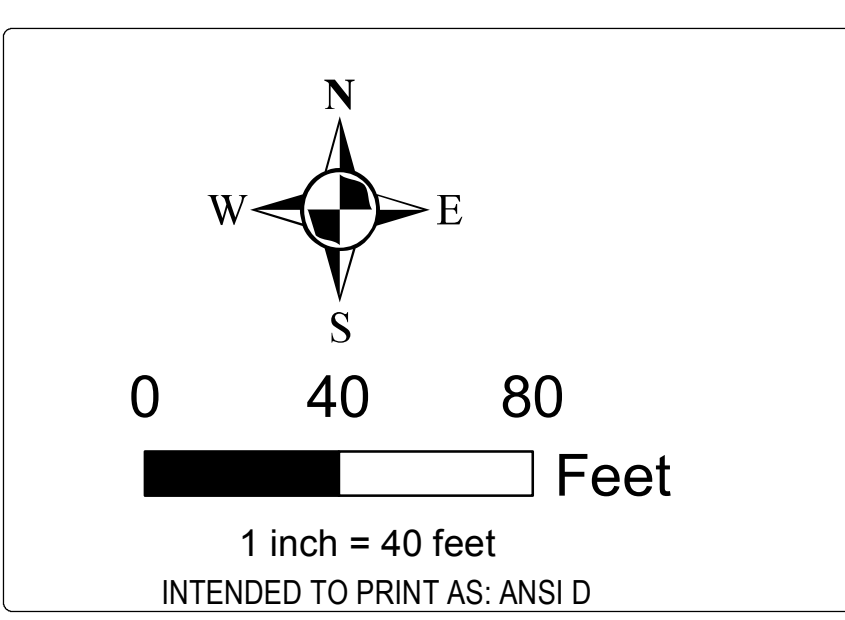
- 1) Property boundaries obtained from Monroe County GIS and are considered approximate.
- 2) April 2015 aerial image obtained from Pictometry International, Inc. and may not represent current conditions.
- 3) Completed investigation locations were measured using GPS (Carlson S320) or tape measured from existing site features.
- 4) "SCO" refers to NYCRR Part 375 Soil Cleanup Objective.
- 5) All units in milligrams per kilogram (mg/kg).
- 6) Values shown in callouts exceed Unrestricted Use SCOs. Values shown in *italicized* font exceed Protection of Groundwater SCOs. Values shown in **red** font exceed Commercial Use SCOs.
- 7) Refer to Data Summary Tables in Appendix for full list of detected compounds and laboratory qualifiers.

PROJECT/DRAWING NUMBER:  
2172414  
FIGURE 4

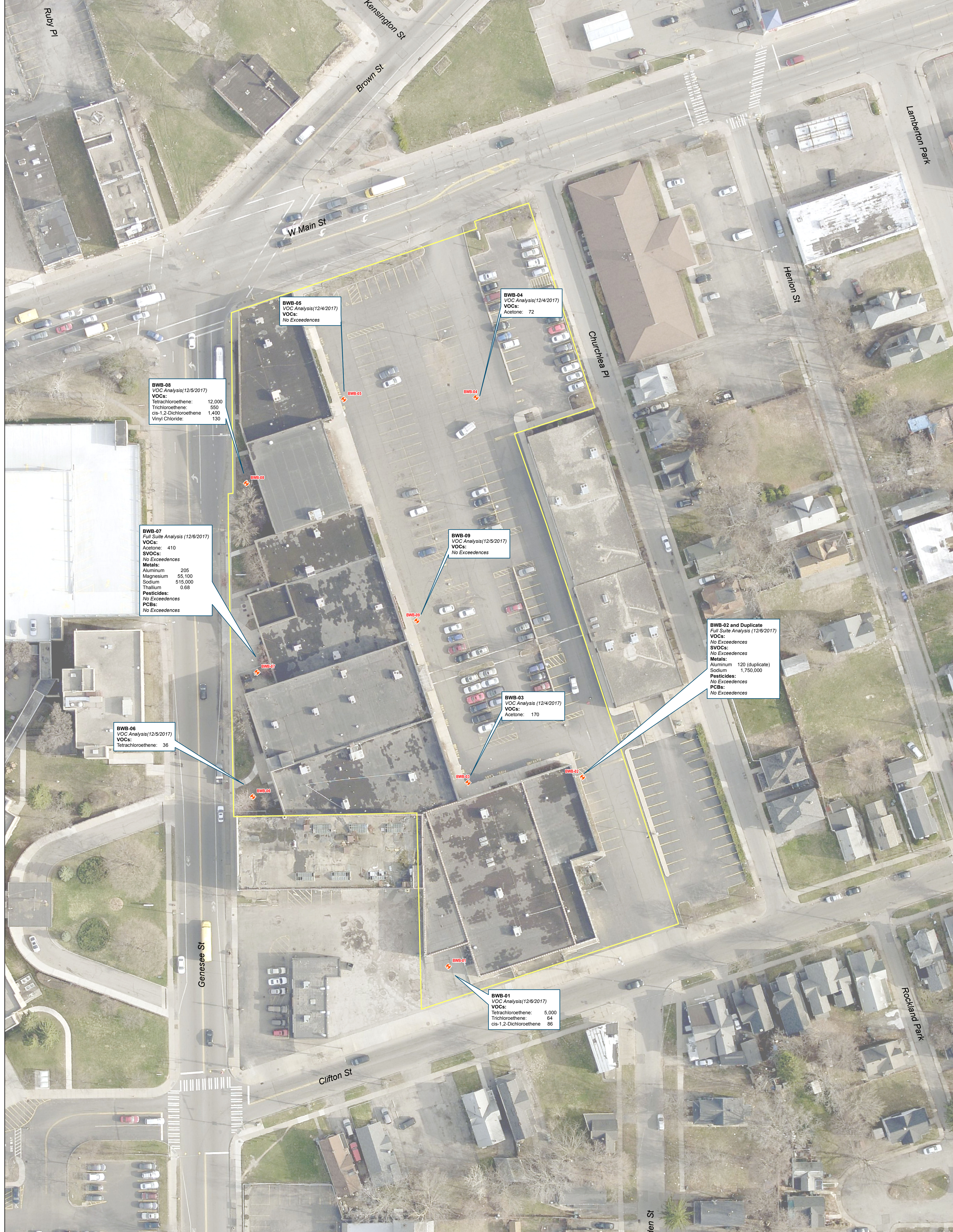
PROJECT:  
**PHASE II ESA**  
**835-855 WEST MAIN STREET**  
**ROCHESTER, NEW YORK**

DRAWING NAME:  
**SUMMARY OF SOIL**  
**DATA EXCEEDING**  
**SOIL CLEANUP OBJECTIVES**

CLIENT:  
**CITY OF ROCHESTER**







**Legend**

- 2017 Bedrock Wells
- Site Boundary

**NOTES:**

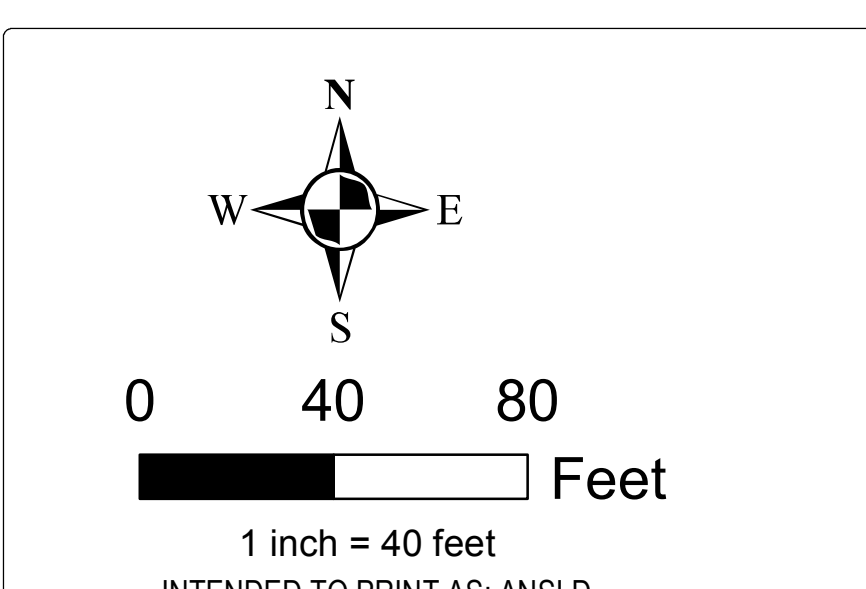
- 1) Property boundaries obtained from Monroe County GIS and are considered approximate.
- 2) April 2015 aerial image obtained from Pictometry International, Inc. and may not represent current conditions.
- 3) Completed investigation locations were measured using GPS (Carlson S320) or tape measured from existing site features.
- 4) Values shown in callouts exceed NYSDEC TOGS 1.1.1 or NYCRR Part 703 Groundwater Standards.
- 5) Refer to Data Summary Tables in Appendix for full list of detected compounds and laboratory qualifiers.

PROJECT/DRAWING NUMBER:  
2172414  
FIGURE 5

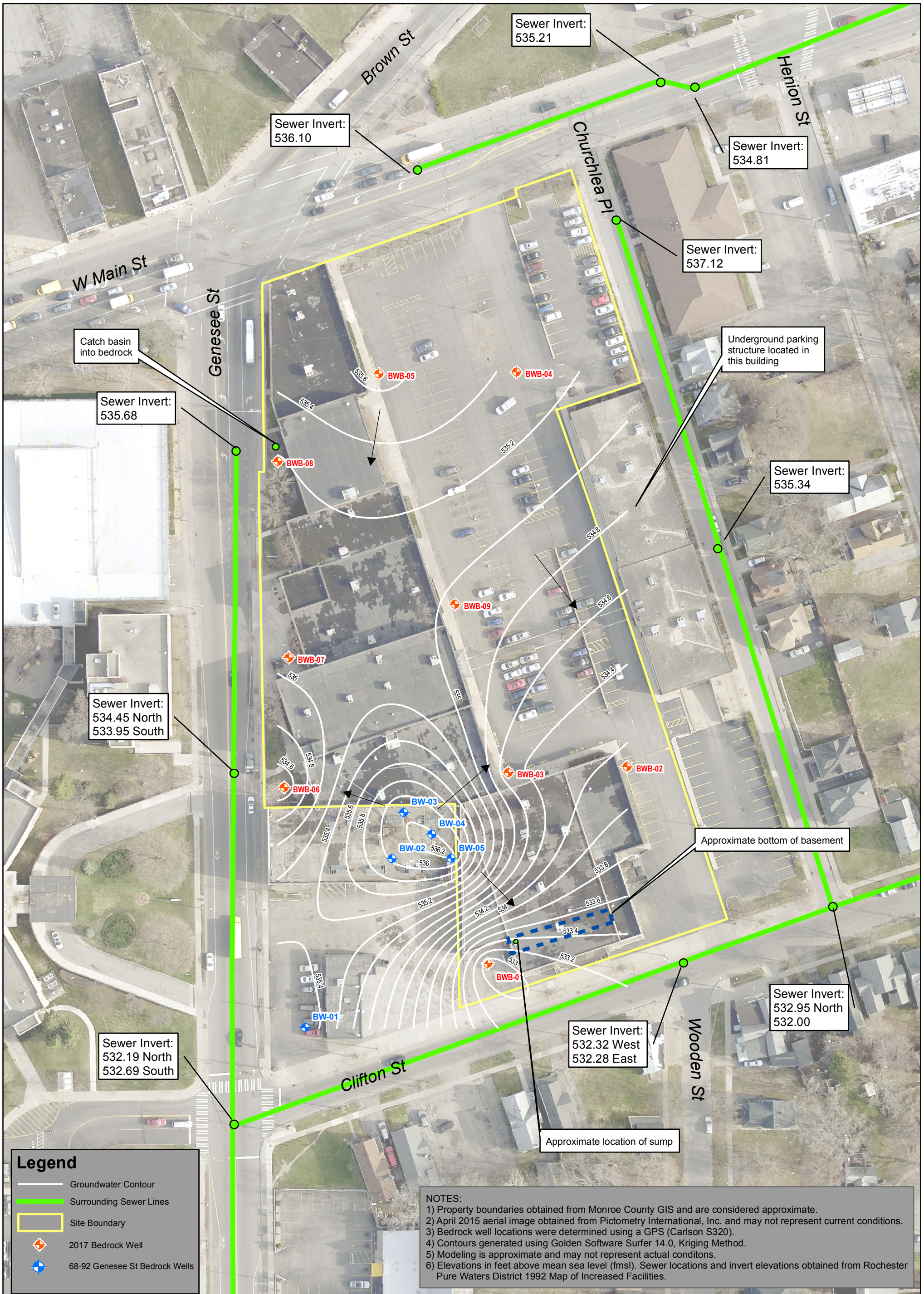
PROJECT:  
**PHASE II ESA**  
**835-855 WEST MAIN STREET**  
**ROCHESTER, NEW YORK**

DRAWING NAME:  
**SUMMARY OF**  
**GROUNDWATER DATA**  
**EXCEEDING STANDARDS**

CLIENT:  
**CITY OF ROCHESTER**



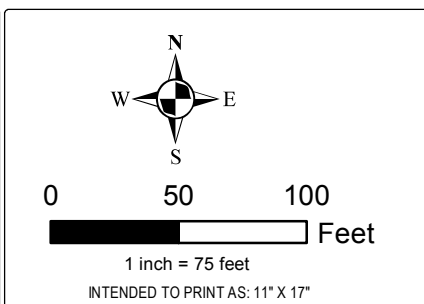




PROJECT/DRAWING NUMBER:  
 [ 2172414 ]  
 [ FIGURE 6 ]

PROJECT:  
**PHASE II ESA**  
**835-855 WEST MAIN STREET**  
**ROCHESTER, NEW YORK**  
 DRAWING NAME:  
**Bedrock Groundwater Elevations**

CLIENT:  
**CITY OF ROCHESTER**







**Legend**

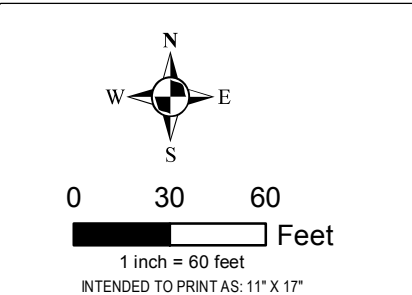
- 2017 Bedrock Well
- 2017 Soil Boring
- 2017 Test Pit
- Apparent Urban Fill Locations
- Site Boundary

**NOTES:**  
 1) Property boundaries obtained from Monroe County GIS and are considered approximate.  
 2) April 2015 aerial image obtained from Pictometry International, Inc. and may not represent current conditions.  
 3) Investigation locations determined using GPS (Carlson S320) or by measuring from Site features.  
 4) "Urban fill" consists of bricks, concrete, asphalt, glass, wood, plastic, coal, ash, coke, AND/OR cinders. Based on observations made by LaBella during Phase II ESA.

PROJECT/DRAWING NUMBER:  
 [ 2172414 ]  
 [ FIGURE 7 ]

PROJECT:  
**PHASE II ESA**  
**835-855 WEST MAIN STREET**  
**ROCHESTER, NEW YORK**  
 DRAWING NAME:  
**AREAS OF APPARENT**  
**URBAN FILL**

CLIENT:  
**CITY OF ROCHESTER**







# TABLES

Table 1A - Page 1 of 3  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Detected Volatile Organic Compounds in Soil Samples  
LaBella Project No. 2172414

Sample ID Sample Depth (feet below ground surface) Date Collected	NYCRR Part 375-6 Protection of Groundwater (ppm)	NYCRR Part 375-6 Unrestricted Use (ppm)	NYCRR Part 375-6 Commerical Use (ppm)	TP-03	Blind Duplicate (TP-03)	TP-05	SB-02	SB-04	SB-05	SB-09	SB-10	SB-12	SB-13	SB-17
				5.5	5.5	5.5	5.7-5.9	2.0-2.2	6.3-6.5	4.8-5.0	3.7-3.9	5.0	5.0-5.2	1.1-6.8
				10/31/2017	10/31/2017	10/31/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/7/2017	11/7/2017	11/8/2017
Acetone	500	0.05	0.05	<0.012	<0.01	<b>0.0026</b> J	<0.69	<b>0.002</b> J	<b>0.0052</b> J	<b>0.014</b>	<b>0.0068</b> J	<b>0.025</b>	<b>0.0029</b> J	<b>0.0095</b> J
Tetrachloroethene	1.3	1.3	150	<0.0012	<0.001	0.015	<b>0.048</b> J	<0.00082	<0.00081	<0.00089	<0.00091	<0.00093	<0.00097	<b>0.0006</b> J
Trichloroethene	0.47	0.47	200	<0.0012	<0.0012	<0.0012	<0.069	<0.00082	<0.00081	<0.00089	<0.00091	<0.00093	<0.00097	<0.0011
Benzene	0.06	0.06	44	<0.0012	<0.0012	<0.0012	<0.069	<0.00082	<b>0.00044</b> J	<0.00089	<b>0.00038</b> J	<0.00093	<b>0.00037</b> J	<0.0011
o-Xylene	NA	NA	NA	<0.0024	<0.0024	<0.0024	<0.14	<0.0016	<b>0.00037</b> J	<0.0018	<b>0.00032</b> J	<0.0018	<b>0.00051</b> J	<0.0022
m/p-Xylene				<0.0024	<0.0024	<0.0024	<0.14	<b>0.00044</b> J	<b>0.0016</b>	<b>0.00032</b> J	<b>0.0011</b> J	<0.0018	<b>0.0022</b>	<0.0022
Total Xylenes	1.6	0.26	500	<0.0024	<0.0024	<0.0024	<0.14	<b>0.00044</b> J	<b>0.00197</b> J	<b>0.00032</b> J	<b>0.00142</b> J	<0.0018	<b>0.00271</b> J	<0.0022
Ethylbenzene	1	1	390	<0.0012	<0.0012	<0.0012	<0.069	<b>0.00022</b> J	<b>0.0006</b> J	<0.00089	<b>0.00028</b> J	<0.00093	<b>0.00069</b> J	<0.0011
Toluene	0.7	0.7	500	<b>0.00029</b> J	<b>0.00022</b> J	<b>0.00019</b> J	<b>0.015</b> J	<b>0.00052</b> J	<b>0.0019</b>	<b>0.00056</b> J	<b>0.0012</b> J	<0.0014	<b>0.0018</b>	<b>0.0005</b> J
Naphthalene	12	12	500	<0.0059	<0.0052	<b>0.0007</b> J	<b>4.0</b>	<0.0041	<0.004	<0.0045	<b>0.00023</b> J	<0.0046	<b>0.00055</b> J	<0.0055
1,3,5-Trimethylbenzene	8.4	8.4	190	<0.0059	<0.0059	<0.0059	<b>0.017</b> J	<0.0041	<b>0.0003</b> J	<0.0045	<b>0.00048</b> J	<0.0046	<b>0.00074</b> J	<0.0055
1,2,4-Trimethylbenzene	3.6	3.6	190	<0.0059	<b>0.00029</b> J	<b>0.00022</b> J	<b>0.024</b> J	<b>0.00028</b> J	<b>0.00085</b> J	<b>0.00032</b> J	<b>0.0018</b> J	<b>0.00023</b> J	<b>0.0028</b> J	<b>0.00022</b> J
n-Propylbenzene	3.9	3.9	500	<0.0012	<0.0012	<0.0012	<0.069	<0.00082	<b>0.00018</b> J	<0.00089	<b>0.00034</b> J	<0.00093	<b>0.00051</b> J	<0.0011
Cyclohexane	NL	NL	NL	<0.024	<0.024	<0.024	<1.4	<0.016	<b>0.00037</b> J	<0.018	<b>0.00056</b> J	<0.018	<b>0.00049</b> J	<0.022
Methyl cyclohexane	NL	NL	NL	<0.0047	<0.0047	<0.0047	<0.28	<0.0033	<b>0.00072</b> J	<0.0036	<b>0.00095</b> J	<0.0037	<b>0.00094</b> J	<0.0044
1,4-Dichlorobenzene	1.8	1.8	130	<0.01	<0.01	<0.01	<b>0.02</b> J	<0.0041	<0.0040	<0.0045	<0.0045	<0.0046	<0.0048	<0.0055
Methyl tert butyl ether	0.93	0.93	500	<0.01	<0.01	<0.01	<b>0.012</b> J	<0.0016	<0.0016	<0.0018	<0.0018	<0.0018	<0.0019	<0.0022
TOTAL VOCs	NA	NA	NA	<b>0.00029</b>	<b>0.00051</b>	<b>0.01871</b>	<b>4.10400</b>	<b>0.0039</b>	<b>0.0145</b>	<b>0.01552</b>	<b>0.01586</b>	<b>0.02523</b>	<b>0.01721</b>	<b>0.01082</b>

Notes:  
Samples collected by United States Environmental Protection Agency (USEPA) Method 5035.  
Samples analysed for Target Compound list VOCs by USEPA Method 8260.

NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY  
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).  
\* J - Indicates value is an estimation by the laboratory.  
\* NA - Not Available  
\* NL - Not Listed

**Bolded** values were detected above laboratory MDL.  
Underlined values were detected above NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective.  
Yellow-highlighted values were detected above NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.  
Orange-highlighted values were detected above NYCRR Part 375 Commercial Use Soil Cleanup Objective.

Table 1A - Page 2 of 3  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Detected Volatile Organic Compounds in Soil Samples  
LaBella Project No. 2172414

Sample ID Sample Depth (feet below ground surface) Date Collected	NYCRR Part 375-6 Protection of Groundwater (ppm)	NYCRR Part 375-6 Unrestricted Use (ppm)	NYCRR Part 375-6 Commerical Use (ppm)	SB-18	SB-19	SB-20	SB-21	SB-22	SB-23	SB-24	Blind Duplicate (SB-24)	SB-26	SB-27
				4.9-5.1	4.2-4.4	3.0-4.0	3.5-5.3	5.7-5.9	4.8-5.0	4.5-5.0	4.5-5.0	4.8-5.1	4.5-4.9
				11/8/2017	11/8/2017	11/8/2017	11/8/2017	11/8/2017	11/13/2017	11/13/2017	11/13/2017	11/13/2017	11/13/2017
Acetone	500	0.05	0.05	<b>0.0044</b> J	<b>0.012</b>	<b>0.02</b>	<b>0.0064</b> J	<b>0.006</b> J	<b>0.0069</b> J	<b>0.012</b>	<b>0.0072</b> J	<b>0.0035</b> J	<b>0.0071</b> J
Tetrachloroethene	1.3	1.3	150	<b>0.004</b>	<b>0.00037</b> J	<b>0.0011</b>	<b>0.041</b>	<b>0.28</b>	<b>0.00046</b> J	<b>0.0028</b>	<b>0.0043</b>	<0.00085	<b>0.0014</b>
Trichloroethene	0.47	0.47	200	<0.00089	<0.0011	<0.00095	<0.001	<b>0.00057</b> J	<0.00090	<0.00090	<0.00094	<0.00085	<0.00087
Benzene	0.06	0.06	44	<0.00089	<0.0011	<0.00095	<0.001	<0.001	<0.00090	<0.00090	<0.00094	<0.00085	<b>0.00020</b> J
o-Xylene				<0.0018	<0.0023	<0.0019	<0.002	<0.0021	<0.0018	<0.0018	<0.019	<0.0017	<0.0017
m/p-Xylene	NA	NA	NA	<b>0.00032</b> J	<b>0.001</b> J	<0.0019	<0.002	<0.0021	<0.0018	<0.0018	<0.019	<0.0017	<0.0017
Total Xylenes	1.6	0.26	500	<b>0.00032</b> J	<b>0.001</b> J	<0.0019	<0.002	<0.0021	<0.0018	<0.0018	<0.019	<0.0017	<0.0017
Ethylbenzene	1	1	390	<b>0.00017</b> J	<b>0.00044</b> J	<0.00095	<0.001	<0.001	<0.00090	<0.00090	<0.00094	<0.00085	<0.00087
Toluene	0.7	0.7	500	<b>0.00036</b> J	<b>0.0011</b> J	<b>0.00056</b> J	<0.0015	<0.0015	<b>0.00036</b> J	<b>0.00056</b> J	<b>0.00060</b> J	<b>0.00018</b> J	<b>0.00037</b> J
Naphthalene	12	12	500	<b>0.00012</b> J	<b>0.0078</b>	<b>0.0013</b> J	<b>0.0011</b> J	<0.0052	<b>0.00018</b> J	<0.0045	<0.0047	<b>0.00056</b> J	<b>0.00049</b> J
1,3,5-Trimethylbenzene	8.4	8.4	190	<b>0.00015</b> J	<b>0.00034</b> J	<0.0048	<0.005	<0.0052	<b>0.00018</b> J	<0.0045	<0.0047	<0.00042	<0.00043
1,2,4-Trimethylbenzene	3.6	3.6	190	<b>0.0007</b> J	<b>0.0015</b> J	<0.00018	<b>0.00059</b> J	<0.0004	<0.0045	<0.0045	<b>0.00037</b> J	<b>0.00042</b> J	<b>0.00030</b> J
n-Propylbenzene	3.9	3.9	500	<0.00089	<b>0.00031</b> J	<0.00095	<0.001	<0.001	<b>0.00021</b> J	<0.00090	<0.00094	<0.00085	<0.00087
Cyclohexane	NL	NL	NL	<0.018	<0.023	<0.019	<0.02	<0.021	<0.018	<0.018	<0.019	<0.017	<0.017
Methyl cyclohexane	NL	NL	NL	<0.0036	<0.0045	<0.0038	<0.004	<0.0041	<0.0036	<0.0036	<0.0038	<0.034	<b>0.00090</b> J
1,4-Dichlorobenzene	1.8	1.8	130	<0.0044	<0.0057	<0.0048	<0.0050	<0.0052	<0.0045	<0.0045	<0.0047	<0.0042	<0.0043
Methyl tert butyl ether	0.93	0.93	500	<0.0018	<0.0023	<0.0019	<0.0020	<0.0021	<0.0018	<0.0018	<0.0019	<0.0017	<0.017
TOTAL VOCs	NA	NA	NA	<b>0.01054</b>	<b>0.02586</b>	<b>0.02296</b>	<b>0.04909</b>	<b>0.28657</b>	<b>0.00829</b>	<b>0.01536</b>	<b>0.0125</b>	<b>0.00466</b>	<b>0.0108</b>

Notes:  
**Samples collected by United States Environmental Protection Agency (USEPA) Method 5035.**  
**Samples analysed for Target Compound list VOCs by USEPA Method 8260.**  
**NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY**  
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).  
"J" - Indicates value is an estimation by the laboratory.  
"NA" - Not Available  
"NL" - Not Listed  
**Bolded** values were detected above laboratory MDL.  
Underlined values were detected above NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective.  
Yellow-highlighted values were detected above NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.  
Orange-highlighted values were detected above NYCRR Part 375 Commercial Use Soil Cleanup Objective.

Table 1A - Page 3 of 3  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Detected Volatile Organic Compounds in Soil Samples  
LaBella Project No. 2172414

Sample ID Sample Depth (feet below ground surface) Date Collected	NYCRR Part 375-6 Protection of Groundwater (ppm)	NYCRR Part 375-6 Unrestricted Use (ppm)	NYCRR Part 375-6 Commercial Use (ppm)	BWB-01	BWB-02	BWB-04	BWB-04	BWB-05	BWB-07	BWB-09
				4.0-4.9	5.4-5.9	0.7-1.5	5.0-5.7	0.8-1.4	6.0-6.5	4.5-5.0
				11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/27/2017	11/28/2017	11/30/2017
Acetone	500	0.05	0.05	<b>0.0028</b> J	<0.6 U	<b>0.035</b>	<b>0.018</b>	<b>0.012</b>	<b>0.025</b>	<b>0.0083</b> J
Tetrachloroethene	1.3	1.3	150	<0.00082	<b>0.032</b> J	<0.00089 U	<0.00089 U	<0.00088 U	<0.00086 U	<0.00086 U
Trichloroethene	0.47	0.47	200	<0.00082	<0.06 U	<0.00089 U	<0.00089 U	<0.00088 U	<0.00086 U	<0.00086 U
1,2-Dichlorobenzene	1,100	1,100	500,000	<0.00082	<0.3 U	<0.0045 U	<0.0045 U	<0.0044 U	<0.0043 U	<0.0043 U
1,4-Dichlorobenzene	1,800	1,800	130,000	<0.00082	<0.3 U	<0.0045 U	<0.0045 U	<0.0044 U	<0.0043 U	<0.0043 U
Benzene	0.06	0.06	44	<0.00082	<0.06 U	<b>0.00059</b> J	<0.00089 U	<b>0.0002</b> J	<0.00086 U	0.0017
Chlorobenzene	1,100	1,100	500,000	<0.00082	<0.06 U	<0.00089 U	<0.00089 U	<0.00088 U	<0.00086 U	<0.00086 U
o-Xylene	NA	NA	NA	<0.0016	<0.12 U	<b>0.0017</b> J	<b>0.00043</b> J	<b>0.0004</b> J	<0.0017 U	<b>0.0019</b>
m/p-Xylene				<b>0.0008</b> J	<0.12 U	<b>0.0053</b>	<b>0.0015</b> J	<b>0.0015</b> J	<b>0.00077</b> J	<b>0.0066</b>
Total Xylenes	1.6	0.26	500	<b>0.0008</b> J	<0.12 U	<b>0.007</b> J	<b>0.00193</b> J	<b>0.0019</b> J	<b>0.00077</b> J	<b>0.0085</b>
n-Butylbenzene	NA	12,000	NA	<0.00082	<0.06 U	<0.00089 U	<0.00089 U	<0.00088 U	<0.00086 U	<0.00086 U
sec-Butylbenzene	11,000	11,000	500,000	<0.00082	<0.06 U	<b>0.00064</b> J	<0.00089 U	<0.00088 U	<0.00086 U	<0.00086 U
Ethylbenzene	1	1	390	<b>0.00021</b> J	<0.06 U	<b>0.0016</b>	<b>0.00039</b> J	<b>0.00042</b> J	<b>0.0002</b> J	<b>0.0012</b>
Toluene	0.7	0.7	500	<b>0.00067</b> J	<b>0.014</b> J	<b>0.0048</b>	<b>0.0013</b>	<b>0.0016</b>	<b>0.00089</b> J	<b>0.0064</b>
Naphthalene	12	12	500	<0.0041	<b>2.6</b>	<b>0.001</b> J	<b>0.00034</b> J	<0.0044 U	<0.0043 U	<b>0.0002</b> J
1,3,5-Trimethylbenzene	8.4	8.4	190	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	3.6	3.6	190	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	3.9	3.9	500	<0.00082	<0.06 U	<b>0.00068</b> J	<0.00089 U	<0.00088 U	<0.00086 U	<b>0.00039</b> J
Isopropylbenzene	NA	NA	NA	<0.00082	<0.06 U	<b>0.00046</b> J	<0.00089 U	<0.00088 U	<0.00086 U	<0.00086 U
4-Isopropyltoluene	NA	NA	NA	<0.00082	<0.06 U	<0.00089 U	<0.00089 U	<0.00088 U	<0.00086 U	<0.00086 U
Cyclohexane	NL	NL	NL	<0.016	<1.2 U	<b>0.0012</b> J	<0.018 U	<0.018 U	<0.017 U	<b>0.0033</b> J
Methyl cyclohexane	NL	NL	NL	<0.0033	<0.24 U	<b>0.0039</b>	<0.0036 U	<0.0035 U	<b>0.00021</b> J	<b>0.0059</b>
1,4-Dichlorobenzene	1.8	1.8	130	<0.0041	<0.3 U	<0.0045 U	<0.0045 U	<0.0044 U	<0.0043 U	<0.0043 U
Methyl tert butyl ether	0.93	0.93	500	<0.016	<b>0.012</b> J	<0.0018 U	<0.0018 U	<0.0018 U	<0.0017 U	<0.0017 U
2-Butanone	0.12	0.12	500	<0.0082	<0.6 U	<0.0089 U	<0.0089 U	<0.0088 U	<0.0086 U	<b>0.0044</b> J
Carbon Disulfide	NA	NA	NA	<0.0082	<0.6 U	<b>0.0016</b> J	<0.0089 U	<0.0088 U	<b>0.0012</b> J	<0.0086 U
TOTAL VOCs	NA	NA	NA	0.00528	2.65800	0.06547	0.02389	0.00602	0.02904	0.0488

Notes:  
**NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY**  
**Samples collected by United States Environmental Protection Agency (USEPA) Method 5035.**  
**Samples analysed for Target Compound list VOCs by USEPA Method 8260.**  
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).  
\* J - Indicates value is an estimation by the laboratory.  
\* NA - Not Available  
\* NL - Not Listed  
**Bolded** values were detected above laboratory MDL.  
Underlined values were detected above NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective.  
Yellow-highlighted values were detected above NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.  
Orange-highlighted values were detected above NYCRR Part 375 Commercial Use Soil Cleanup Objective.

Table 1B  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Detected Semi-Volatile Organic Compounds in Soil Samples  
LaBella Project No. 2172414

Sample ID	NYCRR Part 375-6 Protection of Groundwater (ppm)	NYCRR Part 375-6 Unrestricted Use (ppm)	NYCRR Part 375-6 Commercial Use (ppm)	TP-03	Blind Duplicate (TP-03)	TP-05	SB-16	SB-17	SB-24	Blind Duplicate (SB-24)
Sample Depth (feet below ground surface)				5.5	5.5	5.5	0.6-1.4	1.1-6.8	1.4-5.0	1.4-5.0
Date Collected				10/31/2017	10/31/2017	10/31/2017	11/7/2017	11/8/2017	11/13/2017	11/13/2017
Acenaphthene	98	20	500	<0.150	<0.150	0.77	3.2	<0.150	<0.160	<0.160
Fluoranthene	1,000	100	500	0.095 J	0.078 J	10 D	35 D	<0.110	0.033 J	0.050 J
Naphthalene	12	12	500	0.190 J	<0.190	0.35	1.6	<0.190	<0.200	<0.190
Benzo(a)anthracene	1	1	5.6	0.053 J	0.043 J	4.3	16 D	<0.110	0.031 J	0.036 J
Benzo(a)pyrene	22	1	1	0.054 J	<0.15	3.8	13 D	<0.150	0.062 J	0.058 J
Benzo(b)fluoranthene	1.7	1	5.6	0.074 J	0.05 J	4.8	16 D	<0.110	0.072 J	0.070 J
Benzo(k)fluoranthene	2	0.8	56	<0.120	<0.120	1.4	4.9	<0.110	<0.120	<0.120
Chrysene	1	1	56	0.052 J	0.038 J	3.8	14 D	<0.110	0.032 J	0.036 J
Acenaphthylene	107	100	500	<0.150	<0.150	0.11 J	2.4	<0.150	<0.160	<0.160
Anthracene	1,000	100	500	<0.120	<0.120	1.9	8.4 D	<0.110	<0.120	<0.120
Benzo(ghi)perylene	1,000	100	500	0.04 J	0.027 J	2.0	7.3	<0.150	0.054 J	0.051 J
Fluorene	386	30	500	<0.190	<0.190	0.75	3.7	<0.190	<0.200	<0.190
Phenanthrene	1,000	100	500	0.039 J	0.048 J	7.2	30	<0.110	<0.120	0.030 J
Dibenzo(a,h)anthracene	1,000	0.33	5.6	<0.120	<0.120	0.54	3.1	<0.110	<0.120	<0.120
Indeno(1,2,3-cd)pyrene	8	0.5	5.6	0.04 J	0.029 J	2.3	7.5	<0.150	0.056 J	0.055 J
Pyrene	1,000	100	500	0.08 J	0.064 J	9.1 D	30	<0.110	0.032 J	0.045 J
Biphenyl	NL	NL	NL	<0.440	<0.440	0.063 J	0.320 J	<0.440	<0.450	<0.440
Dibenzofuran	6.2	NL	NL	<0.190	<0.190	0.42	2.4	<0.190	<0.200	<0.190
2-Methylnaphthalene	36	NL	NL	<0.230	<0.230	0.22	1.0	<0.230	<0.240	<0.230
Acetophenone	NL	NL	NL	<0.190	<0.190	<0.190	0.026 J	<0.190	<0.200	<0.190
Phenol	0.33	0.33	500	<0.190	<0.190	<0.190	0.067 J	<0.190	<0.200	<0.190
2-Methylphenol	0.33	NL	NL	<0.190	<0.190	<0.190	0.036 J	<0.190	<0.200	<0.190
3-Methylphenol/4-Methylphenol	0.33	NL	NL	<0.280	<0.280	<0.280	0.120 J	<0.280	<0.280	<0.280
Carbazole	NL	NL	NL	<0.190	<0.190	0.74	3.5	<0.190	<0.200	<0.190
TOTAL SVOCs	NA	NA	NA	0.717	0.377	54.563	203.569	None Detected	0.372	0.43

Notes:  
**Samples analyzed for Target Compound List SVOCs by USEPA Method 8270.**  
**NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY**  
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).  
"D" - Indicates concentration of analyte was quantified from dilution analysis  
"J" - Indicates value is an estimation by the laboratory.  
"NA" - Not Available  
"NL" - Not Listed  
**Bolded** values were detected above laboratory MDL.  
Underlined values were detected above NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective.  
**Yellow-highlighted** values were detected above NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.  
**Orange-highlighted** values were detected above NYCRR Part 375 Commercial Use Soil Cleanup Objective.



Table 1C  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Detected Metals in Soil Samples  
LaBella Project No. 2172414

Sample ID	NYCRR Part 375-6 Protection of Groundwater (ppm)	NYCRR Part 375-6 Unrestricted Use (ppm)	NYCRR Part 375-6 Commercial Use (ppm)	TP-03	Blind Duplicate (TP-03)	TP-05	SB-17	SB-24	Blind Duplicate (SB-24)
Sample Depth (feet below ground surface)				5.5	5.5	5.5	1.1-6.8	1.4-5.0	1.4-5.0
Date Collected				10/31/2017	10/31/2017	10/31/2017	11/8/2017	11/13/2017	11/13/2017
Aluminum	10,000 <sup>(A)</sup>	10,000 <sup>(A)</sup>	10,000 <sup>(A)</sup>	7510	8450	5260	6460	7310	6910
Antimony	12 <sup>(A)</sup>	12 <sup>(A)</sup>	12 <sup>(A)</sup>	<4.58	<4.67	<4.33	1.5 J	0.814 J	0.826 J
Arsenic	16	13	16	6.29	5.35	6.51	9.24	4.52	3.53
Barium	820	350	400.0	56.3	44	98.4	68.5	64.5	43.4
Beryllium	47	7.2	590	0.275 J	0.271 J	0.251 J	0.387 J	0.297 J	0.260 J
Cadmium	7.5	2.5	9.3	0.404 J	0.392 J	0.71 J	0.600 J	0.680 J	0.501 J
Calcium	10,000 <sup>(A)</sup>	10,000 <sup>(A)</sup>	10,000 <sup>(A)</sup>	18900	13600	62600	33000	18,400	11900
Chromium	NL	30	1,500	8.59	9.6	8.53	9.48	9.31	8.79
Cobalt	20 <sup>(A)</sup>	20 <sup>(A)</sup>	20 <sup>(A)</sup>	3.47	3.94	3.31	4.73	4.41	3.47
Copper	1,720	50	270	13.8	11.6	25.6	42.1	13.3	8.88
Iron	2,000 <sup>(B)</sup>	2,000 <sup>(B)</sup>	2,000 <sup>(B)</sup>	12400	12600	10300	12800	11600	10400
Lead	450	63	1,000	74.9	53.8	108	151	130	83.8
Magnesium	NL	NL	NL	6310	4930	11400	7840	9170	6720
Manganese	2,000	1,600	10,000	223	228	367	379	474	242
Mercury	0.73	0.18	2.8	0.30	0.23	0.36	6.3	0.57	0.39
Nickel	130	30	310	8.19	7.94	7.79	10.4	7.43	7.16
Potassium	NL	NL	NL	471	474	693	571	458	409
Selenium	4.0	3.9	1,500	0.550 J	0.327 J	0.338 J	0.507 J	<1.92	<1.89
Sodium	NL	NL	NL	880	783	1050	189	105 J	104 J
Vanadium	39 <sup>(A)</sup>	39 <sup>(A)</sup>	39 <sup>(A)</sup>	16	19	18.4	17.9	16.2	15.1
Zinc	2,480	109	10,000	79.8	64.5	329	171	215	133
Cyanide	40	27	27	<0.19	<0.19	<0.19	0.44 J	<1.1	<1.2

Notes:

Samples analyzed for Target Analyte List Metals and Cyanide by USEPA Method 6010C/7471B/9010C.

NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY

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).

\*J\* - Indicates value is an estimation by the laboratory.

\*NA\* - Not Available

\*NL\* - Not Listed

<sup>(A)</sup>Part 375 Soil Cleanup Objective not listed. Values compared to Commissioner Policy 51 Supplemental Soil Cleanup Objective for Protection of Ecological Resources.

<sup>(B)</sup>Part 375 Soil Cleanup Objective not listed. Values compared to Commissioner Policy 51 Supplemental Soil Cleanup Objective for Residential Use.

**Bolded** values were detected above laboratory MDL.

Underlined values were detected above NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective.

**Yellow-highlighted** values were detected above NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.

**Orange-highlighted** values were detected above NYCRR Part 375 Commercial Use Soil Cleanup Objective.

*Italicized* values were detected above Commissioner Policy 51 Supplemental Soil Cleanup Objective.

Table 1D  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Detected Pesticides in Soil Samples  
LaBella Project No. 2172414

Sample ID	NYCRR Part 375-6 Protection of Groundwater (ppm)	NYCRR Part 375-6 Unrestricted Use (ppm)	NYCRR Part 375-6 Commerical Use (ppm)	TP-03	Blind Duplicate (TP-03)	TP-05	SB-02	SB-17	SB-23	SB-24	Blind Duplicate (SB-24)
Sample Depth (feet below ground surface)				5.5	5.5	5.5	5.7-5.9	1.1-6.8	0.5-2.7	1.4-5.0	1.4-5.0
Date Collected				10/31/2017	10/31/2017	10/31/2017	11/6/2017	11/8/2017	11/13/2017	11/13/2017	11/13/2017
Endrin	0.06	0.014	89	<0.000745	<0.000755	<b>0.00444</b> PI	<0.00390	<0.000784	<0.000789	<0.000770	<0.000785
4,4'-DDT	136	0.0033	47	<0.00335	<0.0034	<b>0.00655</b> PI	<0.00175	<b>0.00342</b> J	<0.00355 PI	<0.00346	<0.00353
4,4'-DDE	17	0.0033	62	<0.00179	<0.00181	<0.00173	<b>0.00327</b> J	<0.00188	<0.00189	<0.00185	<0.00188
Dieldrin	0.1	0.005	1.4	<0.00112	<0.00113	<0.00108	<b>0.0148</b> PI	<0.00118	<0.00118	<0.00115	<0.00118
Endosulfan II	102	2.4	200	<0.00179	<0.00181	<0.00173	<b>0.0111</b> PI	<0.00188	<0.00189	<0.00185	<0.00188

Notes:  
**Samples analyzed for Pesticides by USEPA Method 8081.**  
NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY  
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).  
\* P - Indicates the RPD between the results for the two columns exceeds the method-specified criteria  
\* I - Indicates the lower value for thee two columns has been reported due to obvious interface  
\* J - Indicates value is an estimation by the laboratory.  
\* NA - Not Available  
\* NL - Not Listed  
**Bolded** values were detected above laboratory MDL.  
Underlined values were detected above NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective.  
**Yellow-highlighted** values were detected above NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.  
**Orange-highlighted** values were detected above NYCRR Part 375 Commercial Use Soil Cleanup Objective.



Table 1E  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Polychlorinated Biphenyls (PCBs) in Soil Samples  
LaBella Project No. 2172414

Sample ID	NYCRR Part 375-6 Protection of Groundwater (ppm)	NYCRR Part 375-6 Unrestricted Use (ppm)	NYCRR Part 375-6 Commerical Use (ppm)	TP-03	Blind Duplicate (TP-03)	TP-05	SB-17	SB-24	Blind Duplicate (SB-24)
Sample Depth (feet below ground surface)				5.5	5.5	5.5	1.1-6.8	1.4-5.0	1.4-5.0
Date Collected				10/31/2017	10/31/2017	10/31/2017	11/8/2017	11/13/2017	11/13/2017
Aroclor 1016		Not Listed		<0.039	<0.0371	<0.0368	<0.0375	<0.0398	<0.0397
Aroclor 1221		Not Listed		<0.039	<0.0371	<0.0368	<0.0375	<0.0398	<0.0397
Aroclor 1232		Not Listed		<0.039	<0.0371	<0.0368	<0.0375	<0.0398	<0.0397
Aroclor 1242		Not Listed		<0.039	<0.0371	<0.0368	<0.0375	<0.0398	<0.0397
Aroclor 1248		Not Listed		<0.039	<0.0371	<0.0368	<0.0375	<0.0398	<b>0.00476</b> J
Aroclor 1254		Not Listed		<0.039	<0.0371	<0.0368	<0.0375	<0.0398	<0.0397
Aroclor 1260		Not Listed		<0.039	<0.0371	<0.0368	<0.0375	<0.0398	<0.0397
Aroclor 1262		Not Listed		<0.039	<0.0371	<0.0368	<0.0375	<0.0398	<0.0397
Aroclor 1268		Not Listed		<0.039	<0.0371	<0.0368	<0.0375	<0.0398	<0.0397
<b>Total PCBs</b>	3.2	0.1	1	None Detected	None Detected	None Detected	None Detected	None Detected	<b>0.00476</b>

Notes:  
**Samples analyzed for PCBs by USEPA Method 8082.**  
**NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY**  
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).  
"P" - Indicates the RPD between the results for the two columns exceeds the method-specified criteria  
"\*" - Indicates the lower value for thee two columns has been reported due to obvious interface  
"J" - Indicates value is an estimation by the laboratory.  
"NA" - Not Available  
"NL" - Not Listed  
**Bolded** values were detected above laboratory MDL.  
Underlined values were detected above NYCRR Part 375 Protection of Groundwater Soil Cleanup Objective.  
**Yellow-highlighted** values were detected above NYCRR Part 375 Unrestricted Use Soil Cleanup Objective.  
**Orange-highlighted** values were detected above NYCRR Part 375 Commercial Use Soil Cleanup Objective.

Table 2A  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Detected Volatile Organic Compounds in Groundwater Samples  
LaBella Project No. 2172414

Sample ID Date Collected	NYCRR Part 703 Groundwater Quality Standards	BWB-01	BWB-02	DUPE (BWB-02)	BWB-03	BWB-04	BWB-05	BWB-06	BWB-07	BWB-08	BWB-09
		12/6/2017	12/6/2017	12/6/2017	12/4/2017	12/4/2017	12/4/2017	12/5/2017	12/6/2017	12/5/2017	12/5/2017
		6-16	7-17	7-17	7-17	6-16	7-17	11.5-21.5	7.5-17.5	6.5-16.5	7-17
Tetrachloroethene	5	<b>5000</b>	<b>0.37</b> J	<b>0.25</b> J	<b>0.9</b>	<b>0.68</b>	<b>2.6</b>	<b>36</b>	<0.5 U	<b>12000</b>	<b>1.8</b>
Benzene	1	<20 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<b>0.68</b>	<50 U	<b>0.69</b>
Toluene	5	<100 U	<2.5 U	<2.5 U	<2.5 U	<2.5 U	<2.5 U	<2.5 U	<b>1.2</b> J	<250 U	<b>1.2</b> J
Vinyl chloride	2	<40 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<b>130</b>	<1 U
Trichloroethene	5	<b>64</b>	<0.5 U	<0.5 U	<0.5 U	<b>0.21</b> J	<b>0.3</b> J	<b>0.82</b>	<b>0.29</b> J	<b>550</b>	<b>0.18</b> J
p/m-Xylene	5	<100 U	<2.5 U	<2.5 U	<2.5 U	<2.5 U	<2.5 U	<2.5 U	<b>1</b> J	<250 U	<b>1</b> J
cis-1,2-Dichloroethene	5	<b>86</b> J	<2.5 U	<2.5 U	<2.5 U	<2.5 U	<2.5 U	<b>0.74</b> J	<2.5 U	<b>1400</b>	<2.5 U
Acetone	50*	<200 U	<5 U	<5 U	<b>170</b>	<b>72</b>	<b>22</b>	<b>31</b>	<b>410</b> D	<500 U	<b>33</b>
Cyclohexane	NL	<400 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<b>0.5</b> J	<1000 U	<b>0.49</b> J
Methyl cyclohexane	NL	<400 U	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<b>0.56</b> J	<1000 U	<b>0.65</b> J
Total VOCs	NA	5150	0.37	0.25	170.9	72.89	24.9	68.56	414.23	14080	39.01

Notes:  
**Samples analysed for Target Compound list VOCs by USEPA Method 8260.**

**NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY**

All values displayed in micrograms per liter (µg/L) or parts per billion (ppb)

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

J - Indicates value is an estimation by the laboratory.

D - Indicates concentration of analyte was quantified from dilution analysis

NA - Not Available

NL - Not Listed

**Bolded** values were detected above laboratory MDL.

**Yellow-highlighted values were detected above NYCRR Part 703 Groundwater Standards.**

\* Indicates no Part 703 Groundwater Quality Standard listed; Guidance Value displayed.

Table 2B  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Detected Semi-Volatile Organic Compounds in Groundwater Samples  
LaBella Project No. 2172414

Sample ID	NYCRR Part 703 Groundwater Quality Standards	BWB-02	DUPE (BWB-02)	BWB-07
Date Collected		12/6/2017	12/6/2017	12/6/2017
Screened Interval (feet below ground surface)		7-17	7-17	7.5-17.5
Fluoranthene	50*	<0.1	<b>0.04</b> J	<0.1
Benzo(ghi)perylene	NL	<0.1	<0.1	<b>0.04</b> J
Fluorene	50*	<b>0.06</b> J	<b>0.07</b> J	<b>0.02</b> J
Pyrene	50*	<0.1	<0.1	<b>0.05</b> J
<i>Total SVOCs</i>	NA	<i>0.06</i>	<i>0.11</i>	<i>0.11</i> J

Notes:

Samples analysed for Target Compound list SVOCs by USEPA Method 8270.

**NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY**

All values displayed in micrograms per liter (µg/L) or parts per billion (ppb)

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

J - Indicates value is an estimation by the laboratory.

D - Indicates concentration of analyte was quantified from dilution analysis

NA - Not Available

NL - Not Listed

**Bolded** values were detected above laboratory MDL.

**Yellow-highlighted values were detected above NYCRR Part 703 Groundwater Standards.**

\* Indicates no Part 703 Groundwater Quality Standard listed; Guidance Value displayed.

Table 2C  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Detected TAL Metals, Cyanide and Inorganic Compounds in Groundwater Samples  
LaBella Project No. 2172414

Sample ID	NYCRR Part 703 Groundwater Quality Standards	BWB-01	BWB-02	DUPE (BWB-02)	BWB-06	BWB-07
Date Collected		12/6/2017	12/6/2017	12/6/2017	12/5/2017	12/6/2017
Screened Interval (feet below ground surface)		6-16	7-17	7-17	11.5-21.5	7.5-17.5
Aluminum, Total	100*	NA	<b>115</b>	<b>120</b>	NA	<b>205</b>
Antimony, Total	3	NA	2.04 J	1.69 J	NA	<4
Arsenic, Total	25	NA	2.58	2.48	NA	1.1
Barium, Total	1,000	NA	135.1	134	NA	123.6
Cadmium, Total	5	NA	0.36	0.38	NA	0.07 J
Calcium, Total	NL	NA	127000	131000	NA	197000
Chromium, Total	50	NA	14.49	11.47	NA	8.79
Cobalt, Total	5*	NA	0.19 J	0.34 J	NA	0.45 J
Copper, Total	200	NA	2.2	2.23	NA	1.73
Iron, Total	300	40.1 J	156	135	89.2	273
Lead, Total	25	NA	<10	<5	NA	0.72 J
Magnesium, Total	35,000*	NA	34300	34700	NA	<b>55100</b>
Manganese, Total	300	<b>26.94</b>	14.76	12.12	17.12	59.07
Nickel, Total	100	NA	4.86	3.8	NA	6.17
Potassium, Total	NL	NA	25700	26900	NA	24000
Selenium, Total	10	NA	2.23 J	2.1 J	NA	2.76 J
Sodium, Total	20,000	NA	<b>1750000</b>	<b>1750000</b>	NA	<b>515000</b>
Thallium, Total	0.5*	NA	<5	<2.5	NA	<b>0.68</b>
Vanadium, Total	NL	NA	14.38	11.28	NA	6.08
Zinc, Total	2,000*	NA	69.76	128.1	NA	71.55
Cyanide	200	NA	<0.005	<0.005	NA	<0.005
Nitrate	10,000	<b>1800</b>	NA	NA	5100	NA
Sulfate	250,000	<b>227000</b>	NA	NA	126000	NA

Notes:  
**Samples analysed for TAL Metals and Cyanide by USEPA Methods 6010, 7470 and 9060.**

**NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY**

All values displayed in micrograms per liter (µg/L) or parts per billion (ppb)

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

J - Indicates value is an estimation by the laboratory.

D - Indicates concentration of analyte was quantified from dilution analysis

NA - Not Available or Not Analyzed

NL - Not Listed

**Bolded** values were detected above laboratory MDL.

**Yellow-highlighted values** were detected above NYCRR Part 703 Groundwater Standards.

\* Indicates no Part 703 Groundwater Quality Standard listed; Guidance Value displayed.

Table 2D  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Polychlorinated Biphenyls (PCBs) and Detected Pesticides in Groundwater Samples  
LaBella Project No. 2172414

Sample ID	NYCRR Part 703 Groundwater Quality Standards	BWB-02	DUPE (BWB-02)	BWB-07
Date Collected		12/6/2017	12/6/2017	12/6/2017
Screened Interval (feet below ground surface)		7-17	7-17	7.5-17.5
<b>PCBs</b>				
Aroclor 1016	NA	<0.083	<0.083	<0.083
Aroclor 1221	NA	<0.083	<0.083	<0.083
Aroclor 1232	NA	<0.083	<0.083	<0.083
Aroclor 1242	NA	<0.083	<0.083	<0.083
Aroclor 1248	NA	<0.083	<0.083	<0.083
Aroclor 1254	NA	<0.083	<0.083	<0.083
Aroclor 1260	NA	<0.083	<0.083	<0.083
Aroclor 1262	NA	<0.083	<0.083	<0.083
Aroclor 1268	NA	<0.083	<0.083	<0.083
Total PCBs:	0.09	<i>None Detected</i>	<i>None Detected</i>	<i>None Detected</i>
<b>Pesticides</b>	NA	<i>None Detected</i>	<i>None Detected</i>	<i>None Detected</i>

Notes:

Samples analysed for PCBs via USEPA Method 8082 and pesticides via USEPA Method 8081.

NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY

All values displayed in micrograms per liter (µg/L) or parts per billion (ppb)

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

NA - Not Available or Not Analyzed

NL - Not Listed

**Bolded** values were detected above laboratory MDL.

Yellow-highlighted values were detected above NYCRR Part 703 Groundwater Standards.

Table 3  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835-855 West Main Street, Rochester, New York  
Well Survey/Static Water Levels  
LaBella Project No: 2172414

GPS SURVEY and WELL CONSTRUCTION INFORMATION							Date 12/4-12/5/2017		Date 12/19/17	
Well ID	NORTHING	EASTING	GROUND SURFACE ELEVATION	PVC ELEVATION	DEPTH STEEL CASING SET TO (ft bgs)	SCREENED INTERVAL (ft bgs)	DEPTH TO WATER (ft btoc)	WATER ELEVATION	DEPTH TO WATER (ft btoc)	WATER ELEVATION
BWB-01	1148644.98	1401301.51	542.6106	542.1641	6	6-16	9.62	532.5441	9.29	532.8741
BWB-02	1148814.59	1401421.52	542.9791	542.5971	7	7-17	8.9	533.6971	8.45	534.1471
BWB-03	1148809.68	1401319.17	543.3241	542.8583	7	7-17	8.78	534.0783	8.41	534.4483
BWB-04	1149154.82	1401326	542.4855	542.0674	7	6-16	6.83	535.2374	6.71	535.3574
BWB-05	1149152.93	1401208.29	543.1176	542.8113	7	7-17	7.4	535.4113	7.14	535.6713
BWB-06	1148797.09	1401126.14	542.1276	541.6906	11.5	11.5-21.5	7.44	534.2506	7.23	534.4606
BWB-07	1148908.66	1401130.14	542.8133	542.3921	7.5	7.5-17.5	7.34	535.0521	7.32	535.0721
BWB-08	1149077.69	1401120.56	542.7806	542.4582	6.5	6.5-16.5	7.42	535.0382	7.28	535.1782
BWB-09	1148954.81	1401273.18	543.0778	542.5829	6.5	7-17	7.69	534.8929	7.62	534.9629

- Notes:
- bgs = below ground surface
  - btoc = below top of well casing
  - Elevations in feet above mean sea level (fmsl)
  - Refer to Figure 7 for groundwater flow direction model.
  - All wells are dedicated bedrock wells; overburden not encountered as part of this Phase II ESA.

Table 4  
Phase II Environmental Site Assessment  
Bullshead Plaza: 835- 855 West Main Street, Rochester, New York  
Summary of Total Organic Carbon (TOC) in Soil Samples  
LaBella Project No. 2172414

Sample ID	SB-17	SB-21
Sample Depth (feet below ground surface)	1.1-6.8	3.5-5.3
Date Collected	11/8/2017	11/8/2017
Total Organic Carbon (Rep1)*	0.935	6.23
Total Organic Carbon (Rep2)*	0.95	7.5

Notes:

Samples analyzed for TOC by USEPA Method 9060

**NOTE: DATA NOT VALIDATED AND SHOULD BE CONSIDERED PRELIMINARY**

All values displayed in percentages (%).

Collected for remedial design purposes.

\*Two repetitions are analyzed as standard lab practice due to the non-homogenous nature of soil. Results can vary based on what portion of soil is analyzed from the sample jar submitted.





# APPENDIX 1

Field Logs



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST PIT LOG**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

Test Pit: TP-01

SHEET 1 OF 1

JOB #: 2172414

CHKD BY:

CONTRACTOR: LaBella Env, LLC      TEST PIT LOCATION: See Figure      TIME: 0920 TO 1100  
EXCAVATOR: P. Spagnola      GROUND SURFACE ELEVATION: NA      DATUM: NA  
GEOLOGIST: A. Brett      DATE: 10/31/17

WEATHER: Low 40's, cloudy, gusts of wind.

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	Remarks
	SAMPLE NO. AND DEPTH		STRATA CHANGE			
0	S1 0.0-4.9'		0.0'	Asphalt		
			0.5'	Gray broken shale pieces (FILL), little Silt, little Sand, moist, no odor.	0.0	
					0.0	
2			2.1'	Brown and gray coarse to fine SAND, little Silt, trace fine gravel, large brick pieces (FILL), moist, no odor.	0.0	
					0.0	
4			3.9'	Concrete Slab		
			4.3'	Brown coarse to fine SAND, little fine Gravel, trace silt, moist, no odor.	0.0	
				End Test Pit - 4.9-ft - Refusal		
6						
8						
10						
12						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF PIT	GROUNDWATER ENCOUNTERED	NOTES: Test pit backfilled with soils and tamped, leaving ten inches prior to addition of stone. Approximately 3-inches of space after stone added for asphalt.
DATE	TIME	ELAPSED TIME				
NA	NA	NA	NA	4.9-Ft.	NA	

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.
- 3) ABBREVIATIONS:
 

and = 35 to 50 %	c = coarse
some = 20 to 35%	m = medium
little = 10 to 20%	f = fine
trace = 1 to 10%	vf = very fine

BGS = Below the Ground Surface  
NA = Not Applicable

Test Pit: TP-01



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST PIT LOG**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

Test Pit: TP-02

SHEET 1 OF 1

JOB #: 2172414

CHKD BY:

CONTRACTOR: LaBella Env, LLC      TEST PIT LOCATION: See Figure      TIME: 1110 TO 1155  
EXCAVATOR: P. Spagnola      GROUND SURFACE ELEVATION: NA      DATUM: NA  
GEOLOGIST: A. Brett      DATE: 10/31/17

WEATHER: Low 40's, cloudy, gusts of wind.

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	Remarks
	SAMPLE NO. AND DEPTH		STRATA CHANGE			
0	S1 0.0-5.3'		0.0'	Asphalt		Bricks predominantly on W. Main St. end of test pit excavation
			0.5'	Gray broken shale pieces (FILL), little Silt, trace clay, brick pieces (FILL), moist, no odor.	0.0	
					0.0	
2			2.0'	Red-brown SILT, little coarse to fine Sand, little cobbles, trace clay, moist, no odor.	0.0	
					0.0	
4					0.0	
			5.0'	Similar to above, slab rock.	0.0	
				End Test Pit - 5.3-ft - Refusal		
6						
8						
10						
12						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF PIT	GROUNDWATER ENCOUNTERED	NOTES: Test pit backfilled with soils and tamped, leaving ten inches prior to addition of stone. Approximately 3-inches of space after stone added for asphalt.
DATE	TIME	ELAPSED TIME				
NA	NA	NA	NA	5.3-Ft.	NA	

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.

3) ABBREVIATIONS:      and = 35 to 50 %      c = coarse  
                                  some = 20 to 35%      m = medium      BGS = Below the Ground Surface  
                                  little = 10 to 20%      f = fine      NA = Not Applicable  
                                  trace = 1 to 10%      vf = very fine

Test Pit: TP-02



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST PIT LOG**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

Test Pit: TP-03

SHEET 1 OF 1

JOB #: 2172414

CHKD BY:

CONTRACTOR: LaBella Env, LLC      TEST PIT LOCATION: See Figure      TIME: 1210 TO 1327  
EXCAVATOR: P. Spagnola      GROUND SURFACE ELEVATION: NA      DATUM: NA  
GEOLOGIST: A. Brett      DATE: 10/31/17

WEATHER: Low 40's, cloudy, gusts of wind.

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	Remarks
	SAMPLE NO. AND DEPTH		STRATA CHANGE			
0	S1 0.0-5.5'		0.0'	Asphalt		
			0.5'	Gray broken shale pieces (FILL), some Silt, little sand, moist.	0.0	
2					0.0	
			2.7'	Red-brown and gray-brown SILT, little Sand, little angular cobbles, trace clay, moist, no odor.	0.0	
4					0.0	
					0.0	4.5-5.5 Environmental Sample Collected
					0.0	Full Suite including MS/MSD/Duplicate
6				End Test Pit - 5.5-ft - Refusal		
8						
10						
12						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF PIT	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME				
NA	NA	NA	NA	5.5-Ft.	NA	

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.

3) ABBREVIATIONS:      and = 35 to 50 %      c = coarse  
                                  some = 20 to 35%      m = medium      BGS = Below the Ground Surface  
                                  little = 10 to 20%      f = fine      NA = Not Applicable  
                                  trace = 1 to 10%      vf = very fine

Test Pit: TP-03





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST PIT LOG**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

Test Pit: TP-04

SHEET 1 OF 1

JOB #: 2172414

CHKD BY:

CONTRACTOR: LaBella Env, LLC      TEST PIT LOCATION: See Figure      TIME: 1400 TO 1500  
EXCAVATOR: P. Spagnola      GROUND SURFACE ELEVATION: NA      DATUM: NA  
GEOLOGIST: A. Brett      DATE: 10/31/17

WEATHER: Low 40's, overcast, gusts of wind.

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	Remarks
	SAMPLE NO. AND DEPTH		STRATA CHANGE			
0	S1 0.0-4.85'		0.0'	Asphalt		
			0.6'	Gray broken shale pieces (FILL), some to little Silt, trace Sand, moist, no odor.	0.0	
					0.0	
2			2.0'	Brown SILT, little coarse to fine Sand, little gravel, trace cobbles, moist, no odor	0.0	
			2.8'	Dark brown to black SILT, trace sand, roots, moist, organic odor (former topsoil)	0.0	
4			4.5'	Red-brown SILT, some Sand, little gravel, trace clay, moist, no odor.	0.0	
				End Test Pit - 4.85-ft - Refusal		
6						
8						
10						
12						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF PIT	GROUNDWATER ENCOUNTERED	NOTES: Test pit backfilled with soils and tamped, leaving ten inches prior to addition of stone. Approximately 3-inches of space after stone added for asphalt.
DATE	TIME	ELAPSED TIME				
NA	NA	NA	NA	4.85-Ft.	NA	

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.

3) ABBREVIATIONS:      and = 35 to 50 %      c = coarse  
                                  some = 20 to 35%      m = medium      BGS = Below the Ground Surface  
                                  little = 10 to 20%      f = fine      NA = Not Applicable  
                                  trace = 1 to 10%      vf = very fine

Test Pit: TP-04



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST PIT LOG**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

Test Pit: TP-05

SHEET 1 OF 1

JOB #: 2172414

CHKD BY:

CONTRACTOR: LaBella Env, LLC      TEST PIT LOCATION: See Figure      TIME: 1100 TO 1210  
EXCAVATOR: P. Spagnola      GROUND SURFACE ELEVATION: NA      DATUM: NA  
GEOLOGIST: A. Brett      DATE: 11/1/17

WEATHER: 44 °F, overcast.

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	Remarks
	SAMPLE NO. AND DEPTH		STRATA CHANGE			
0	S1 0.0-5.7'		0.0'	Asphalt		
			0.7'	Gray broken shale pieces (FILL), little Silt and Sand, moist, no odor.	0.0	
					0.0	
2			1.8'	Fill materials consisting of bricks, concrete blocks, metal and metal springs, wood, slab rock, little sand and silt, little ash, moist, no odor. (FILL)	0.0	
					0.0	
4					0.0	
					0.0	
				End Test Pit - 5.7-ft - Refusal	0.3	5.0-5.6 Environmental Sample Collected Full Suite
6						
8						
10						
12						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF PIT	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME				
NA	NA	NA	NA	5.7-Ft.	NA	

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.

3) ABBREVIATIONS:      and = 35 to 50 %      c = coarse  
                                   some = 20 to 35%      m = medium      BGS = Below the Ground Surface  
                                   little = 10 to 20%      f = fine      NA = Not Applicable  
                                   trace = 1 to 10%      vf = very fine

Test Pit: TP-05



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST PIT LOG**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

Test Pit: TP-06

SHEET 1 OF 1

JOB #: 2172414

CHKD BY:

CONTRACTOR: LaBella Env, LLC      TEST PIT LOCATION: See Figure      TIME: 1220 TO 1310  
EXCAVATOR: P. Spagnola      GROUND SURFACE ELEVATION: NA      DATUM: NA  
GEOLOGIST: A. Brett      DATE: 11/1/17

WEATHER: 45 °F, overcast

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	Remarks
	SAMPLE NO. AND DEPTH		STRATA CHANGE			
0	S1 0.0-3.5'		0.0'	Asphalt		
			0.75'	Gray broken shale pieces (FILL), little Silt and Sand, moist, no odor.	0.0	
					0.0	
2			1.8'	Fill consisting of bricks, concrete, wood, little sand and silt, trace ash, moist, no odor. (FILL)	0.0	
				End Test Pit - 3.5-ft - Refusal	0.0	
4						
6						
8						
10						
12						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF PIT	GROUNDWATER ENCOUNTERED	NOTES: Test pit backfilled with soils and tamped, leaving ten inches prior to addition of stone. Approximately 3-inches of space after stone added for asphalt.
DATE	TIME	ELAPSED TIME				
NA	NA	NA	NA	3.5-Ft.	NA	

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.
- 3) ABBREVIATIONS:
 

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

Test Pit: TP-06



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST PIT LOG**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

Test Pit: TP-07

SHEET 1 OF 1

JOB #: 2172414

CHKD BY:

CONTRACTOR: LaBella Env, LLC      TEST PIT LOCATION: See Figure      TIME: 1320 TO 1420  
EXCAVATOR: P. Spagnola      GROUND SURFACE ELEVATION: NA      DATUM: NA  
GEOLOGIST: A. Brett      DATE: 11/1/17

WEATHER: 45 °F Overcast

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	Remarks
	SAMPLE NO. AND DEPTH		STRATA CHANGE			
0	S1 0.0-5.5'		0.0'	Asphalt		
			0.7'	Gray broken shale pieces (FILL), little Silt and Sand, moist, no odor.	0.0	
2			1.6'	Fill consisting of bricks, concrete, wood, little silt, little sand, trace ash, trace coke, moist, no odor. (FILL)	0.0	Predominatly bricks
					0.0	
4					0.0	
					0.0	
					0.0	
6				End Test Pit - 5.5-ft - Refusal	0.0	
8						
10						
12						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF PIT	GROUNDWATER ENCOUNTERED	NOTES: Test pit backfilled with soils and tamped, leaving ten inches prior to addition of stone. Approximately 3-inches of space after stone added for asphalt.
DATE	TIME	ELAPSED TIME				
NA	NA	NA	NA	5.5-Ft.	NA	

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.
- 3) ABBREVIATIONS:
 

and = 35 to 50 %	c = coarse
some = 20 to 35%	m = medium
little = 10 to 20%	f = fine
trace = 1 to 10%	vf = very fine

BGS = Below the Ground Surface  
NA = Not Applicable

Test Pit: TP-07



300 STATE STREET, ROCHESTER, NY  
 ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
 835-855 West Main Street  
 Rochester, NY  
 City of Rochester

**BORING:** SB-01  
**SHEET:** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

CONTRACTOR: LaBella Env. LLC      BORING LOCATION: See Figure  
 DRILLER: M. Pepe      GROUND SURFACE ELEVATION: NA      DATUM: NA  
 LABELLA REPRESENTATIVE: A.Brett      START DATE: 11/6/2017      END DATE: 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 52%	0.0'	Asphalt	0	
			0.5'	Gray-brown SILT and SAND, little coarse to fine subangular to angular gravel, moist, no odor.		
2			1.7'	Red-brown SILT, little sand, trace clay, moist, no odor.		
4	5.0-6.1'	S2 91%	5.0'	Similar to above	0	
6			6.0'	Weathered bedrock	0	
			End Boring - 6.1-ft - Refusal			
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.1'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-01





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-02  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/6/2017      **END DATE:** 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.9'	S1 59%	0.0'	Asphalt	0	
			0.5'	Gray-brown SILT and SAND, dry, no odor.		
2			1.0'	Black, tan, and gray coarse to fine SAND, some coarse to fine gravel, little brick pieces, trace white fibrous material, moist, no odor. (FILL)		
			2.5'	Red-brown SILT, little sand, trace clay, moist, no odor.		
4			5.3'	Light brown fine SAND, dry to moist, no odor.		
6			End Boring - 5.9-ft - Refusal			20
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.9'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-02



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-03  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/6/2017      **END DATE:** 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.8'	S1 58%	0.0'	Brown to dark brown SILT, little fine sand, trace clay and roots, moist, organic odor (topsoil)	0	
			0.9'	Concrete (FILL)	0	
			1.0'	Red-Brown SILT, little fine sand, trace clay, moist, no odor	0	
2					0	
4					0	
			4.7'	Weathered bedrock	0	
				End Boring - 4.8-ft - Refusal		
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.8'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-03



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-04  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/6/2017      **END DATE:** 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.8'	S1 48%	0.0'	Asphalt	0	
			0.5'	Red-brown SILT, some fine to medium Sand, little to trace coarse to fine subrounded to subangular gravel, trace clay, moist, no odor.	0	
2			2.0'	Brown coarse to fine SAND and GRAVEL, trace silt, moist, no odor.	0	
4					0	
				End Boring - 4.8-ft - Refusal	0	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.8'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-04



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-05  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/6/2017      **END DATE:** 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-6.7'	S1 49%	0.0'	Asphalt		
			0.5'	Brown coarse to fine SAND, little gravel, trace silt, moist, no odor	130	
			1.1'	Red-Brown SILT, little fine sand, little clay, trace gravel, moist, no odor.	72	
2					25	
					78	
4					90	
			6.0'	Broken weathered bedrock, little fine to medium sand, moist, no odor.	518	
				End Boring - 6.7-ft - Refusal		
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.7'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-05



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-06  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/6/2017      **END DATE:** 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-6.5'	S1 46%	0.0'	Asphalt	132	
			0.6'	Brown coarse to fine SAND, little coarse to fine gravel, moist, no odor.		
2			1.0'	Brown SILT, little coarse to fine brown to black sand, trace clay, moist, no odor.		
			2.5'	Brown SILT, little fine sand, little coke, trace building materials, trace gravel, trace clay, moist, no odor. (FILL)		
4						
6			6.4'	Weathered bedrock		
8			End Boring - 6.5-ft - Refusal	417		
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.5'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-06





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-07  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/6/2017      **END DATE:** 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS	
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE				
0	0.0-4.2'	S1 76%	0.0'	Asphalt	325		
			0.7'	Gray-brown coarse to fine SAND and subangular to angular GRAVEL, moist to dry, no odor.			811
2			1.3'	Brown to dark brown SILT, little coarse to fine gravel, trace fine sand, trace clay, moist, no odor.			72
			3.9'	Weathered bedrock.			182
4			End Boring - 4.2-ft - Refusal				
6							
8							
10							
12							
14							
16							

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.2'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-07



300 STATE STREET, ROCHESTER, NY  
 ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
 835-855 West Main Street  
 Rochester, NY  
 City of Rochester

**BORING:** SB-08  
**SHEET:** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/6/2017      **END DATE:** 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.0'	S1 48%	0.0'	Asphalt	122	
			0.6'	Gray-brown coarse to fine SAND and subangular to angular GRAVEL, moist, no odor.		
2			1.2'	Brown SILT, little coarse to fine subangular to angular gravel, little brick pieces, trace sand, trace silt, moist, no odor. (FILL)		
4			End Boring - 4.0-ft - Refusal			
6					302	
					422	
					202	
					48	

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-08



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-09  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/6/2017      **END DATE:** 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 66%	0.0'	Asphalt	0	
			0.6'	Red-brown to brown SAND and SILT, moist, no odor.		
2			2.0'	Light brown SILT, some fine Sand, moist, no odor.	0	
4					0	
				End Boring - 5.0-ft - Refusal	12	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	5.0'	5.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-09



300 STATE STREET, ROCHESTER, NY  
 ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
 835-855 West Main Street  
 Rochester, NY  
 City of Rochester

**BORING:** SB-10  
**SHEET:** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/6/2017      **END DATE:** 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-3.9'	S1 41%	0.0'	Asphalt	185	
			0.6'	Gray-brown coarse to fine SAND, some coarse to fine Gravel, moist to dry, no odor.		
2			0.9'	Brown SILT, little coarse to fine sand, little coarse to fine subangular to angular gravel, moist, no odor.		
			3.4'	Brown fine SAND, trace silt, wet at bottom, no odor.		
4			End Boring - 3.9-ft - Refusal		2192	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	3.9'	3.9'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-10



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

PROJECT

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-11  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC BORING LOCATION: See Figure  
DRILLER: M. Pepe GROUND SURFACE ELEVATION: NA DATUM: NA  
LABELLA REPRESENTATIVE: A.Brett START DATE: 11/6/2017 END DATE 11/6/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.7'	S1 53%	0.0'	Asphalt	0 0 23 25 12 0 0	
			0.3'	Gray coarse to fine angular GRAVEL, dry, no odor.		
			0.7'	Dark brown SILT, little coarse to fine sand, trace clay, little to trace coke and wood, moist no odor. (FILL)		
2			1.4'	Similar to above, fill only consisting of wood, organic odor.		
			2.5'	Light brown SILT, little coarse to fine sand, little clay, moist, no odor.		
4			End Boring - 4.7-ft - Refusal			
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.7'	NA	

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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-11





300 STATE STREET, ROCHESTER, NY  
 ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
 835-855 West Main Street  
 Rochester, NY  
 City of Rochester

**BORING:** SB-12  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/7/2017      **END DATE:** 11/7/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 50%	0.0'	Asphalt	0	
			0.5'	Gray GRAVEL, little silt and sand, moist, no odor.		
			1.0'	Gray-brown SILT and coarse to fine SAND, some coarse to fine Gravel, moist, no odor.		
2			2.0'	Red-brown SILT, little to trace fine sand, trace coarse to fine gravel, moist, no odor.	0	
4					0	
				End Boring - 5.0-ft - Refusal	4	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-12



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-13  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/7/2017      **END DATE:** 11/7/2017

**TYPE OF DRILL RIG:** Geoprobe 54LT      **DRIVE SAMPLER TYPE:** Direct push  
**AUGER SIZE AND TYPE:** NA      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Macrocore      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.2'	S1 31%	0.0'	Concrete	0	
			0.4'	Bricks		
			0.5'	Brown coarse to fine SAND, little silt, trace ash material, moist, no odor. (FILL)		
2			1.4'	Brown SILT, some coarse to fine Sand, moist, no odor		
4					0	
				End Boring - 5.2-ft - Refusal	0	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	5.2'	5.2'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-13



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-14  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/7/2017      **END DATE:** 11/7/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-2.5'	S1 60%	0.0'	Concrete	0	
			0.5'	Brown SAND and GRAVEL, little cinders, moist, no odor. (FILL)		
			0.6'	Brown coarse to fine SAND, little silt, little coarse to fine gravel, trace ash material, moist, no odor. (FILL)		
2				End Boring - 2.5' - End Boring	0	
4						
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	2.5'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-14



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-15  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/7/2017      **END DATE:** 11/7/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-7.4'	S1 18%	0.0' 0.5'	Concrete Brown SILT, little coarse to fine sand and gravel, moist, no odor.	0	
2					0	
4					0	
6					90	
					98	
8				Refusal - 7.4-ft - End Boring	0	
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	7.4'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-15



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-16  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/7/2017      **END DATE:** 11/7/2017

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

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-6.0'	S1 58%	0.0'	Concrete	0	
			0.5'	Brown SAND, little asphalt, little silt, moist, no odor.		
			0.6'	Brown SILT and fine SAND, trace subrounded gravel, trace white shards/pieces, moist, no odor. (FILL)		
2			1.0'	Brown fine to medium SAND, little silt, trace gravel, moist, no odor.		
			1.4'	Dark Brown SILT, some fine Sand, trace gravel, moist, no odor.		
			2.5'	Tan-brown to brown SILT, little clay, moist, no odor.		
4					5	
					5	
					5	
6				End Boring - 6.0-ft - Refusal	5	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-16





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-17  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/8/2017      **END DATE:** 11/8/2017

**TYPE OF DRILL RIG:** Geoprobe 54LT      **DRIVE SAMPLER TYPE:** Direct push  
**AUGER SIZE AND TYPE:** NA      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Macrocore      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-6.8'	S1 47%	0.0'	Concrete	0	
			0.4'	Brown fine to medium SAND, little Silt, trace coarse sand, trace gravel, moist, no odor.		
2			1.1'	Brown SILT and coarse to fine SAND, little concrete, trace ash, trace glass moist, no odor. (FILL)		
			1.8'	Dark brown SILT, trace fine sand, moist, no odor.		
			1.9'	Similar to above, light brown.		
4					0	
6					0	
				End Boring - 6.8-ft - Refusal	0	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.8'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-17



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-18  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/8/2017      **END DATE:** 11/8/2017

**TYPE OF DRILL RIG:** Geoprobe 54LT      **DRIVE SAMPLER TYPE:** Direct push  
**AUGER SIZE AND TYPE:** NA      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Macrocore      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.2'	S1 44%	0.0'	Concrete	0	
			0.4'	Black gravel, trace cinders, moist, no odor.		
2			0.8'	Brown Silt and coarse to fine SAND, little building materials, wood/ash, moist, no odor. (FILL)		
4						
6			5.1'	Broken weathered bedrock.		
8			End Boring - 5.2-ft - Refusal			
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.2'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-18



300 STATE STREET, ROCHESTER, NY  
 ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

PROJECT

Bullshead Plaza Phase II ESA  
 835-855 West Main Street  
 Rochester, NY  
 City of Rochester

BORING: SB-19  
 SHEET 1 OF 1  
 JOB: 2172414  
 CHKD BY:

CONTRACTOR: LaBella Env. LLC BORING LOCATION: See Figure  
 DRILLER: M. Pepe GROUND SURFACE ELEVATION: NA DATUM: NA  
 LABELLA REPRESENTATIVE: A.Brett START DATE: 11/8/2017 END DATE 11/8/2017

TYPE OF DRILL RIG: Geoprobe 54LT DRIVE SAMPLER TYPE: Direct push  
 AUGER SIZE AND TYPE: NA INSIDE DIAMETER: 2"  
 OVERBURDEN SAMPLING METHOD: Macrocore OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.7'	S1 53%	0.0'	Concrete	352	
			0.5'	Brown-gray coarse to fine subrounded to angular GRAVEL and SAND, little silt, moist, no odor.		
			1.2'	Brown coarse to fine SAND, some pieces of concrete, moist, no odor.		
2			2.2'	Light tan GRAVEL, little concrete, little dark brown silt, dry, no odor.		
4				End Boring - 4.7-ft - Refusal	1167	
6					190	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	4.7'	4.7'	NA	

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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-19



300 STATE STREET, ROCHESTER, NY  
 ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
 835-855 West Main Street  
 Rochester, NY  
 City of Rochester

**BORING:** SB-20  
**SHEET:** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

CONTRACTOR: LaBella Env. LLC      BORING LOCATION: See Figure  
 DRILLER: M. Pepe      GROUND SURFACE ELEVATION: NA      DATUM: NA  
 LABELLA REPRESENTATIVE: A.Brett      START DATE: 11/8/2017      END DATE: 11/8/2017

TYPE OF DRILL RIG: Geoprobe 54LT      DRIVE SAMPLER TYPE: Direct push  
 AUGER SIZE AND TYPE: NA      INSIDE DIAMETER: 2"  
 OVERBURDEN SAMPLING METHOD: Macrocore      OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.0'	S1 55%	0.0'	Concrete	106	
			0.5'	Brown-gray coarse to fine subrounded to angular GRAVEL and SAND, little silt, moist, no odor.	149	
2			1.8'	Brown and black coarse to fine SAND and GRAVEL, moist, no odor.	264	
4				End Boring - 4.0-ft - Refusal	100	
6					65	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-20



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-21  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/8/2017      **END DATE:** 11/8/2017

**TYPE OF DRILL RIG:** Jackhammer      **DRIVE SAMPLER TYPE:** Direct push  
**AUGER SIZE AND TYPE:** NA      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Macrocore      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-2.0'	S1 63%	0.0' 0.5'	Concrete Brown coarse to fine SAND and GRAVEL, little silt, trace brick, trace crushed concrete or ash, moist, no odor. (FILL)	102 305	
2	2.0-5.5'	S2 14%	2.0'	Similar to above, no brick, concrete or ash.	468 329 239	
4			5.4'	Bedrock fragments End Boring - 5.5' - Refusal	102	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	5.5'	5.5'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-21





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-22  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** M. Pepe      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/8/2017      **END DATE:** 11/8/2017

**TYPE OF DRILL RIG:** Jackhammer      **DRIVE SAMPLER TYPE:** Direct push  
**AUGER SIZE AND TYPE:** NA      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Macrocore      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-2.0'	S1 55%	0.0'	Concrete		
			0.5'	Brown and black coarse to fine SAND, little gravel, trace concrete, trace coal, trace brick, moist, no odor. (FILL)	92	
			0.9'	Brown SILT, some coarse to fine SAND, trace coarse to fine gravel, moist, no odor.	128	
2	2.0-6.0'	S2 51%	2.2'	Dark brown SILT, moist, no odor.	115	
4			4.0'	Similar to above, trace sand and gravel.	185	
6				End Boring - 6.0-ft - Refusal	264	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-22



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-23  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** J. Constantino      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/13/2017      **END DATE:** 11/13/2017

**TYPE OF DRILL RIG:** Geoprobe 54LT      **DRIVE SAMPLER TYPE:** Direct push  
**AUGER SIZE AND TYPE:** NA      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Macrocore      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 64%	0.0'	Dark brown SILT and SAND, roots, moist, organic odor (topsoil).	0	
			0.5'	Similar to above, brown.	0	
			0.7'	Brown SILT, some coarse to fine Sand, little coarse to fine subrounded to subangular gravel, trace fill consisting of brick, coal, plastic, and asphalt, moist, no odor. (FILL)	0	
2					0	
			2.7'	Brown SILT, little sand, trace clay, moist to wet, no odor.	0	
4				0		
				End Boring - 5.0-ft - Refusal	0	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-23



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-24  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** J. Constantino      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/13/2017      **END DATE:** 11/13/2017

**TYPE OF DRILL RIG:** Geoprobe 54LT      **DRIVE SAMPLER TYPE:** Direct push  
**AUGER SIZE AND TYPE:** NA      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Macrocore      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 98%	0.0'	Dark brown SILT, little coarse to fine sand, moist, organic odor (topsoil).	0	
			0.4'	Gray brown coarse to fine SAND and coarse to fine angular GRAVEL, moist, no odor.	0	
2			1.4'	Brown SILT, little brick and coal/coke, trace coarse to fine sand, trace coarse to fine gravel, moist, no odor. (FILL)	0	
			2.2'	Broken cobble/gravel.	0	
			2.4'	Brown SILT, little coal/coke with ash and brick pieces, trace sand, moist, no odor. (FILL)	46	
4			3.7'	Brown SILT, moist to wet, no odor.	573	
			End Boring - 5.0-ft - Refusal	468		
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-24



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-25  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** J. Constantino      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/13/2017      **END DATE:** 11/13/2017

**TYPE OF DRILL RIG:** Geoprobe 54LT      **DRIVE SAMPLER TYPE:** Direct push  
**AUGER SIZE AND TYPE:** NA      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Macrocore      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 80%	0.0'	Dark to light tan SILT, little coarse to fine sand, roots, moist, organic odor (topsoil).	0	
			0.2'	Broken Cobble.	0	
			0.3'	Black and gray coarse to fine GRAVEL and SAND, moist, no odor.	48	
			0.6'	Brown to red-brown coarse to fine SAND, little silt, trace pockets of clay, white fill material, moist, no odor. (FILL)	34	
2			2.0'	Brown to light brown fine SAND and SILT, dry, no odor.	0	
4					0	
				End Boring - 5.0-ft - Refusal	0	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-25



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-26  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

CONTRACTOR: LaBella Env. LLC      BORING LOCATION: See Figure  
DRILLER: J. Constantino      GROUND SURFACE ELEVATION: NA      DATUM: NA  
LABELLA REPRESENTATIVE: A.Brett      START DATE: 11/13/2017      END DATE 11/13/2017

TYPE OF DRILL RIG: Geoprobe 54LT      DRIVE SAMPLER TYPE: Direct push  
AUGER SIZE AND TYPE: NA      INSIDE DIAMETER: 2"  
OVERBURDEN SAMPLING METHOD: Macrocore      OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 80%	0.0'	Dark brown SILT, little coarse to fine sand, little coarse to fine gravel, roots, organic odor (topsoil).	0	
2			1.3'	Similar to above, brown, no roots.	0	
4			3.1'	Brown SILT, little sand, little clay, moist, no odor.	0	
6				End Boring - 5.0-ft - Refusal	0	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	5.0'	5.0'	NA	

**GENERAL NOTES**

- 1) STRATIFICATION LINES REPRESENT APPROXMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-26



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-27  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** J. Constantino      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/13/2017      **END DATE:** 11/13/2017

**TYPE OF DRILL RIG:** Geoprobe 54LT      **DRIVE SAMPLER TYPE:** Direct push  
**AUGER SIZE AND TYPE:** NA      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Macrocore      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS	
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE				
0	0.0-5.0'	S1 80%	0.0'	Brown SILT, little coarse to fine sand, little to trace clay, roots, moist, organic odor (topsoil).	0		
			0.8'	Brown SILT, some coarse to fine Sand, little gravel, trace asphalt, moist, no odor. (FILL)	0		
2			1.5'	Brown SILT, little coarse to fine gravel, little coarse to fine sand, moist, no odor.	0		
							0
4			3.5'	Similar to above, trace asphalt.	0		
			4.9'	Gray rock	12		
			End Boring - 5.0-ft - Refusal	6			
6							
8							
10							
12							
14							
16							

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-27





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** BWB-01  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

CONTRACTOR: Nothnagle Drilling Inc      BORING LOCATION: See Figure  
DRILLER: N. Short      GROUND SURFACE ELEVATION: NA      DATUM: NA  
LABELLA REPRESENTATIVE: A.Brett      START DATE: 11/27/2017      END DATE 11/27/2017

TYPE OF DRILL RIG: CME 75      DRIVE SAMPLER TYPE: Hydraulic Hammer  
AUGER SIZE AND TYPE: Hollow -stem      INSIDE DIAMETER: 2"  
OVERBURDEN SAMPLING METHOD: Split-spoon      OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0'0"-2'0"	S1 15"	0'0" 0'5" 0'11"	Asphalt. Firm gray damp to moist CRUSHER-RUN STONE. FILL: Firm red-brown-black mottled moist SILT, little organic cmf sand, trace fine brick.	0 0 0	
2	2'0"-4'0"	S2 16"		S-2: Same, loose, red-brown, moist, trace clay.	0 0	
4	4'0"-4'11"	S3 5"	3'10" 4'11"	Loose tan-brown moist SILT, little fine sand, trace organic and fine gravel S-3: Same, very dense, red-brown, moist, little clay from 4'10" to 4'11" no organic noted. Bedrock encountered.	0 0	
6				Augering into rock to set steel casing. End Boring - 6'0"	0	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES: On 11/29/17 bedrock at BWB-01 was cored to 16-ft bgs for observation and monitoring well installation.
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	6'0"	6'0"	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** BWB-01



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** BWB-02  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** Nothnagle Drilling Inc      **BORING LOCATION:** See Figure  
**DRILLER:** N. Short      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/27/2017      **END DATE:** 11/27/2017

**TYPE OF DRILL RIG:** CME 75      **DRIVE SAMPLER TYPE:** Hydraulic Hammer  
**AUGER SIZE AND TYPE:** Hollow -stem      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Split-spoon      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0'0"-2'0"	S1 18"	0'0" 0'9"	Asphalt. Compact gray dry CRUSHER-RUN STONE, little silt.	0	
2	2'0"-4'0"	S2 12"	1'5" 2'5" 2'10"	FILL: Compact brown coarse to fine SAND, damp, trace Silt, trace fine Gravel, trace brick, trace cinder, moist. S-2: same, firm. FILL: firm red BRICK, little coke. FILL: firm coarse to fine SAND, moist, little coke, cinders and ash.	0 0 0	
4	4'0"-5'11"	S3 9"	5'5"	S-3 Same, firm, no coke noted, some coarse to fine Gravel.  Tan coarse to fine SAND and GRAVEL, moist, little silt.	0 0	
6			5'11"	Bedrock encountered.  Augering into rock to set steel casing. End Boring - 7'0"	127 356 211 0	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	7'0"	7'0"	NA	

On 11/29/2017 Rollerbit used at location to drill through bedrock to a depth of 17-ft bgs for monitoring well 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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** BWB-02



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** BWB-03  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** Nothnagle Drilling Inc      **BORING LOCATION:** See Figure  
**DRILLER:** N. Short      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/27/2017      **END DATE:** 11/27/2017

**TYPE OF DRILL RIG:** CME 75      **DRIVE SAMPLER TYPE:** Hydraulic Hammer  
**AUGER SIZE AND TYPE:** Hollow -stem      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Split-spoon      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0'0"-2'0"	S1 13"	0'0" 0'7"	Asphalt S-1 Gray-brown loose SILT and coarse to fine SAND, moist, little coarse to fine gravel, trace glass, trace brick.	0	
2	2'0"-4'0"	S2 9"	2'0" 2'5"	S-2 Firm coarse gray-brown GRAVEL, moist, some silt, little sand. FILL: Firm red BRICK, dry.	0	
4	4'0"-5'11"	S3 0"	4'0" 5'11"	No Recovery Bedrock encountered	0	
6				Augering into rock to set steel casing. End Boring - 7'0"	0	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES: On 11/30/2017 Rollerbit used at location to drill through bedrock to a depth of 17-ft bgs for monitoring well installation
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	7'0"	7'0"	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** BWB-03



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** BWB-04  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** Nothnagle Drilling Inc      **BORING LOCATION:** See Figure  
**DRILLER:** N. Short      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/27/2017      **END DATE:** 11/27/2017

**TYPE OF DRILL RIG:** CME 75      **DRIVE SAMPLER TYPE:** Hydraulic Hammer  
**AUGER SIZE AND TYPE:** Hollow -stem      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Split-spoon      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0'0"-2'0"	S1 23"	0'0" 0'6" 1'0"	Asphalt S-1 FILL: Black and brown dense coarse to fine SAND and angular GRAVEL, damp, trace silt. FILL: Very dense gray coarse to fine angular GRAVEL, dry, some silt.	1012 3053	@ 1'3"
2	2'0"-4'0"	S2 9"	1'8" 2.0'	FILL: Very dense brown SILT, damp, some coarse to fine sand, trace gravel, trace brick. S-2 Fill: Firm red BRICK, dry.	31 34 33	
4	4'0"-5'7"	S3 10"	4'0" 4'2" 5'7"	S-3 FILL: Loose tan fine to medium SAND, damp, trace brick. Very soft brown SILT, moist, trace fine to medium sand, trace clay, trace coarse to fine gravel Bedrock encountered	33 31	
6				Augering into rock to set steel casing. End Boring - 7'0"		
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	7'0"	7'0"	NA	

On 11/30/2017 Rollerbit used at location to drill through bedrock to a depth of 17-ft bgs for monitoring well 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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** BWB-04



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** BWB-05  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

CONTRACTOR: Nothnagle Drilling Inc      BORING LOCATION: See Figure  
DRILLER: N. Short      GROUND SURFACE ELEVATION: NA      DATUM: NA  
LABELLA REPRESENTATIVE: A.Brett      START DATE: 11/27/2017      END DATE 11/27/2017

TYPE OF DRILL RIG: CME 75      DRIVE SAMPLER TYPE: Hydraulic Hammer  
AUGER SIZE AND TYPE: Hollow -stem      INSIDE DIAMETER: 2"  
OVERBURDEN SAMPLING METHOD: Split-spoon      OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0'0"-2'0"	S1 23"	0'0" 0'6" 0'9" 1'3"	Asphalt S-1 FILL: Compact black and gray coarse to fine GRAVEL, damp, some coarse to fine sand, subbase. FILL: Compact gray-brown angular GRAVEL (shale), dry, some silt. FILL: Compact brown coarse to fine SAND, moist, some silt, little coarse to fine gravel, trace brick, trace coke.	130 190 115 230	
2	2'0"-4'0"	S2 9"	2'0" 3'0"	S-2 FILL: Firm brown SILT, moist, little coarse to fine sand, little coarse to fine gravel, trace brick. Same, no brick.	130 94 101	
4	4'0"-5'9"	S3 4"	5'9"	S-3 Same, loose, trace sand.  Bedrock encountered  Augering into rock to set steel casing. End Boring - 7'0"	107   98	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	7'0"	7'0"	NA	

On 12/1/17 bedrock at BWB-05 was cored to 17-ft bgs for observation and monitoring well 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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** BWB-05



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** BWB-06  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** Nothnagle Drilling Inc      **BORING LOCATION:** See Figure  
**DRILLER:** N. Short      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/28/2017      **END DATE:** 11/28/2017

**TYPE OF DRILL RIG:** CME 75      **DRIVE SAMPLER TYPE:** Hydraulic Hammer  
**AUGER SIZE AND TYPE:** Hollow -stem      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Split-spoon      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0				Location of well in location of previously completed boring. See boring log for SB-27 for description of overburden soils.		
2						
4						
6			7'6"	Augered down to apparent bedrock at 7.5-ft bgs. Broke through the rock at 8.0-ft bgs and drilling became easy. Split spoon sampled from 9'0" to 10'6".		
8	9'0" - 10'6"	S1 6"	9'0"	Brown SILT, trace sand, wet.	0	Blow counts 9 for first 6" 50 over the next 12"
10			10'0" 10'6"	Gray broken rock, trace coarse to fine sand. Bedrock encountered.	0	
12				Augering into rock to set steel casing. End Boring - 11'6"	0	
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	11'6"	11'6"	NA	

On 12/4/2017 Rollerbit used at location to drill through bedrock to a depth of 21.5-ft bgs for monitoring well 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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** BWB-06





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** BWB-07  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** Nothnagle Drilling Inc      **BORING LOCATION:** See Figure  
**DRILLER:** N. Short      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/28/2017      **END DATE:** 11/28/2017

**TYPE OF DRILL RIG:** CME 75      **DRIVE SAMPLER TYPE:** Hydraulic Hammer  
**AUGER SIZE AND TYPE:** Hollow -stem      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Split-spoon      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0'0"-2'0"	S1 0"	0'0" 0'6"	Concrete. No recovery.	0	
2	2'0"-4'0"	S2 7"	2'0"	S-2 FILL: Brown SILT, moist, little coarse to fine sand, trace gravel, trace brick.	0	
4	4'0"-6'0"	S3 1"		S-3: Same, no brick.	0	
6	6'0"-6'6"	S4 4"	6'0" 6'6"	S-4: Brown SILT, moist, trace coarse to fine sand, trace fine gravel. Bedrock encountered. Augering into rock to set steel casing. End Boring - 7'6"	0	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES: On 12/4/2017 Rollerbit used at location to drill through bedrock to a depth of 17.5-ft bgs for monitoring well installation.
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	7'6"	7'6"	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** BWB-07



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** BWB-08  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** Nothnagle Drilling Inc      **BORING LOCATION:** See Figure  
**DRILLER:** N. Short      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/28/2017      **END DATE:** 11/28/2017

**TYPE OF DRILL RIG:** CME 75      **DRIVE SAMPLER TYPE:** Hydraulic Hammer  
**AUGER SIZE AND TYPE:** Hollow -stem      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Split-spoon      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0				Location of well in location of previously completed boring. See boring log for SB-24 for description of overburden soil.		
2						
4						
6			5'6"	Bedrock encountered. Augering into rock to set steel casing. End Boring - 6'6"		
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES: On 12/5/2017 Rollerbit used at location to drill through bedrock to a depth of 16.5-ft bgs for monitoring well installation.
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	6'6"	6'6"	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** BWB-08



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**TEST BORING LOG**

**PROJECT**

Bullshead Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** BWB-09  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** Nothnagle Drilling Inc      **BORING LOCATION:** See Figure  
**DRILLER:** N. Short      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/30/2017      **END DATE:** 11/30/2017

**TYPE OF DRILL RIG:** CME 75      **DRIVE SAMPLER TYPE:** Hydraulic Hammer  
**AUGER SIZE AND TYPE:** Hollow -stem      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Split-spoon      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0'0"-2'0"	S1 18"	0'0" 0'7" 1'5"	Asphalt. S-1 FILL: Black and gray coarse to fine GRAVEL, dry, little coarse to fine sand, little silt. Brown SILT, damp, some coarse to fine sand, trace coarse to fine gravel.	73 268 599 632	
2	2'0"-4'0"	S2 15"	2'0" 2'6" 2'10"	S-2: Similar to above. Tan coarse to fine SAND, moist, little fine gravel, trace silt. FILL: Gray coarse to fine GRAVEL and SAND, dry, little concrete.	621 1367 1201	
4	4'0"-5'1"	S3 12"	3'1" 4'6" 5'1"	Brown SILT, moist, some fine sand. S-3: Same. Brown SILT, moist, some coarse to fine gravel, little coarse to fine sand. Bedrock encountered.	2492 2390	
6				Augering into rock to set steel casing. End Boring - 6'6"		
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	6'6"	6'6"	NA	

On 12/1/2017 Rollerbit used at location to drill through bedrock to a depth of 17-ft bgs for monitoring well 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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** BWB-09



300 STATE STREET, ROCHESTER, NY

**ROCK CORE LOG**

**PROJECT:**

Bullshead Plaza Phase II  
835-855 West Main Street, Rochester, New York  
City of Rochester

BORING NO: BW-01

SHEET 1 OF 1

PROJECT NO: 2172124

CONTRACTOR: Nothnagle Drilling Inc

BORING LOCATION: BWB-01 See Figure

START DATE: 11/29/17

DRILLER: N. Short

GRD SURF ELEVATION: 542.6106

FINISH DATE: 11/29/17

RIG TYPE: CME 75

DATUM: North American 1983

LABELLA REP: A. Brett

CSG TYPE/DIAM: \_\_\_\_\_

CORE BARREL TYPE / DIAMETER: H

Depth (ft.)	Drill Rate (min per ft)	Core Run No. / Depth	Recovery (ft / %)	RQD <sup>(1)</sup> (in / %)	Fractures (depth ft / width in)	Strata Change (Depth in ft)	Visual Classification and Remarks	PID Data (ppb)
6	10	C1 6-9'	2'1" / 97.2%	(A)	6'6.5"/0.5"	6.0'	Dolomite, calcified nodules	0
7	10				6'9"/0.25"			0
8	10				7'3"/0.5"			0
9	7	C2 9-14'	4'10" / 96.6%	(A)	7'11"/0.5"			0
10	8				8'7"/0.25"			0
11	8				8'10"/0.25"			0
12	8				9'1"/0.25"			0
13	8				9'3"/0.25"			0
14	6	C3 14-16'	2'0" / 100%	(A)	9'7"/0.25"		Dolomite, very calcified	0
15	6				10'/0.25"			0
16	6				10'2"/0.5"			0
					11'1"/0.5"			0
					13'5"/0.25"			0
					14'1"/0.25"			0
					14'3"/0.25"			0
					15'10"/0.5"			0
							End Rock Core - 16' bgs	0

**WATER LEVEL DATA**

DATE	TIME	ELAPSED TIME	DEPTH (FT)		
			BOTTOM OF CASING	BOTTOM OF BORING	WATER LEVEL
NA	NA	NA	16	16	NA

**OTHER REMARKS**

Dust supression system set up, periodically checking dust monitors,  
dust supression system altered to prevent water/dust from expelling.

**GENERAL NOTES**

- 1) For runs with greater than 100% recovery, RQD is computed using total core recovered.
- 2) Measured water levels may not represent actual groundwater levels.
- (A) Refer to Foundation Design, P.C. Report in Appendix 2

BORING NO: **BW-01**



300 STATE STREET, ROCHESTER, NY

**ROCK CORE LOG**

**PROJECT:**

Bullshead Plaza Phase II  
835-855 West Main Street, Rochester, New York  
City of Rochester

**BORING NO:** BW-05

**SHEET** 1 **OF** 1

**PROJECT NO:** 2172124

**CONTRACTOR:** Nothnagle Drilling Inc

**DRILLER:** N. Short

**RIG TYPE:** CME 75

**CSG TYPE/DIAM:**

**BORING LOCATION:** BWB-05 See Figure

**GRD SURF ELEVATION:** 543.1176

**DATUM:** North American 1983

**CORE BARREL TYPE / DIAMETER:** H

**START DATE:** 12/1/17

**FINISH DATE:** 12/1/17

**LABELLA REP:** A. Brett

Depth (ft.)	Drill Rate (min per ft)	Core Run No. / Depth	Recovery (ft / %)	RQD <sup>(1)</sup> (in / %)	Fractures (depth ft / width in)	Strata Change (Depth in ft)	Visual Classification and Remarks	PID Data (ppb)
7	6	C1 7-10'	3' / 100%	(A)	7'3"/0.25"	7.0'	Dolomite	249
8	8				8'2"/1"			280
9	6				8'6"/0.25"			321
					8'7"/0.125"			
					9'5"/1"			
10	6	C2 10-15'	5' / 100%	(A)	9'10"/0.25"			69
					10'8"/1"			
11	6				11'3"/0.125"			137
					11'7"/0.125"			
12	6				11'9"/0.125"			238
					12'/0.125"			
13	5				12'4"/0.125"			60
					12'9"/0.125"			
14	5				13'/1"			128
					14'6"/0.25"			
15	11	C3 15-17'	2' / 100%	(A)	15'8"/0.125"		Dolomite, vugs	60
					15'11"/0.25"			
16	11							60
17	11				16'7"/0.25"		End Rock Core - 17' bgs	60

**WATER LEVEL DATA**

DATE	TIME	ELAPSED TIME	DEPTH (FT)		
			BOTTOM OF CASING	BOTTOM OF BORING	WATER LEVEL


**OTHER REMARKS**

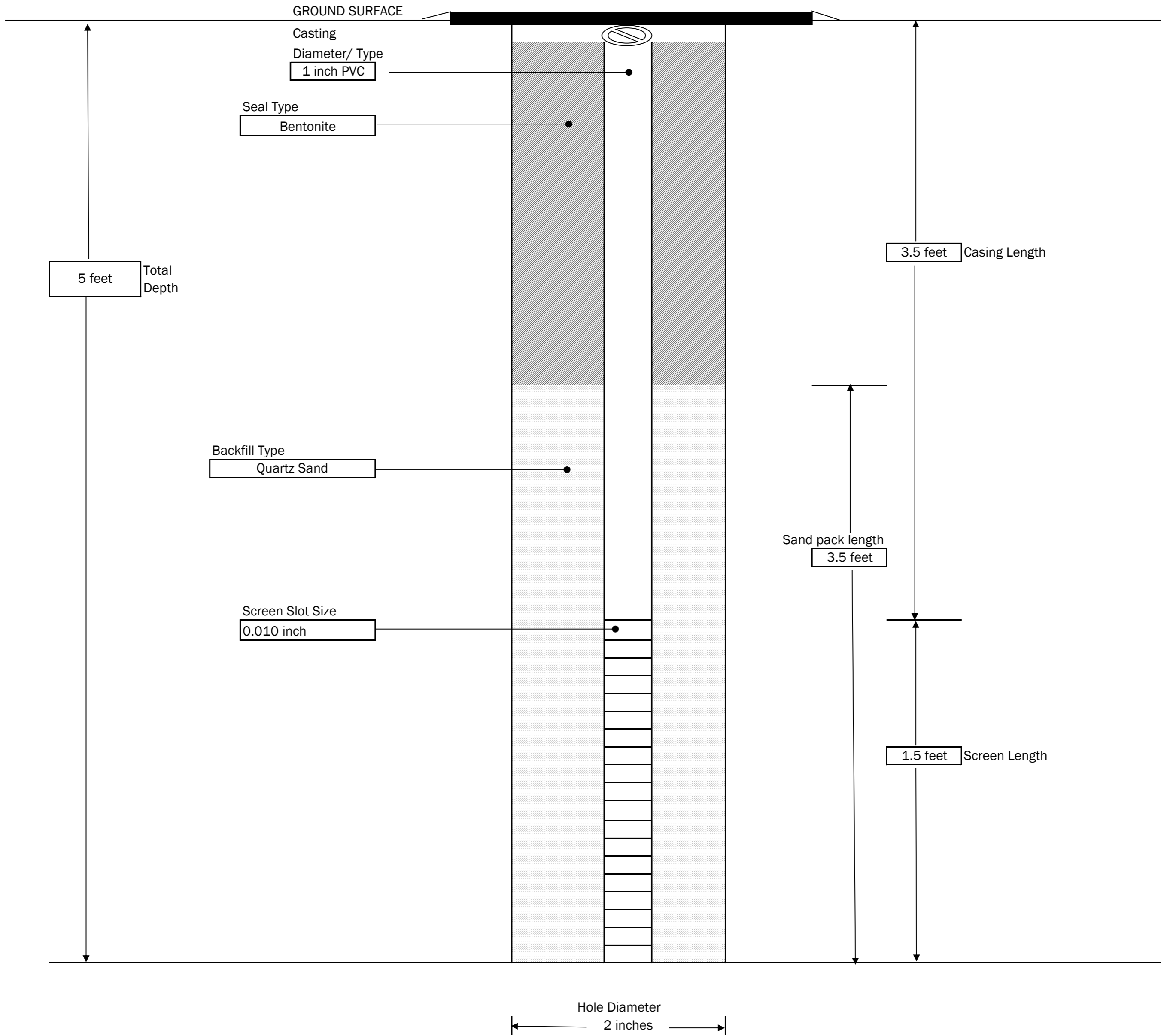
Background PID readings were generally around 100 ppb but fluctuated throughout the drilling process.

**GENERAL NOTES**

- 1) For runs with greater than 100% recovery, RQD is computed using total core recovered.
- 2) Measured water levels may not represent actual groundwater levels.
- (A) Refer to Foundation Design, P.C. Report in Appendix 2


**BORING NO:** BW-01

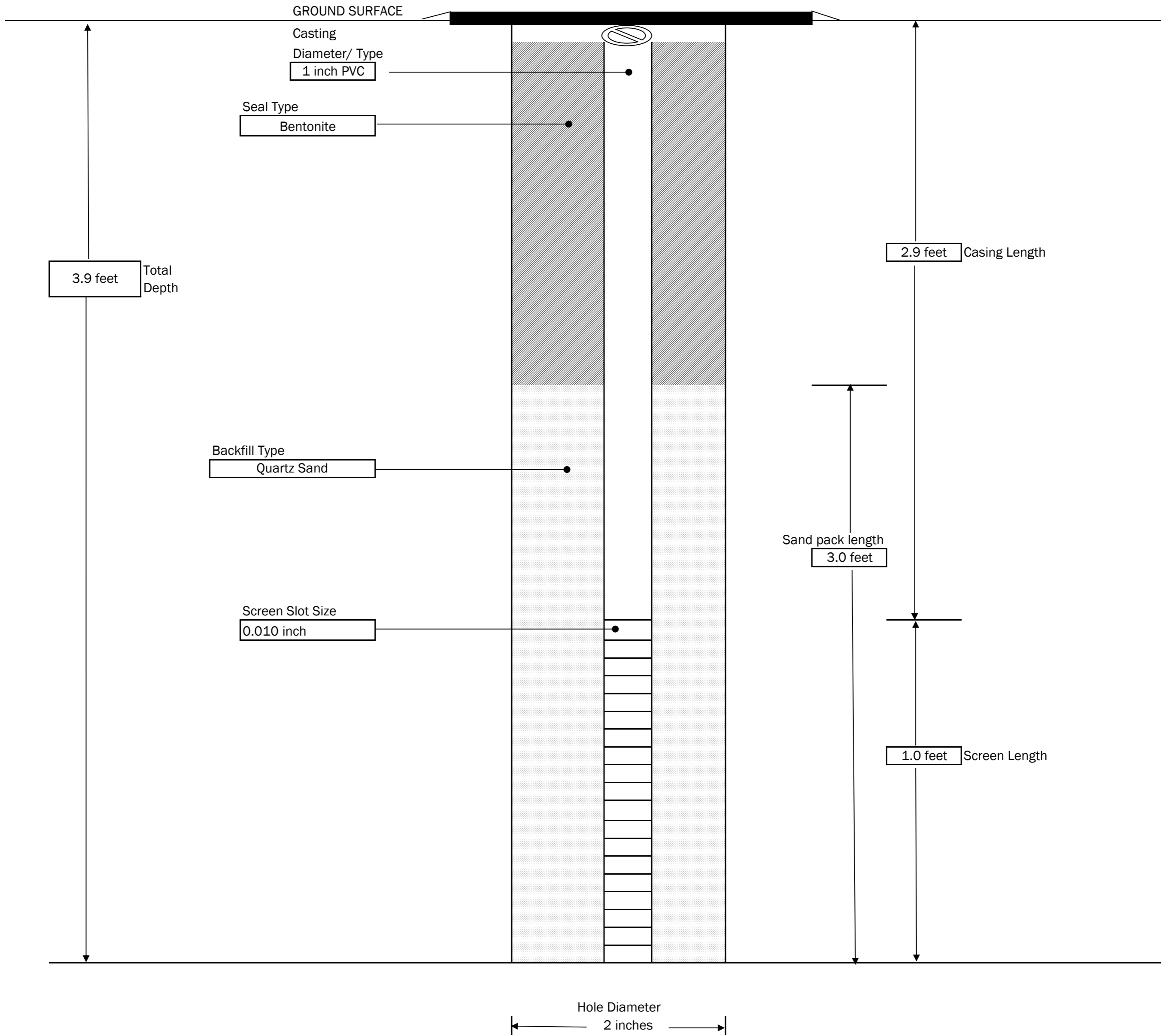
 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street Rochester, NY		<b>MONITORING WELL :</b> MW-01
			<b>SHEET</b> 1 OF 1 <b>JOB #</b> 2172714
<b>CONTRACTOR:</b> LaBella Environmental LLC <b>DRILLER:</b> M. Pepe <b>LABELLA REPRESENTATIVE:</b> AGB	<b>BORING LOCATION:</b> SB-09 <b>GROUND SURFACE ELEVATION:</b> NA <b>DATUM:</b> NA <b>START DATE:</b> 11/6/2017 <b>END DATE:</b> 11/6/2017	<b>TYPE OF DRILL RIG:</b> Geoprobe 6620DT <b>AUGER SIZE AND TYPE:</b> NA <b>OVERBURDEN SAMPLING METHOD:</b> Macrocore	




- GENERAL NOTES:  
 1) NOT TO SCALE  
 2) DEPTHS ARE APPROXIMATE

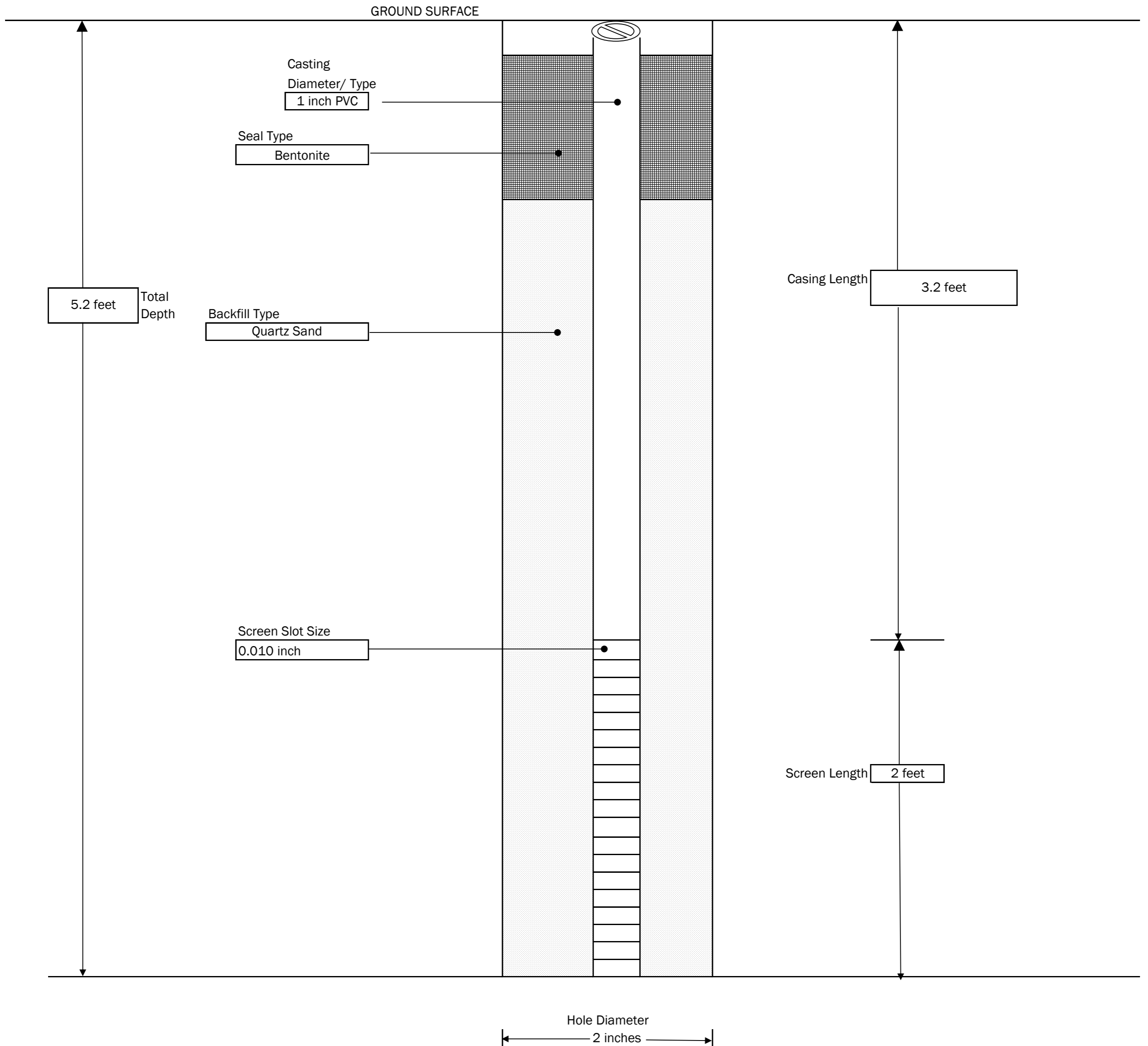


 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street Rochester, NY		<b>MONITORING WELL :</b> MW-02
			<b>SHEET</b> 1 OF 1 <b>JOB #</b> 2172414
<b>CONTRACTOR:</b> LaBella Environmental LLC <b>DRILLER:</b> M. Pepe <b>LABELLA REPRESENTATIVE:</b> AGB	<b>BORING LOCATION:</b> SB-10 <b>GROUND SURFACE ELEVATION:</b> NA <b>DATUM:</b> NA <b>START DATE:</b> 11/6/2017 <b>END DATE:</b> 11/6/2017	<b>TYPE OF DRILL RIG:</b> Geoprobe 6620DT <b>AUGER SIZE AND TYPE:</b> NA <b>OVERBURDEN SAMPLING METHOD:</b> Macrocore	




- GENERAL NOTES:
- 1) NOT TO SCALE
  - 2) DEPTHS ARE APPROXIMATE

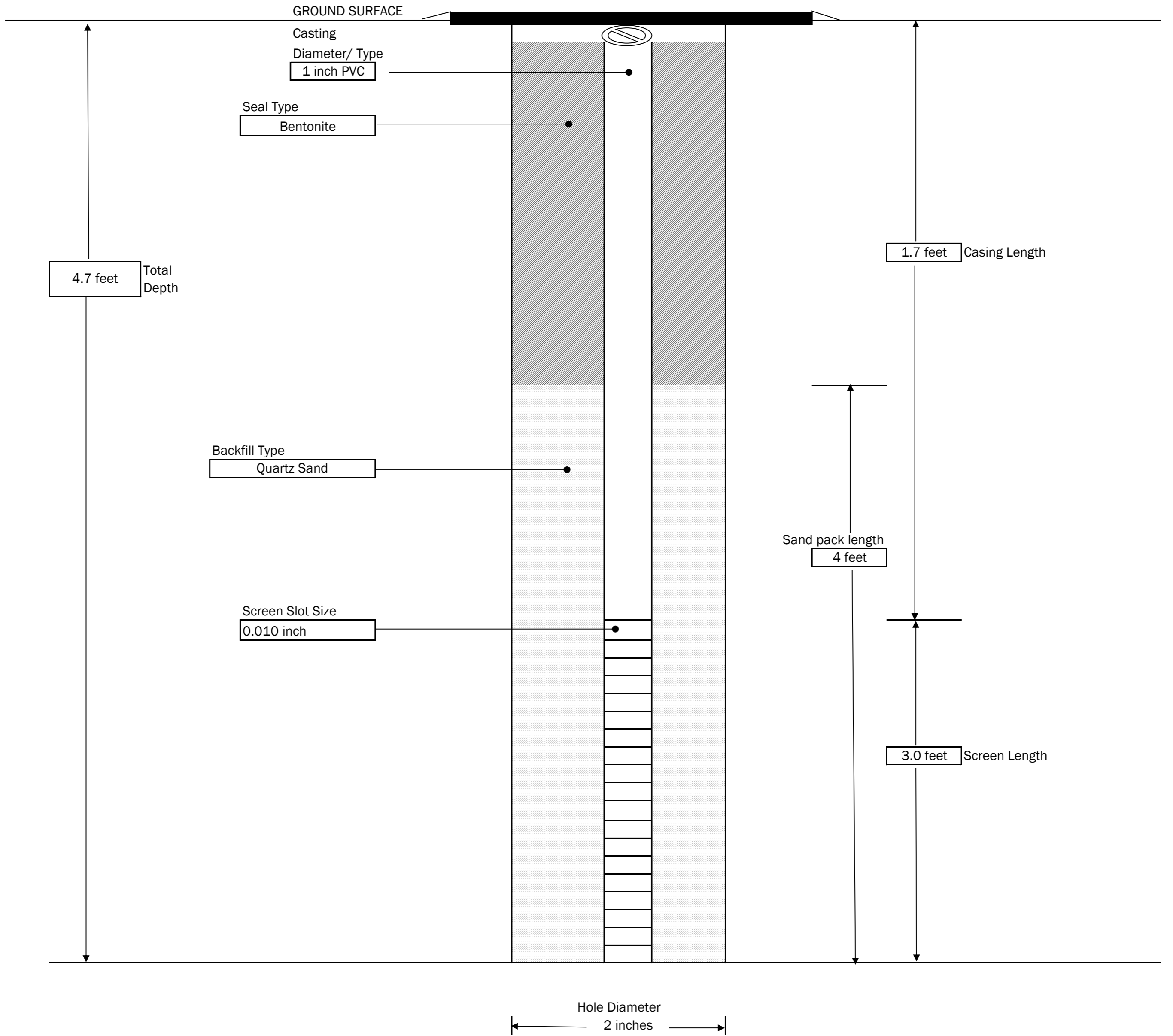
 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street Rochester, NY		<b>MONITORING WELL :</b> MW-03
			<b>SHEET</b> 1 OF 1 <b>JOB #</b> 2172414
<b>CONTRACTOR:</b> LaBella Environmental LLC <b>DRILLER:</b> M. Pepe <b>LABELLA REPRESENTATIVE:</b> AGB	<b>BORING LOCATION:</b> SB-13 <b>GROUND SURFACE ELEVATION:</b> NA <b>DATUM:</b> NA <b>START DATE:</b> 11/7/2017 <b>END DATE:</b> 11/7/2017	<b>TYPE OF DRILL RIG:</b> Geoprobe 54LT <b>AUGER SIZE AND TYPE:</b> NA <b>OVERBURDEN SAMPLING METHOD:</b> Macrocore	




- GENERAL NOTES:
- 1) NOT TO SCALE
  - 2) DEPTHS ARE APPROXIMATE

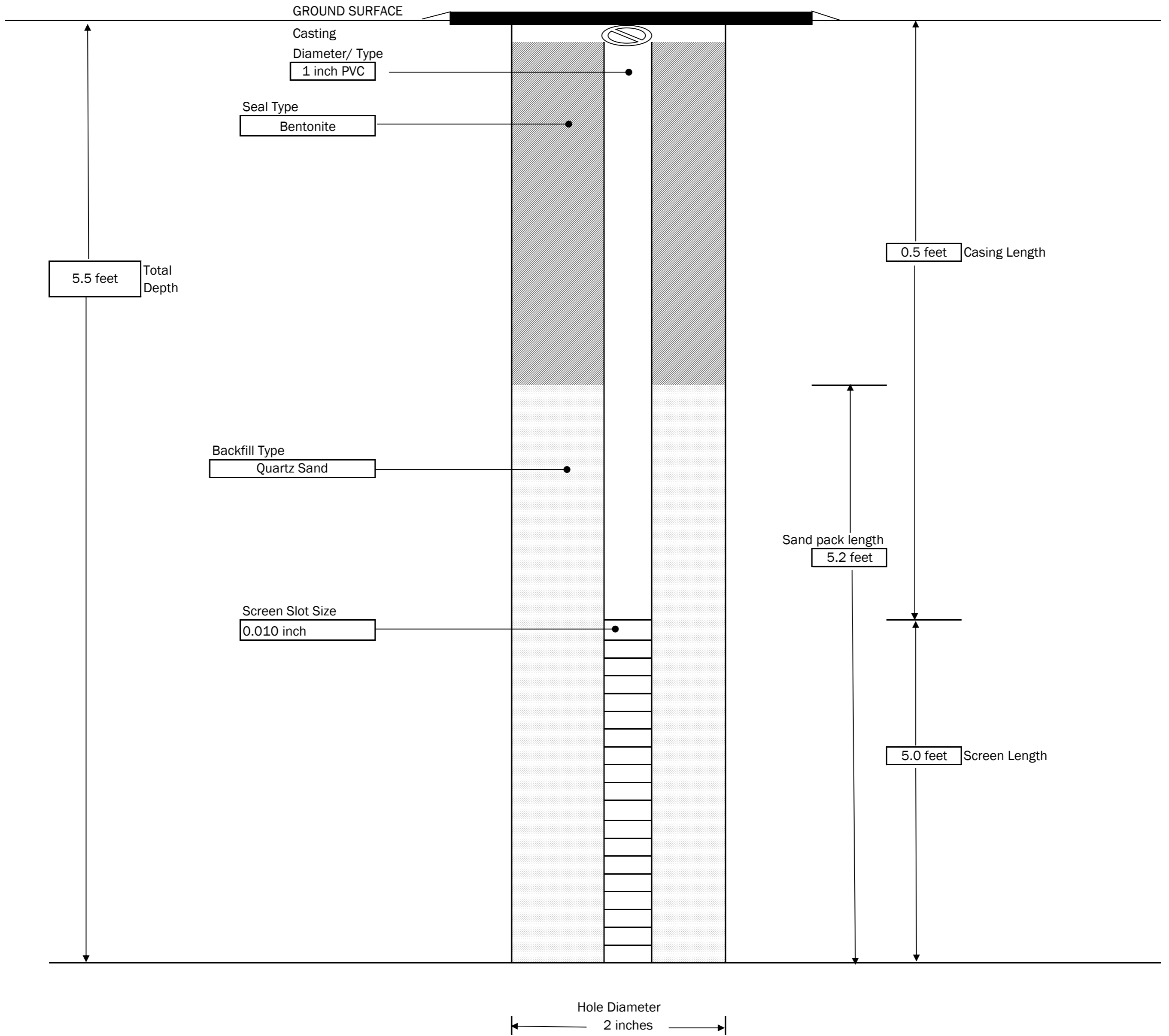


 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street Rochester, NY		<b>MONITORING WELL :</b> MW-04
			<b>SHEET</b> 1 OF 1 <b>JOB #</b> 2172414
<b>CONTRACTOR:</b> LaBella Environmental LLC <b>DRILLER:</b> M. Pepe <b>LABELLA REPRESENTATIVE:</b> AGB	<b>BORING LOCATION:</b> SB-19 <b>GROUND SURFACE ELEVATION:</b> NA <b>DATUM:</b> NA <b>START DATE:</b> 11/8/2017 <b>END DATE:</b> 11/8/2017	<b>TYPE OF DRILL RIG:</b> Geoprobe 6620DT <b>AUGER SIZE AND TYPE:</b> NA <b>OVERBURDEN SAMPLING METHOD:</b> Macrocore	




- GENERAL NOTES:
- 1) NOT TO SCALE
  - 2) DEPTHS ARE APPROXIMATE

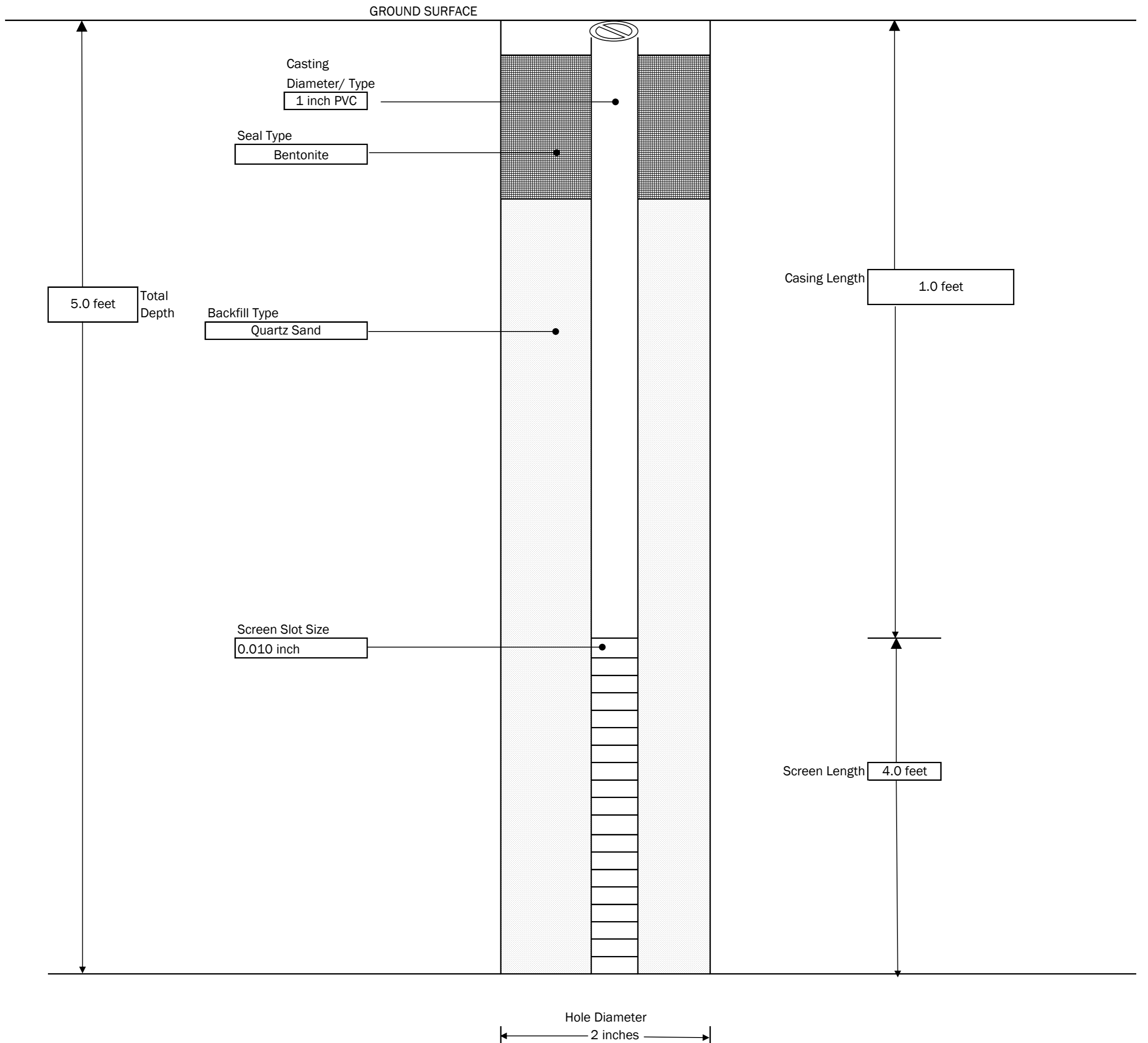
 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street Rochester, NY		<b>MONITORING WELL :</b> MW-05
			<b>SHEET</b> 1 OF 1 <b>JOB #</b> 2172414
<b>CONTRACTOR:</b> LaBella Environmental LLC <b>DRILLER:</b> M. Pepe <b>LABELLA REPRESENTATIVE:</b> AGB	<b>BORING LOCATION:</b> SB-21 <b>GROUND SURFACE ELEVATION:</b> NA <b>DATUM:</b> NA <b>START DATE:</b> 11/8/2017 <b>END DATE:</b> 11/8/2017	<b>TYPE OF DRILL RIG:</b> Geoprobe 6620DT <b>AUGER SIZE AND TYPE:</b> NA <b>OVERBURDEN SAMPLING METHOD:</b> Macrocore	




- GENERAL NOTES:
- 1) NOT TO SCALE
  - 2) DEPTHS ARE APPROXIMATE

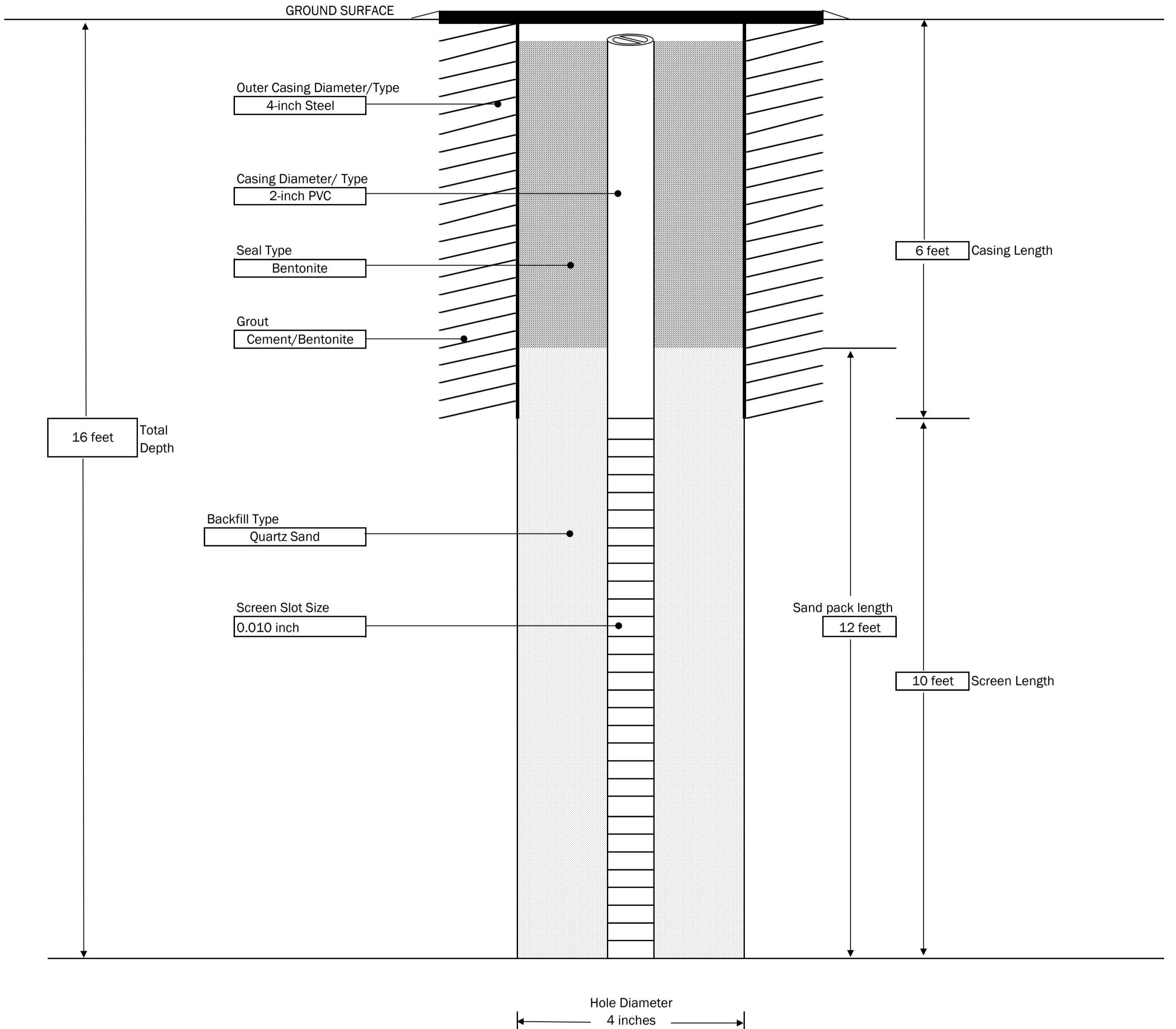


 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street Rochester, NY		<b>MONITORING WELL :</b> MW-06
			<b>SHEET</b> 1 OF 1 <b>JOB #</b> 2172414
<b>CONTRACTOR:</b> LaBella Environmental LLC <b>DRILLER:</b> J. Constantino <b>LABELLA REPRESENTATIVE:</b> AGB	<b>BORING LOCATION:</b> SB-26 <b>GROUND SURFACE ELEVATION:</b> NA <b>DATUM:</b> NA <b>START DATE:</b> 11/13/2017 <b>END DATE:</b> 11/13/2017	<b>TYPE OF DRILL RIG:</b> Geoprobe 54LT <b>AUGER SIZE AND TYPE:</b> NA <b>OVERBURDEN SAMPLING METHOD:</b> Macrocore	



GENERAL NOTES:  
 1) NOT TO SCALE  
 2) DEPTHS ARE APPROXIMATE


 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>WELL CONSTRUCTION LOG</b>		MONITORING WELL : <b>BWB-01</b>	
	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street, Rochester, NY City of Rochester		SHEET : <b>1 OF 1</b> JOB # : <b>2172414</b>	
CONTRACTOR: Nothnagle Drilling Inc. DRILLER: N. Short LABELLA REPRESENTATIVE: A. Brett	BORING LOCATION: <b>BWB-01 - See Figure</b> GROUND SURFACE ELEVATION: <b>542.6106</b> DATUM: <b>North American 1983</b> START DATE: <b>11/27/2018</b> END DATE: <b>11/29/2017</b>	TYPE OF DRILL RIG: <b>CME 75</b> AUGER SIZE AND TYPE: <b>Hollow-Stem</b> OVERBURDEN SAMPLING METHOD: <b>Macrocore</b>		

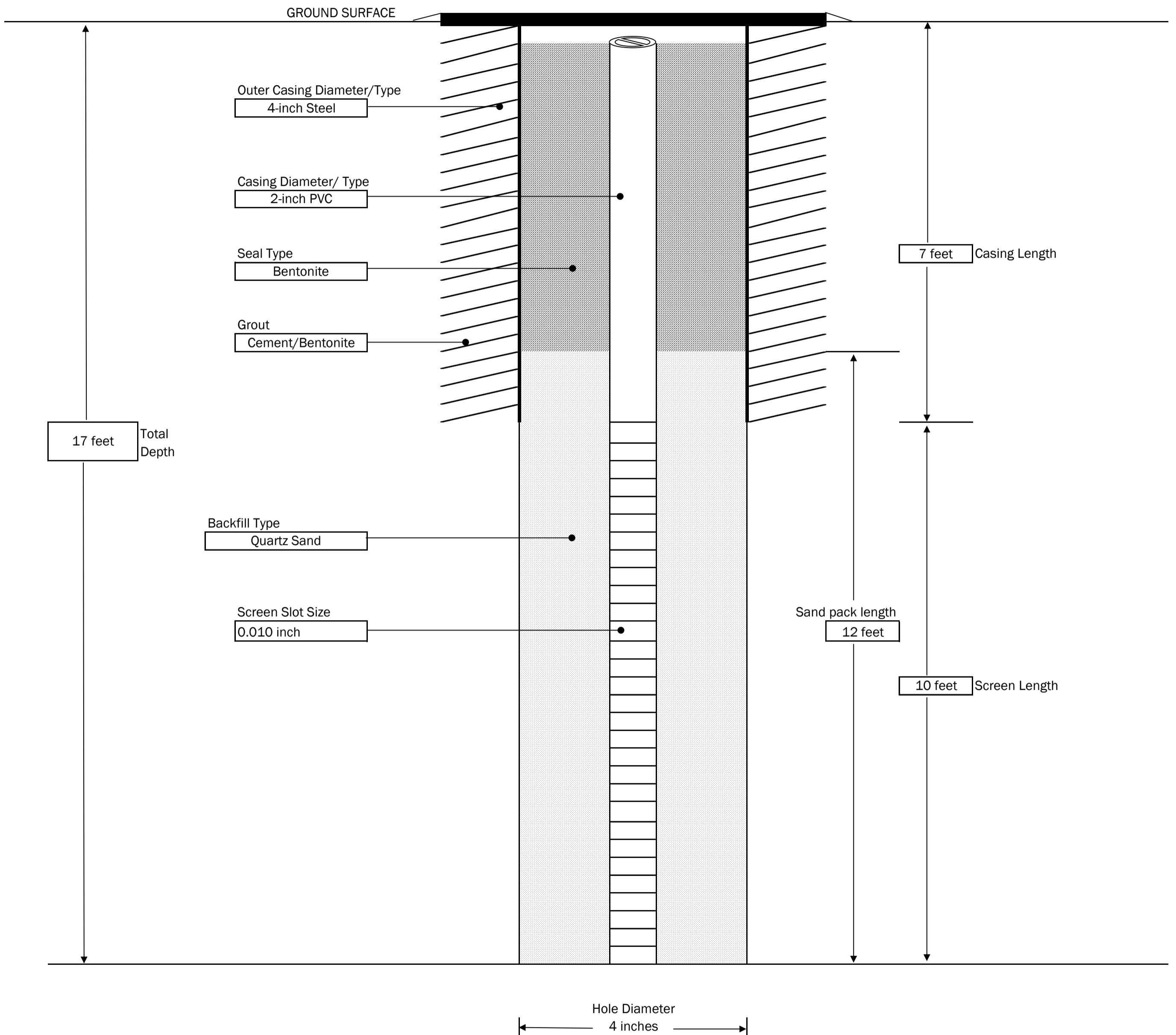


**GENERAL NOTES:**

- 1) NOT TO SCALE
- 2) DEPTHS ARE APPROXIMATE
- 3) Bedrock encountered at 4'11" bgs. Auger was advanced to 6' bgs and steel casing set.




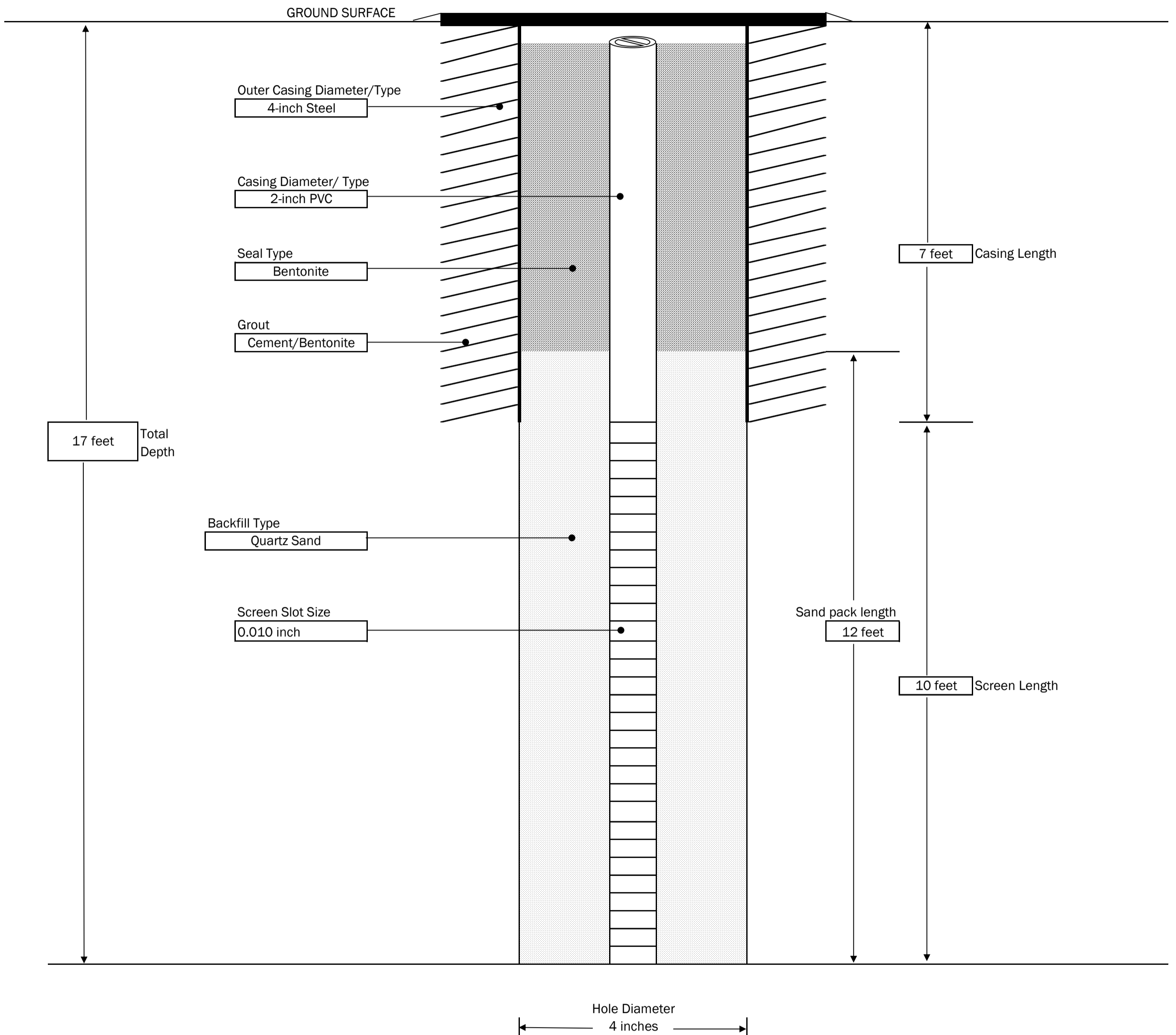
 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>WELL CONSTRUCTION LOG</b>		MONITORING WELL : <b>BWB-02</b>	
	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street, Rochester, NY City of Rochester		SHEET : <b>1 OF 1</b> JOB # : <b>2172414</b>	
CONTRACTOR: Nothnagle Drilling Inc. DRILLER: N. Short LABELLA REPRESENTATIVE: A. Brett	BORING LOCATION: <b>BWB-02 - See Figure</b> GROUND SURFACE ELEVATION: <b>542.9791</b> DATUM: <b>North American 1983</b> START DATE: <b>11/27/2018</b> END DATE: <b>11/29/2017</b>	TYPE OF DRILL RIG: <b>CME 75</b> AUGER SIZE AND TYPE: <b>Hollow-Stem</b> OVERBURDEN SAMPLING METHOD: <b>Macrocore</b>		



**GENERAL NOTES:**

- 1) NOT TO SCALE
- 2) DEPTHS ARE APPROXIMATE
- 3) Bedrock encountered at 5'11" bgs. Auger was advanced to 7' bgs and steel casing set.


 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>WELL CONSTRUCTION LOG</b>		MONITORING WELL : <b>BWB-03</b>	
	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street, Rochester, NY City of Rochester		SHEET : <b>1 OF 1</b> JOB # : <b>2172414</b>	
CONTRACTOR: Nothnagle Drilling Inc. DRILLER: N. Short LABELLA REPRESENTATIVE: A. Brett	BORING LOCATION: <b>BWB-03 - See Figure</b> GROUND SURFACE ELEVATION: <b>543.3241</b> DATUM: <b>North American 1983</b> START DATE: <b>11/27/2018</b> END DATE: <b>11/30/2017</b>	TYPE OF DRILL RIG: <b>CME 75</b> AUGER SIZE AND TYPE: <b>Hollow-Stem</b> OVERBURDEN SAMPLING METHOD: <b>Macrocore</b>		

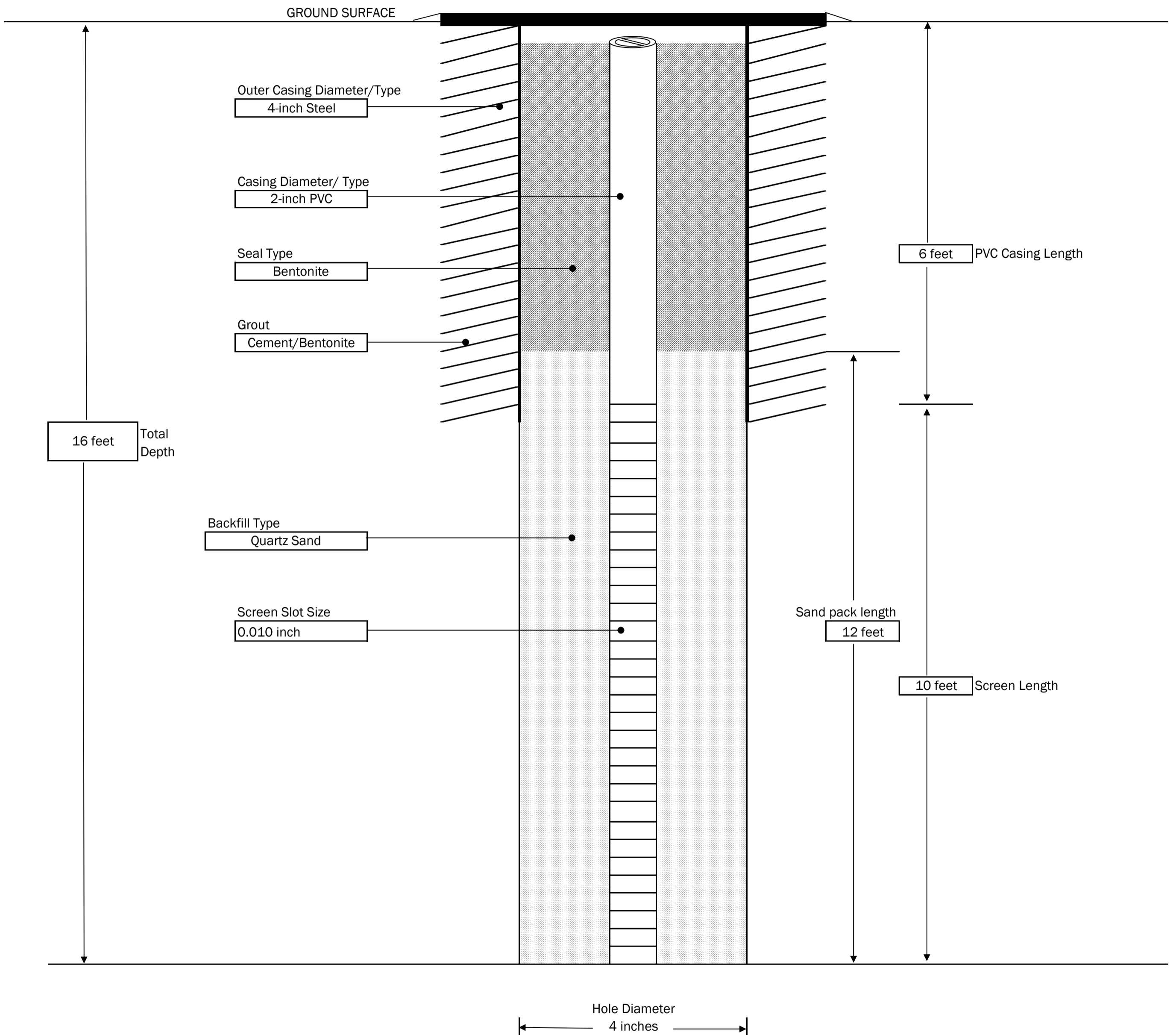


**GENERAL NOTES:**

- 1) NOT TO SCALE
- 2) DEPTHS ARE APPROXIMATE
- 3) Bedrock encountered at 5'11" bgs. Auger was advanced to 7' bgs and steel casing set.




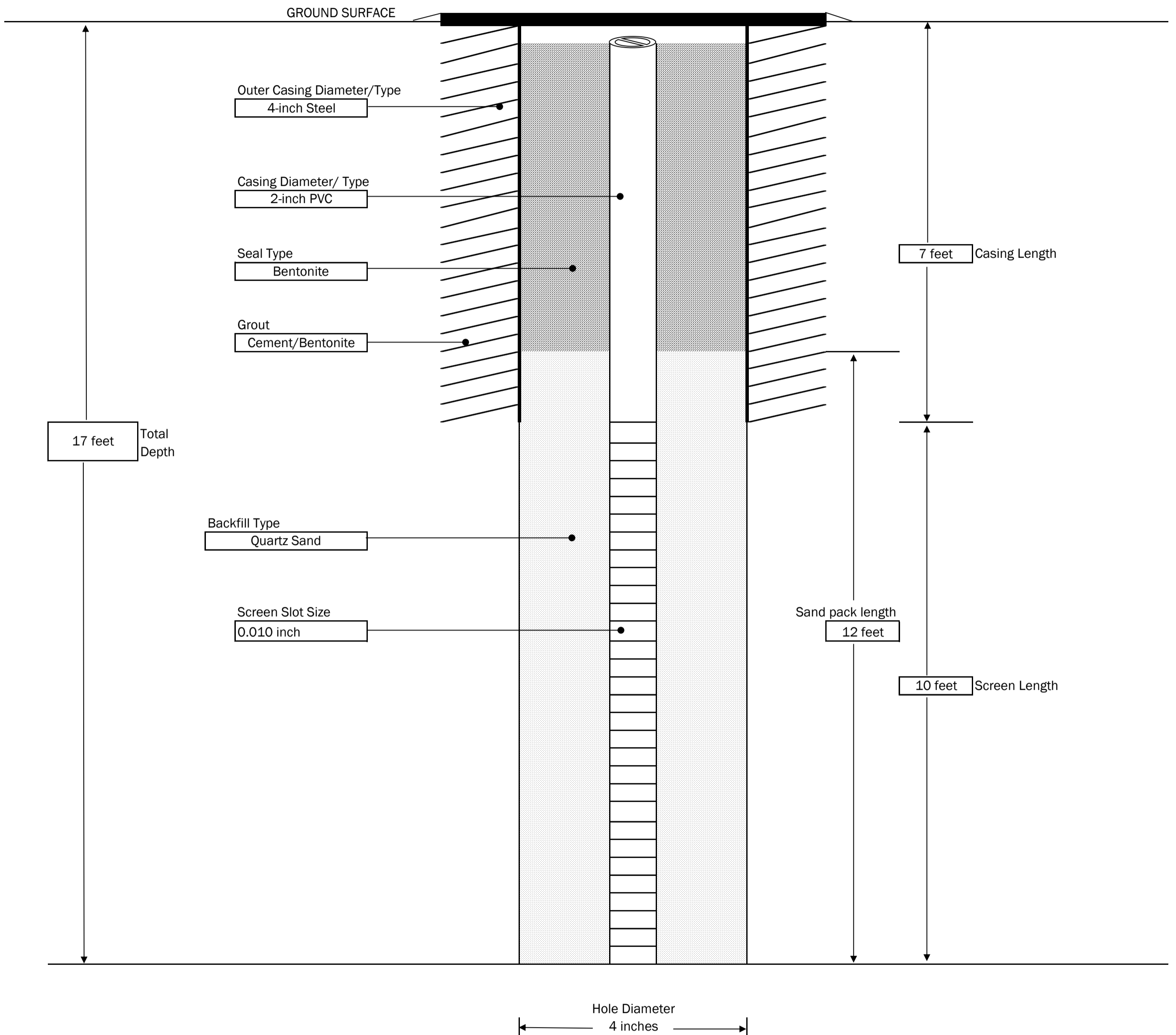
 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>WELL CONSTRUCTION LOG</b>		MONITORING WELL : <b>BWB-04</b>	
	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street, Rochester, NY City of Rochester		SHEET : <b>1 OF 1</b> JOB # : <b>2172414</b>	
CONTRACTOR: Nothnagle Drilling Inc. DRILLER: N. Short LABELLA REPRESENTATIVE: A. Brett	BORING LOCATION: <b>BWB-04 - See Figure</b> GROUND SURFACE ELEVATION: <b>542.4855</b> DATUM: <b>North American 1983</b> START DATE: <b>11/27/2018</b> END DATE: <b>11/30/2017</b>	TYPE OF DRILL RIG: <b>CME 75</b> AUGER SIZE AND TYPE: <b>Hollow-Stem</b> OVERBURDEN SAMPLING METHOD: <b>Macrocore</b>		



**GENERAL NOTES:**

- 1) NOT TO SCALE
- 2) DEPTHS ARE APPROXIMATE
- 3) Bedrock encountered at 5'7" bgs. Auger was advanced to 7' bgs and steel casing set.


 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>WELL CONSTRUCTION LOG</b>		MONITORING WELL : <b>BWB-05</b>	
	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street, Rochester, NY City of Rochester		SHEET : <b>1 OF 1</b> JOB # : <b>2172414</b>	
CONTRACTOR: Nothnagle Drilling Inc. DRILLER: N. Short LABELLA REPRESENTATIVE: A. Brett	BORING LOCATION: <b>BWB-05 - See Figure</b> GROUND SURFACE ELEVATION: <b>543.1176</b> DATUM: <b>North American 1983</b> START DATE: <b>11/27/2018</b> END DATE: <b>12/1/2017</b>	TYPE OF DRILL RIG: <b>CME 75</b> AUGER SIZE AND TYPE: <b>Hollow-Stem</b> OVERBURDEN SAMPLING METHOD: <b>Macrocore</b>		

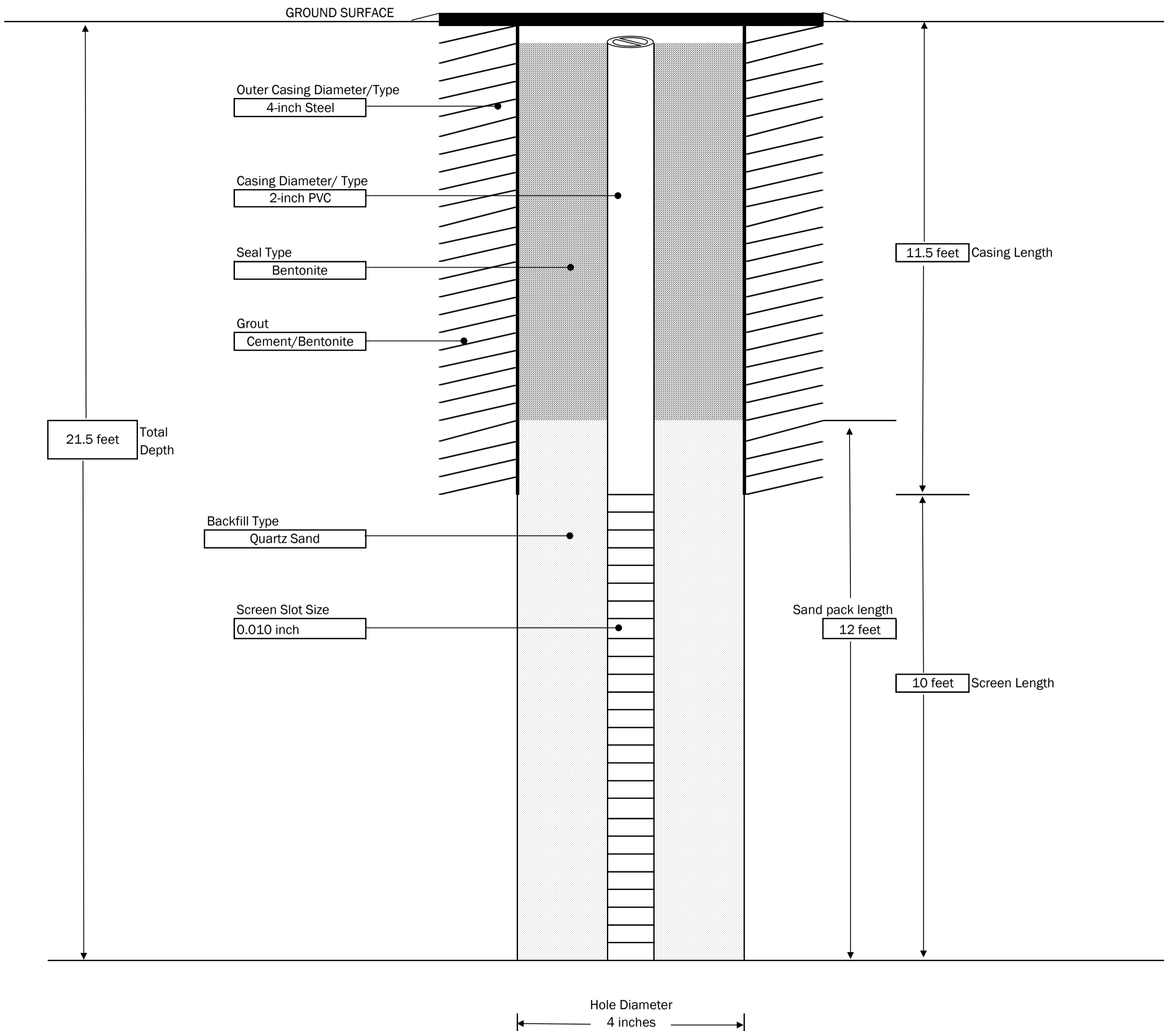


**GENERAL NOTES:**

- 1) NOT TO SCALE
- 2) DEPTHS ARE APPROXIMATE
- 3) Bedrock encountered at 5'9" bgs. Auger was advanced to 7' bgs and steel casing set.




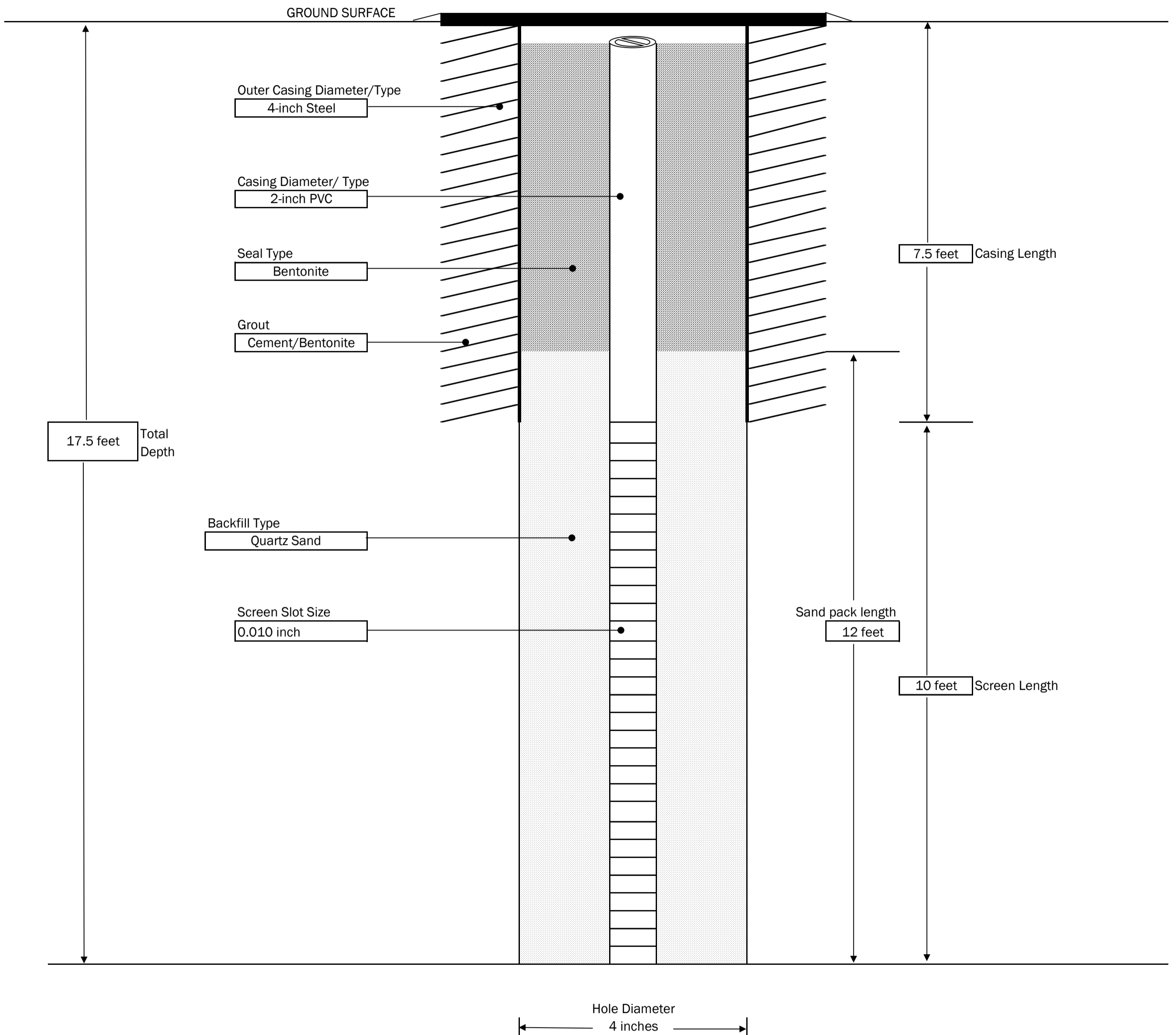
 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>WELL CONSTRUCTION LOG</b>		MONITORING WELL : <b>BWB-06</b>	
	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street, Rochester, NY City of Rochester		SHEET : <b>1 OF 1</b> JOB # : <b>2172414</b>	
CONTRACTOR: Nothnagle Drilling Inc. DRILLER: N. Short LABELLA REPRESENTATIVE: A. Brett	BORING LOCATION: <b>BWB-06 - See Figure</b> GROUND SURFACE ELEVATION: <b>542.1276</b> DATUM: <b>North American 1983</b> START DATE: <b>11/28/2018</b> END DATE: <b>12/4/2017</b>	TYPE OF DRILL RIG: <b>CME 75</b> AUGER SIZE AND TYPE: <b>Hollow-Stem</b> OVERBURDEN SAMPLING METHOD: <b>Macrocore</b>		




**GENERAL NOTES:**

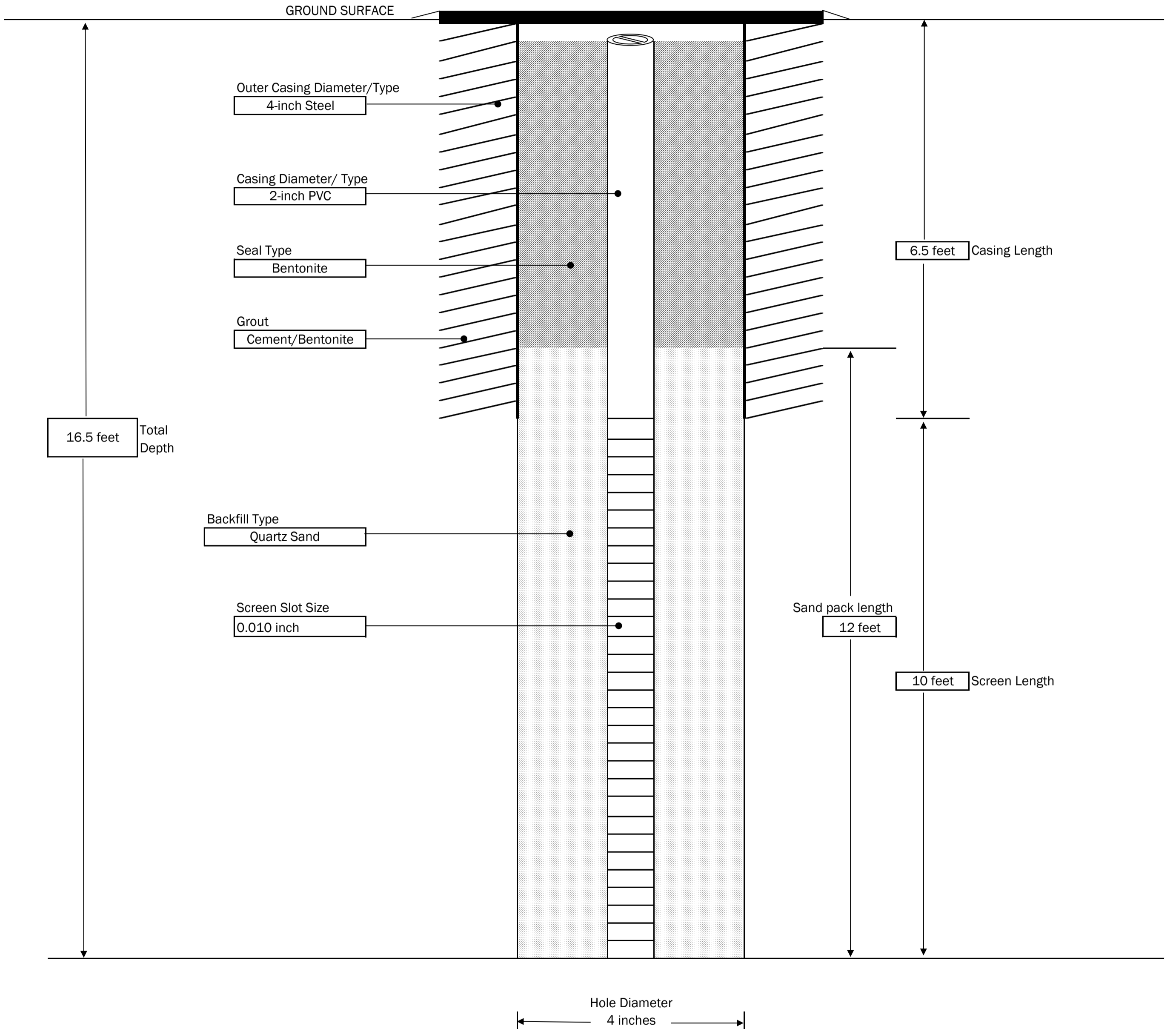
- 1) NOT TO SCALE
- 2) DEPTHS ARE APPROXIMATE
- 3) Weathered bdrck encountered at 7'6" bgs, broke through at 8' bgs. Bedrock at 10'6" bgs and augered to 11'6" bgs to set steel casing.

 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>WELL CONSTRUCTION LOG</b>		MONITORING WELL : <b>BWB-07</b>	
	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street, Rochester, NY City of Rochester		SHEET : <b>1 OF 1</b> JOB # : <b>2172414</b>	
CONTRACTOR: Nothnagle Drilling Inc. DRILLER: N. Short LABELLA REPRESENTATIVE: A. Brett	BORING LOCATION: <b>BWB-07 - See Figure</b> GROUND SURFACE ELEVATION: <b>542.8133</b> DATUM: <b>North American 1983</b> START DATE: <b>11/28/2018</b> END DATE: <b>12/4/2017</b>	TYPE OF DRILL RIG: <b>CME 75</b> AUGER SIZE AND TYPE: <b>Hollow-Stem</b> OVERBURDEN SAMPLING METHOD: <b>Macrocore</b>		




- GENERAL NOTES:
- 1) NOT TO SCALE
  - 2) DEPTHS ARE APPROXIMATE
  - 3) Bedrock encountered at 6'6" bgs. Auger was advanced to 7'6" bgs and steel casing set.

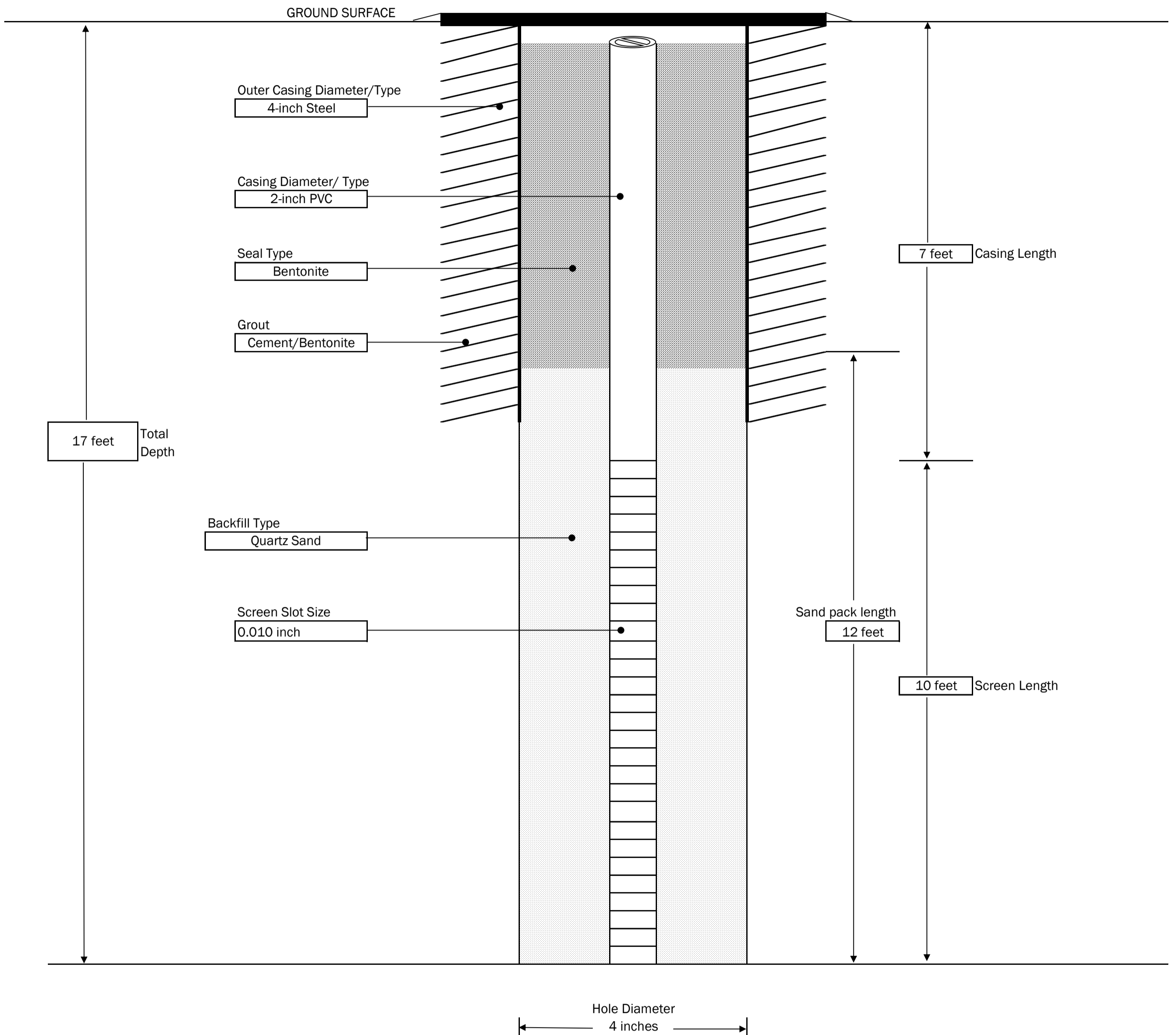
 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>WELL CONSTRUCTION LOG</b>		MONITORING WELL : <b>BWB-08</b>	
	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street, Rochester, NY City of Rochester		SHEET : <b>1 OF 1</b> JOB # : <b>2172414</b>	
CONTRACTOR: Nothnagle Drilling Inc. DRILLER: N. Short LABELLA REPRESENTATIVE: A. Brett	BORING LOCATION: <b>BWB-08 - See Figure</b> GROUND SURFACE ELEVATION: <b>542.7806</b> DATUM: <b>North American 1983</b> START DATE: <b>11/28/2018</b> END DATE: <b>12/5/2017</b>	TYPE OF DRILL RIG: <b>CME 75</b> AUGER SIZE AND TYPE: <b>Hollow-Stem</b> OVERBURDEN SAMPLING METHOD: <b>Macrocore</b>		



- GENERAL NOTES:
- 1) NOT TO SCALE
  - 2) DEPTHS ARE APPROXIMATE
  - 3) Bedrock encountered at 5'6" bgs. Auger was advanced to 6'6" bgs and steel casing set.



 300 STATE STREET, ROCHESTER, NEW YORK ENVIRONMENTAL ENGINEERING CONSULTANTS	<b>WELL CONSTRUCTION LOG</b>		MONITORING WELL : <b>BWB-09</b>	
	<b>PROJECT</b> Bullshead Plaza Phase II ESA 835-855 West Main Street, Rochester, NY City of Rochester		SHEET : <b>1 OF 1</b> JOB # : <b>2172414</b>	
CONTRACTOR: Nothnagle Drilling Inc. DRILLER: N. Short LABELLA REPRESENTATIVE: A. Brett	BORING LOCATION: <b>BWB-09 - See Figure</b> GROUND SURFACE ELEVATION: <b>543.0778</b> DATUM: <b>North American 1983</b> START DATE: <b>11/30/2017</b> END DATE: <b>12/1/2017</b>	TYPE OF DRILL RIG: <b>CME 75</b> AUGER SIZE AND TYPE: <b>Hollow-Stem</b> OVERBURDEN SAMPLING METHOD: <b>Macrocore</b>		



- GENERAL NOTES:
- 1) NOT TO SCALE
  - 2) DEPTHS ARE APPROXIMATE
  - 3) Bedrock encountered at 5'1" bgs. Auger was advanced to 6'6" bgs and steel casing set.



300 STATE STREET, ROCHESTER, NY

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**GROUNDWATER DEVELOPMENT FORM**

WELL I.D.   BWB-01  

Project Name:   Bullshead Plaza Phase II    
 Location:   835-855 West Main Street, Rochester, NY    
 Development By:   A. Brett    
 Weather:   40's, overcast  

Project No.:   2172414    
 Date:   11/30/2017  

**PURGE VOLUME CALCULATION**

Well Diameter:   2.0 -Inch   Static Water Level:   9.28 -Feet    
 Depth of Well:   15.62 -Feet   Single Well Volume:   1.03 -Gallons  

**PURGE & SAMPLING METHOD**

Bailer - Type:   Polyethylene, 1.5" diameter    Pump - Type:   NA    
 Sampling Device:   NA   Pump Rate:   NA  

**FIELD PARAMETER MEASUREMENTS**

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	Date	Comments
1600	0	-	-	-	-	11/30/2017	Color = Clear to gray-brown
1630	5	-	-	-	-	11/30/2017	LNAPL or DNAPL observed = No
1630	5	-	-	-	-	12/1/2017	Odor: NO
1700	9	-	-	-	-	12/1/2017	Sheen: NO

Total   9.00   Gallons Purged Purge Start Time:   1600 on 11/30/17   Purge End Time:   1700 on 12/1/17  

**OBSERVATIONS:**

Initially Clear, low turbidity. Turbidity increased as development continued, gray to gray brown in color. Well produced a good amount of water upfront but drew down with time.  
 Approximately 2.5 gallons of water lost after drilling when cooling the metal casing after cutting it down to surface level. (During well installation).

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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## GROUNDWATER DEVELOPMENT FORM

WELL I.D.

BWB-02

Project Name: Bullshead Plaza Phase II  
 Location: 835-855 West Main Street, Rochester, NY  
 Development By: A. Brett  
 Weather: 40's, overcast

Project No.: 2172414  
 Date: 11/30/2017

### PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch                      Static Water Level: 8.34 -Feet  
 Depth of Well: 16.40 -Feet                      Single Well Volume: 1.31 -Gallons

### PURGE & SAMPLING METHOD

Bailer - Type: Polyethylene, 1.5" diameter                       Pump - Type: NA  
 Sampling Device: NA                      Pump Rate: NA

### FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	Date	Comments
1645	0	-	-	-	-	11/30/2017	Color = Clear to gray-brown
1710	4	-	-	-	-	11/30/2017	LNAPL or DNAPL observed = No
1200	4	-	-	-	-	12/1/2017	Odor: NO
1215	7	-	-	-	-	12/1/2017	Sheen: NO
1600	7	-	-	-	-	12/1/2017	
1625	9	-	-	-	-	12/1/2017	

Total 9.00 Gallons Purged                      Purge Start Time: 1645 on 11/30/17                      Purge End Time: 1625 on 12/1/17

### OBSERVATIONS:

Initially Clear, low turbidity. Turbidity increased as development continued, gray to gray brown in color.  
 Drew down with time.  
 Approximately 2 gallons of water lost after drilling when cooling the metal casing after cutting it down to surface level. (During well installation).  
 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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## GROUNDWATER DEVELOPMENT FORM

WELL I.D.       BWB-03      

Project Name:       Bullshead Plaza Phase II       Project No.:       2172414        
 Location:       835-855 West Main Street, Rochester, NY        
 Development By:       A. Brett       Date:       12/1/2017        
 Weather:       40's, overcast      

### PURGE VOLUME CALCULATION

Well Diameter:       2.0 -Inch       Static Water Level:       8.29 -Feet        
 Depth of Well:       16.71 -Feet       Single Well Volume:       1.37 -Gallons      

### PURGE & SAMPLING METHOD

Bailer - Type:       Polyethylene, 1.5" diameter        Pump - Type:       NA        
 Sampling Device:       NA       Pump Rate:       NA      

### FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	Date	Comments
1500	0.0	-	-	-	-	12/1/2017	Color = Clear to gray-brown
1550	11.5	-	-	-	-	12/1/2017	LNAPL or DNAPL observed = No
							Odor: NO
							Sheen: NO

Total       11.50       Gallons Purged Purge Start Time:       1500 on 12/1/17       Purge End Time:       1550 on 12/1/17      

### OBSERVATIONS:

Initially Clear, low turbidity. Turbidity increased as development continued, gray to gray brown in color.  
 Produced a good amount of water for continued bailing.  
 Approximately 2 gallons of water lost to cool metal casing after cutting casing down, approximately 2.5 gallons lost when installing sandpack. (During well installation)

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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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## GROUNDWATER DEVELOPMENT FORM

WELL I.D.

BWB-04

Project Name: Bullshead Plaza Phase II  
 Location: 835-855 West Main Street, Rochester, NY  
 Development By: A. Brett  
 Weather: 40's, overcast

Project No.: 2172414  
 Date: 12/4/2017

### PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch      Static Water Level: 7.45 -Feet  
 Depth of Well: 15.45 -Feet      Single Well Volume: 1.30 -Gallons

### PURGE & SAMPLING METHOD

Bailer - Type: Polyethylene, 1.5" diameter       Pump - Type: NA  
 Sampling Device: NA      Pump Rate: NA

### FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	Date	Comments
1120	0.0	-	-	-	-	12/4/2017	Color = Clear to gray-brown
1220	10	-	-	-	-	12/4/2017	LNAPL or DNAPL observed = No
							Odor: NO
							Sheen: NO

Total 10.00 Gallons Purged      Purge Start Time: 1120 on 12/4/17      Purge End Time: 1220 on 12/4/17

### OBSERVATIONS:

Initially Clear, low turbidity. Turbidity increased as development continued, gray to gray brown in color.  
 Drew down with time but produced water for continued bailing.  
 Approximately 1 gallon of water lost to cool metal casing after cutting casing down, approximately 2.5 gallons lost when installing sandpack. (During well installation)

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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**GROUNDWATER DEVELOPMENT FORM**

WELL I.D.

BWB-05

Project Name: Bullshead Plaza Phase II

Project No.: 2172414

Location: 835-855 West Main Street, Rochester, NY

Development By: A. Brett

Date: 12/4/2017

Weather: 40's, overcast

**PURGE VOLUME CALCULATION**

Well Diameter: 2.0 -Inch

Static Water Level: 7.03 -Feet

Depth of Well: 17.00 -Feet

Single Well Volume: 1.63 -Gallons

**PURGE & SAMPLING METHOD**

Bailer - Type: Polyethylene, 1.5" diameter

Pump - Type: NA

Sampling Device: NA

Pump Rate: NA

**FIELD PARAMETER MEASUREMENTS**

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	Date	Comments
1320	0.0	-	-	-	-	12/4/2017	Color = Clear to gray-brown
1425	10	-	-	-	-	12/4/2017	LNAPL or DNAPL observed = No
							Odor: NO
							Sheen: NO

Total 10.00 Gallons Purged      Purge Start Time: 1120 on 12/4/17      Purge End Time: 1220 on 12/4/17

**OBSERVATIONS:**

Initially Clear, low turbidity. Turbidity increased as development continued, gray to gray brown in color.  
 Drew down with time but produced water for continued bailing.  
 Approximately 1 gallon of water lost to cool metal casing after cutting casing down (During well installation)

---

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





300 STATE STREET, ROCHESTER, NY

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## GROUNDWATER DEVELOPMENT FORM

WELL I.D.

BWB-06

Project Name: Bullshead Plaza Phase II  
 Location: 835-855 West Main Street, Rochester, NY  
 Development By: A. Brett  
 Weather: 50's, overcast

Project No.: 2172414  
 Date: 12/5/2017

### PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch      Static Water Level: 7.44 -Feet  
 Depth of Well: 21.35 -Feet      Single Well Volume: 2.27 -Gallons

### PURGE & SAMPLING METHOD

Bailer - Type: Polyethylene, 1.5" diameter       Pump - Type: NA  
 Sampling Device: NA      Pump Rate: NA

### FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	Date	Comments
1110	0.0	-	-	-	-	12/5/2017	Color = Clear to gray-brown
1125	8.0	-	-	-	-	12/5/2017	LNAPL or DNAPL observed = No
1330	8.0	-	-	-	-	12/5/2017	Odor: NO
1350	16.5	-	-	-	-	12/5/2017	Sheen: NO

Total 16.50 Gallons Purged      Purge Start Time: 1110 on 12/5/17      Purge End Time: 1350 on 12/5/17

### OBSERVATIONS:

Initially Clear, low turbidity. Turbidity during development gray to gray brown in color.  
 Produced a lot of water.  
 Approximately 5 gallons of water lost to get sand down during sandpacking of well (During well installation)  
 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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## GROUNDWATER DEVELOPMENT FORM

WELL I.D.

BWB-07

Project Name: Bullshead Plaza Phase II  
 Location: 835-855 West Main Street, Rochester, NY  
 Development By: A. Brett  
 Weather: 50's, overcast

Project No.: 2172414  
 Date: 12/5/2017

### PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch Static Water Level: 7.34 -Feet  
 Depth of Well: 17.16 -Feet Single Well Volume: 1.60 -Gallons

### PURGE & SAMPLING METHOD

Bailer - Type: Polyethylene, 1.5" diameter  Pump - Type: NA  
 Sampling Device: NA Pump Rate: NA

### FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	Date	Comments
1120	0.0	-	-	-	-	12/5/2017	Color = Clear to gray-brown
1125	2.5	-	-	-	-	12/5/2017	LNAPL or DNAPL observed = No
1130	2.5	-	-	-	-	12/5/2017	Odor: NO
1230	6.5	-	-	-	-	12/5/2017	Sheen: NO
1400	6.5	-	-	-	-	12/5/2017	
1410	8.5	-	-	-	-	12/5/2017	
1455	8.5	-	-	-	-	12/5/2017	
1508	10.5	-	-	-	-	12/5/2017	
1630	10.5	-	-	-	-	12/5/2017	
1640	12.0	-	-	-	-	12/5/2017	

Total 12.00 Gallons Purged Purge Start Time: 1120 on 12/5/17 Purge End Time: 1640 on 12/5/17

### OBSERVATIONS:

Initially Clear, low turbidity. Turbidity during development gray to gray brown in color.  
 Drew down quickly, moderate recovery rate.  
 Approximately 5 gallons of water lost to get sand down during sandpacking of well (During well installation)  
 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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GROUNDWATER DEVELOPMENT FORM

WELL I.D.

BWB-08

Project Name: Bullshead Plaza Phase II  
 Location: 835-855 West Main Street, Rochester, NY  
 Development By: A. Engelbert  
 Weather: 50's, overcast

Project No.: 2172414  
 Date: 12/5/2017

PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch Static Water Level: 6.05 -Feet  
 Depth of Well: 16.33 -Feet Single Well Volume: 1.68 -Gallons

PURGE & SAMPLING METHOD

Bailer - Type: Polyethylene, 1.5" diameter  Pump - Type: NA  
 Sampling Device: NA Pump Rate: NA

FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	Date	Comments
1105	0.0	-	-	-	-	12/5/2017	Color = Clear to gray-brown
1115	5	-	-	-	-	12/5/2017	LNAPL or DNAPL observed = No
1130	5	-	-	-	-	12/5/2017	Odor: NO
1145	12.00	-	-	-	-	12/5/2017	Sheen: NO

Total 12.00 Gallons Purged Purge Start Time: 1105 on 12/5/17 Purge End Time: 1145 on 12/5/17

OBSERVATIONS:

Initially Clear, low turbidity. Turbidity during development gray to gray brown in color.  
 Drew down with time but produced water for continued bailing.  
 Approximately 5 gallons of water lost to get sand down during sandpacking of well (During well installation)

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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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## GROUNDWATER DEVELOPMENT FORM

WELL I.D. BWB-09

Project Name: Bullshead Plaza Phase II  
 Location: 835-855 West Main Street, Rochester, NY  
 Development By: A. Brett  
 Weather: 40's, overcast

Project No.: 2172414  
 Date: 12/4/2017

### PURGE VOLUME CALCULATION

Well Diameter: 2.0 -Inch Static Water Level: 7.53 -Feet  
 Depth of Well: 16.86 -Feet Single Well Volume: 1.52 -Gallons

### PURGE & SAMPLING METHOD

Bailer - Type: Polyethylene, 1.5" diameter  Pump - Type: NA  
 Sampling Device: NA Pump Rate: NA

### FIELD PARAMETER MEASUREMENTS

Time	Gallons Purged	pH	Temp (oC)	Conductivity (mS/cm)	Turbidity (NTU)	Date	Comments
1600	0.0	-	-	-	-	12/4/2017	Color = Clear to gray-brown
1700	10	-	-	-	-	12/4/2017	LNAPL or DNAPL observed = No
							Odor: NO
							Sheen: NO

Total 10.00 Gallons Purged Purge Start Time: 1120 on 12/4/17 Purge End Time: 1220 on 12/4/17

### OBSERVATIONS:

Initially Clear, low turbidity. Turbidity increased as development continued, gray to gray brown in color.  
 Drew down with time but produced water for continued bailing.  
 Approximately 2 gallons of water lost to get sand down during sandpacking of well (During well installation)

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



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

Project Name: Bulls Head Plaza Phase II ESA  
Location: 835-855 West Main Street, Rochester, NY  
Project No.: 2172124  
Sampled By: AJ Engelbert  
Date: 12/6/17  
Weather: Overcast, 40° F

WELL I.D.: BWB-01

**WELL SAMPLING INFORMATION**

Well Diameter: 2" Static Water Level: 9.40'  
Depth of Well: 15.62' Length of Well Screen: 10'  
Measuring Point: Top of PVC Depth to Top of Pump: 12.0'  
Pump Type: Bladder Tubing Type: LDPE 1/4"

**FIELD PARAMETER MEASUREMENT**

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O <sub>2</sub> (mg/L)	Redox (mV)	Depth to Water	Comments
			+/- 0.1	+/-3%	+/- 3%	<50, +/- 10%	+ 10%	+/- 10 mV	+/-0.3'	
1625	100	0.0	6.48	13.5	1.74	20.5	2.68	172	9.45	
1630	100	0.1	6.81	14.2	1.72	13.4	2.33	168	9.55	
1635	100	0.2	6.63	14.4	1.69	12.15	2.18	164	9.60	
1640	100	0.3	5.73	14.8	1.70	8.54	2.07	162	9.64	
1645	100	0.4	5.68	14.7	1.70	5.67	1.81	161	9.63	
1650	100	0.5	5.60	14.7	1.70	5.48	1.82	160	9.63	
1655	100	0.6	5.64	14.8	1.70	5.51	1.84	159	9.63	

Total 0.6 Gallons Purged

Purge Time Start: 1625 Purge Time End: 1655 Final Static Water Level: 9.63'

**OBSERVATIONS**

Notes: Sampled for VOCs, Nitrate, Sulfate, Mn and Fe at 1655. pH appears to be malfunctioning.



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**WELL I.D.:** BWB-02

Project Name: Bulls Head Plaza Phase II ESA  
 Location: 835-855 West Main Street, Rochester, NY  
 Project No.: 2172124  
 Sampled By: AJ Engelbert  
 Date: 12/6/17  
 Weather: Overcast, 35 °F

**WELL SAMPLING INFORMATION**

Well Diameter: 2" Static Water Level: 8.55'  
 Depth of Well: 16.4' Length of Well Screen: 10.0'  
 Measuring Point: Top of PVC Depth to Top of Pump: 13.0'  
 Pump Type: Bladder Tubing Type: LDPE 1/4"

**FIELD PARAMETER MEASUREMENT**

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O <sub>2</sub> (mg/L)	Redox (mV)	Depth to Water	Comments
			+/- 0.1	+/-3%	+/- 3%	<50, +/- 10%	+ 10%	+/- 10 mV	+/-0.3'	
1310	100	0.0	8.46	13.1	6.01	61.1	6.24	192	8.69	
1315	100	0.1	8.54	13.7	5.96	93.2	5.96	176	8.86	
1320	100	0.2	8.62	14.2	6.18	85.7	5.96	179	8.88	
1325	100	0.3	8.56	14.1	6.30	78.4	5.35	183	8.88	
1330	100	0.4	8.56	14.2	6.54	65.4	5.02	201	8.84	
1335	100	0.5	8.48	14.4	6.76	52.9	4.68	202	8.88	
1340	100	0.6	8.05	14.3	6.97	48.6	4.44	200	8.82	
1345	100	0.7	8.24	14.2	7.29	39.2	3.66	203	8.88	
1350	100	0.8	8.15	14.4	7.38	30.0	3.44	203	8.84	
1355	100	0.9	8.77	14.3	7.55	27.2	3.30	203	8.93	
1400	100	1.0	8.21	14.3	7.64	28.2	3.99	203	8.90	
1405	100	1.1	8.50	14.2	7.77	29.7	4.20	204	8.81	
1410	100	1.2	8.31	14.1	7.85	28.2	4.15	204	8.82	
1415	100	1.3	8.30	14.1	7.91	28.7	4.07	204	8.84	
1420	100	1.4	8.28	14.2	7.93	26.4	4.18	205	8.82	

Total 1.4 Gallons Purged

Purge Time Start: 1310 Purge Time End: 1420 Final Static Water Level: 8.82'

**OBSERVATIONS**

Notes: Sampled at 1420 for Full Suite. MS/MSD and Duplicate collected.





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Project Name: Bulls Head Plaza Phase II ESA  
 Location: 835-855 West Main Street, Rochester, NY  
 Project No.: 2172124  
 Sampled By: AJ Engelbert  
 Date: 12/4/17  
 Weather: Overcast, 45 °F

WELL I.D.: BWB-03

**WELL SAMPLING INFORMATION**

Well Diameter: 2" Static Water Level: 9.35'  
 Depth of Well: 16.81' Length of Well Screen: 10.0'  
 Measuring Point: Top of PVC Depth to Top of Pump: 15.0'  
 Pump Type: Bladder Tubing Type: LDPE 1/4"

**FIELD PARAMETER MEASUREMENT**

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O <sub>2</sub> (mg/L)	Redox (mV)	Depth to Water	Comments
			+/- 0.1	+/-3%	+/- 3%	<50, +/- 10%	+ 10%	+/- 10 mV	+/-0.3'	
1140	200	0.0	7.23	14.9	12.16	151	5.88	208	9.50	
1145	200	0.25	7.24	15.2	12.22	86.0	6.99	33	9.55	
1150	200	0.50	7.82	15.5	12.53	75.2	8.05	113	9.65	
1155	200	0.75	7.29	15.5	12.55	54.1	7.05	143	9.68	
1200	200	1.00	7.10	15.5	12.55	45.8	7.03	155	9.69	
1205	200	1.25	7.10	15.6	12.56	42.7	7.24	164	9.65	
1210	200	1.50	7.10	15.6	12.52	28.4	7.20	172	9.68	
1215	200	2.0	7.09	15.6	12.55	26.4	7.29	171	9.68	
1220	200	2.5	7.09	15.6	12.54	22.4	7.08	180	9.68	
1225	200	3.0	7.08	15.6	12.55	17.5	7.05	183	9.67	
1230	200	3.25	7.08	15.5	12.50	16.5	4.50	185	9.67	-bubbles built-up in D.O. Sensor,
1235	200	3.75	7.07	15.6	12.49	13.7	5.02	185	9.67	after clearing, D.O. dropped
1240	200	4.0	7.06	15.5	12.50	12.10	5.14	185	9.67	
1245	200	4.25	7.07	15.5	12.51	12.0	5.20	165	9.67	-Sampled

Total 4.25 Gallons Purged

Purge Time Start: 1140 Purge Time End: 1245 Final Static Water Level: 9.67'

**OBSERVATIONS**

Notes: Sampled for VOC at 1245.



300 State Street  
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Project Name: Bulls Head Plaza Phase II ESA  
 Location: 835-855 West Main Street, Rochester, NY  
 Project No.: 2172124  
 Sampled By: AJ Engelbert  
 Date: 12/4/17  
 Weather: Overcast, 45-50 °F

WELL I.D.: BWB-04

**WELL SAMPLING INFORMATION**

Well Diameter: 2" Static Water Level: 8.02'  
 Depth of Well: 15.44' Length of Well Screen: 10.0'  
 Measuring Point: Top of PVC Depth to Top of Pump: 14.0'  
 Pump Type: Bladder Tubing Type: LDPE 1/4"

**FIELD PARAMETER MEASUREMENT**

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O <sub>2</sub> (mg/L)	Redox (mV)	Depth to Water	Comments
			+/- 0.1	+/-3%	+/- 3%	<50, +/- 10%	+ 10%	+/- 10 mV	+/-0.3'	
1330	200	0	7.98	15.9	7.35	OVER	4.29	183	8.02	
1335	200	0.1	8.10	16.2	7.20	OVER	3.52	176	8.35	
1340	200	0.25	8.40	16.2	6.98	OVER	4.89	169	8.62	
1345	200	0.50	8.52	16.3	6.92	OVER	6.45	165	8.69	
1350	200	1.0	8.49	16.4	6.92	211	7.46	164	8.75	
1355	200	1.75	8.43	16.4	6.91	116	7.53	164	8.91	
1400	200	2.0	8.36	16.4	6.90	129	6.46	165	8.85	
1405	200	2.25	8.25	16.4	6.93	107.3	7.23	167	8.87	
1410	200	2.50	8.13	16.5	6.92	99.1	7.57	171	8.89	
1415	200	2.50	8.10	16.5	6.91	94.1	3.46	171	8.90	- bubbles built up on D.O. sensor.
1420	200	3.0	8.03	16.6	6.92	82.0	4.50	171	8.95	D.O. sensor cleared and reset
1425	200	3.0	7.97	16.4	6.96	60.0	4.46	171	9.02	
1430	200	3.5	7.92	16.5	6.95	55.7	4.79	172	9.06	
1435	200	4.0	7.87	16.5	6.97	51.4	4.40	173	9.10	
1440	200	4.25	7.86	16.5	6.93	40.4	4.69	174	9.11	
1445	200	4.5	7.84	16.4	6.97	36.5	4.40	174	9.11	
1450	200	4.75	7.79	16.5	6.96	35.9	4.64	174	9.14	- Sampled

Total 4.75 Gallons Purged

Purge Time Start: 1330 Purge Time End: 1450 Final Static Water Level: 9.14'

**OBSERVATIONS**

Notes: Sampled at 1450 for VOCs.



300 State Street  
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Project Name: Bulls Head Plaza Phase II ESA  
 Location: 835-855 West Main Street, Rochester, NY  
 Project No.: 2172124  
 Sampled By: AJ Engelbert  
 Date: 12/4/17  
 Weather: Overcast, 40° F

WELL I.D.: BWB-05

**WELL SAMPLING INFORMATION**

Well Diameter: 2" Static Water Level: 8.10'  
 Depth of Well: 17.10' Length of Well Screen: 10.0'  
 Measuring Point: Top of PVC Depth to Top of Pump: 15.0'  
 Pump Type: Bladder Tubing Type: LDPE 1/4"

**FIELD PARAMETER MEASUREMENT**

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O <sub>2</sub> (mg/L)	Redox (mV)	Depth to Water	Comments
			+/- 0.1	+/-3%	+/- 3%	<50, +/- 10%	+ 10%	+/- 10 mV	+/-0.3'	
1555	200	0.0	7.2	15.4	12.49	OVER	5.27	213	8.16	
1600	200	0.25	7.18	15.6	12.49	OVER	4.97	214	8.30	
1605	200	0.50	7.18	15.6	12.26	OVER	4.91	215	8.33	
1610	200	0.75	7.20	15.6	11.96	OVER	4.61	216	8.38	
1615	200	1.25	7.20	15.6	11.91	OVER	4.68	216	8.42	
1620	200	1.5	7.19	15.5	11.96	120	4.70	217	8.42	
1625	200	1.75	7.18	15.6	11.99	73	4.56	217	8.42	
1630	200	2.25	7.17	15.6	12.04	72	4.66	218	8.44	
1635	200	2.75	7.15	15.6	12.12	119	4.67	219	8.43	
1640	200	2.75	7.14	15.6	12.18	94.9	4.56	220	8.43	
1645	200	3.0	7.16	15.5	12.27	77.2	4.59	221	8.43	
1650	200	3.25	7.12	15.6	12.26	57.7	4.60	222	8.43	
1655	200	3.75	7.12	15.6	12.26	53.8	4.74	224	8.43	
1700	200	4.00	7.10	15.6	12.17	50.1	4.66	225	8.43	
1705	200	4.50	7.10	15.6	12.17	48.4	4.77	226	8.43	

Total 4.25 Gallons Purged

Purge Time Start: 1555 Purge Time End: 1705 Final Static Water Level: 8.43'

**OBSERVATIONS**

Notes: Sampled at 1705 for VOCs





300 State Street  
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Project Name: Bulls Head Plaza Phase II ESA  
 Location: 835-855 West Main Street, Rochester, NY  
 Project No.: 2172124  
 Sampled By: AJ Engelbert  
 Date: 12/5/17  
 Weather: Overcast, 50° F

WELL I.D.: BWB-06

**WELL SAMPLING INFORMATION**

Well Diameter: 2" Static Water Level: 7.65'  
 Depth of Well: 21.35' Length of Well Screen: 10.0'  
 Measuring Point: Top of PVC Depth to Top of Pump: 16.0'  
 Pump Type: Bladder Tubing Type: LDPE 1/4"

**FIELD PARAMETER MEASUREMENT**

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O <sub>2</sub> (mg/L)	Redox (mV)	Depth to Water	Comments
			+/- 0.1	+/-3%	+/- 3%	<50, +/- 10%	+ 10%	+/- 10 mV	+/-0.3'	
1405	100	0.0	8.16	14.2	1.36	72.1	3.47	125	7.74	
1410	100	0.1	8.16	14.6	1.35	96.4	2.38	127	7.82	
1415	100	0.25	8.15	14.7	1.36	53.6	1.98	126	7.84	
1420	100	0.40	8.17	14.7	1.36	41.8	1.86	126	7.81	
1425	100	0.50	8.21	14.7	1.36	31.6	1.82	125	7.85	
1430	100	0.65	8.26	14.8	1.34	24.4	1.97	125	7.82	
1435	100	0.75	8.31	14.8	1.31	18.3	1.87	125	7.79	
1440	100	0.85	8.33	14.8	1.31	12.8	1.97	124	7.85	
1445	100	1.0	8.36	14.8	1.30	12.10	1.90	124	7.75	
1450	100	1.0	8.37	14.8	1.31	10.22	1.95	123	7.85	

Total 1.1 Gallons Purged

Purge Time Start: 1405 Purge Time End: 1450 Final Static Water Level: 7.85'

**OBSERVATIONS**

Notes: Sampled on 12/5/17 at 1450 for VOCs  
 Sample on 12/6/17 at 0900 for Mn, Sulfate, Fe, and Nitrate. 0.25-gallons purged prior to sampling on 12/6/17.



300 State Street  
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 Telephone: (585) 454-6110  
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WELL I.D.: BWB-07

Project Name: Bulls Head Plaza Phase II ESA  
 Location: 835-855 West Main Street, Rochester, NY  
 Project No.: 2172124  
 Sampled By: AJ Engelbert  
 Date: 12/6/17  
 Weather: Overcast, 40° F

**WELL SAMPLING INFORMATION**

Well Diameter: 2" Static Water Level: 7.61'  
 Depth of Well: 17.16' Length of Well Screen: 10.0'  
 Measuring Point: Top of PVC Depth to Top of Pump: 14.0'  
 Pump Type: Bladder Tubing Type: LDPE 1/4"

**FIELD PARAMETER MEASUREMENT**

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O <sub>2</sub> (mg/L)	Redox (mV)	Depth to Water	Comments
			+/- 0.1	+/-3%	+/- 3%	<50, +/- 10%	+ 10%	+/- 10 mV	+/-0.3'	
1005	100	0.0	7.38	13.7	3.49	72.8	5.78	205	7.61	
1010	100	0.1	7.48	13.9	3.69	67.7	5.46	200	7.88	
1015	100	0.2	7.53	14.1	3.65	89.4	5.20	197	8.19	
1020	100	0.3	7.55	14.3	3.61	99.1	5.24	197	8.36	
1025	100	0.4	7.58	13.8	3.53	125	5.41	196	8.51	
1030	100	0.5	7.58	14.2	3.49	142	5.24	196	8.70	
1035	100	0.6	7.58	14.2	3.47	125	5.05	195	8.86	
1040	100	0.7	7.57	14.2	3.48	113	4.69	195	8.91	
1045	100	0.8	7.57	14.2	3.49	100.1	4.68	194	9.02	
1050	100	0.9	7.57	14.3	3.49	97.0	4.77	194	9.11	
1055	100	1.0	7.56	14.2	3.50	77.9	4.88	194	9.22	
1100	100	1.10	7.55	14.2	3.53	72.6	4.96	193	9.42	
1105	100	1.20	7.54	14.3	3.53	62.7	4.93	192	9.48	
1110	100	1.30	7.53	14.2	3.57	59.9	4.88	193	9.62	
1115	100	1.40	7.52	14.2	3.60	46.4	4.85	193	9.64	

Total 1.40 Gallons Purged

Purge Time Start: 1005 Purge Time End: 1115 Final Static Water Level: 9.64'

**OBSERVATIONS**

Notes: Sampled at 1115 for full suite.



300 State Street  
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Project Name: Bulls Head Plaza Phase II ESA  
 Location: 835-855 West Main Street, Rochester, NY  
 Project No.: 2172124  
 Sampled By: AJ Engelbert  
 Date: 12/5/17  
 Weather: Overcast, 50° F

WELL I.D.: BWB-08

**WELL SAMPLING INFORMATION**

Well Diameter: 2" Static Water Level: 7.42'  
 Depth of Well: 16.33' Length of Well Screen: 10.0'  
 Measuring Point: Top of PVC Depth to Top of Pump: 13.0'  
 Pump Type: Bladder Tubing Type: LDPE 1/4"

**FIELD PARAMETER MEASUREMENT**

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O <sub>2</sub> (mg/L)	Redox (mV)	Depth to Water	Comments
			+/- 0.1	+/-3%	+/- 3%	<50, +/- 10%	+ 10%	+/- 10 mV	+/-0.3'	
1225	200	0.0	7.85	14.4	1.67	85.5	2.94	145	7.42	
1230	200	0.25	7.74	14.7	1.59	59.1	3.08	142	7.59	
1235	200	0.35	7.63	14.6	1.69	107.0	3.09	141	7.62	
1240	100	0.45	7.57	14.5	1.75	75.8	2.90	143	7.45	
1245	100	0.50	7.53	14.5	1.78	75.6	3.02	143	7.45	
1250	100	0.55	7.50	14.5	1.81	60.2	3.00	143	7.45	
1255	100	0.65	7.49	14.5	1.82	47.1	2.97	142	7.45	
1300	100	0.80	7.45	14.5	1.86	31.5	3.13	141	7.45	
1305	100	1.0	7.44	14.6	1.86	26.9	3.04	140	7.47	
1310	100	1.5	7.42	14.5	1.87	21.8	2.96	139	7.47	
1315	100	1.75	7.42	14.5	1.87	18.5	2.89	138	7.47	
1320	100	2.0	7.41	14.5	1.88	11.8	2.96	138	7.48	
1325	100	2.25	7.41	14.5	1.88	10.81	2.91	137	7.48	
1330	100	2.50	7.41	14.5	1.87	10.32	2.87	136	7.48	

Total 2.5 Gallons Purged

Purge Time Start: 1225 Purge Time End: 1330 Final Static Water Level: 7.48'

**OBSERVATIONS**

Notes: Sampled at 1330 for VOCs





300 State Street  
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**WELL I.D.:** BWB-09

Project Name: Bulls Head Plaza Phase II ESA  
 Location: 835-855 West Main Street, Rochester, NY  
 Project No.: 2172124  
 Sampled By: AJ Engelbert  
 Date: 12/5/17  
 Weather: Rain, 47 °F

**WELL SAMPLING INFORMATION**

Well Diameter: 2" Static Water Level: 7.60'  
 Depth of Well: 16.85' Length of Well Screen: 10.0'  
 Measuring Point: Top of PVC Depth to Top of Pump: 15.0'  
 Pump Type: Bladder Tubing Type: LDPE 1/4"

**FIELD PARAMETER MEASUREMENT**

Time	Pump Rate	Gallons Purged	pH	Temp °C	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved O <sub>2</sub> (mg/L)	Redox (mV)	Depth to Water	Comments
			+/- 0.1	+/-3%	+/- 3%	<50, +/- 10%	+ 10%	+/- 10 mV	+/-0.3'	
0815	200	0.0	7.37	14.2	10.65	OVER	7.36	242	7.43	
0820	200	0.25	7.36	14.9	10.71	OVER	6.04	228	8.33	
0825	200	0.50	7.31	15.0	10.7	OVER	5.95	210	8.52	
0830	200	0.75	7.26	15.1	10.69	OVER	5.88	199	8.75	
0835	200	1.0	7.21	15.1	10.68	OVER	5.65	193	8.80	
0840						OVER			8.98	-YSI water quality meter stopped working.
0940	200	1.1	6.95	15.5	10.57	OVER	6.16	197	8.29	Went to ECO for new sensor.
0945	200	1.5	6.97	15.6	10.56	OVER	6.32	197	8.60	
0950	200	2.0	6.95	15.5	10.60	153	6.01	196	8.95	
0955	200	2.5	6.95	15.5	10.55	144	6.16	196	8.96	
1000	200	3.7	6.89	15.5	10.54	130	5.97	195	9.02	
1005	200	4.0	6.87	15.5	10.52	123	5.61	194	9.10	
1010	200	4.5	6.85	15.6	10.50	135	5.72	193	9.12	

Total 4.5 Gallons Purged

Purge Time Start: 0815 Purge Time End: 1010 Final Static Water Level: 9.12'

**OBSERVATIONS**

Notes: Sampled at 1010 for VOCs



# APPENDIX 2

Foundation Design, P.C. Report



# Foundation Design, P.C.

SOIL • BEDROCK • GROUNDWATER

January 24, 2018

LaBella Associates, D.P.C.  
300 State Street, Suite 201  
Rochester, New York 1614

Attention: Jennifer Gillens, M.S.

Reference: Bullshead Plaza Re-development  
835-855 West Main Street, Rochester, New York  
DRAFT Pre-Development Assessment, 4362.0

Dear Ms. Gillens:

This report outlines our *Pre-Development Assessment* for the Bullshead Plaza Re-development. We understand that the City of Rochester is in the process of acquiring the referenced parcels with the intent of having a private developer re-develop the land. The potential new construction could vary from wood or steel-framed residential housing (under 40 feet in height); steel-framed, office/commercial uses (under 40 feet in height); or a multi-level high rise mixed-use structure (5 to 6 stories in height). We base this evaluation on our review of U.S.G.S. topographic mapping; EDR/Sanborn Fire Insurance mapping you provided; new test pit, soil probe and test boring exploration; and consultation with the design team. We intend this report for use exclusively in assessing the geotechnical cost impacts associated with developing the parcel and to aid in the conceptual layout of new building(s) on the parcel. We intend this report to be used in conjunction with your *Phase 2 Environmental Site Assessment*.

The subject parcel is located between 835 and 855 West Main Street in Rochester, New York. The parcel lies on the southwest corner of West Main and Genesee Streets. A Rite Aid Pharmacy lies to the north, opposite West Main Street. Rochester Regional Health System - St. Mary's Medical Complex lies to the west, across Genesee Street. Clifton Street forms the southern property line, with residential housing lining the opposite side of the street. A *General Location Plan*, on U.S.G.S.



LaBella Associates, D.P.C.  
January 24, 2018  
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topographic mapping, is enclosed. The existing plaza covers the site. The main building lines Genesee Street with a paved parking lot located on the east side of the structure. Surface grades are relatively flat across the property.

The site lies in an old portion of the City of Rochester. EDR/Sanborn Fire Insurance mapping and City of Rochester Plat mapping indicates that two orphanages previously occupied the site (see the enclosed 1912 EDR/Sanborn Fire Insurance map). St. Mary's Boys Orphanage and Asylum was located along West Main Street; St. Patrick's Girls Orphanage and Asylum lined Clifton Street. Several support buildings were constructed prior to the closing of the two Orphanages. Other structures may have occupied the site prior/after this date.

To define/assess subsurface conditions, LaBella Associates, D.P.C. performed a series of test pits, soil probes, and soil borings. Our staff observed test pits TP17-1 through TP17-7, excavated on October 31, 2017. LaBella Associates provided a rubber track CAT303.5E mini excavator for the test pit work within the parking lot on the eastern side of the parcel. The test pit depths ranged from 3.5 feet to 5.7 feet below grade.

LaBella Associates, D.P.C. performed soil probes SB-1 through SB-27 between November 6 and November 13, 2017. They provided a Geoprobe 6620 for the soil probe work, recovering soil samples using a macro-core sampler. Their staff logged the subsurface profiles encountered. The soil probes ranged from 2.5 feet to 7.4 feet below grade.

Nothnagle Drilling, Inc. provided a truck-mounted drill rig for the observation well installations at BWB-01 through BWB-09 between November 27 and November 30, 2017. The borings were advanced to the bedrock surface using hollow stem auger casings. SPT soil samples were recovered continuously to the bedrock surface at all locations except BWB-06 and BWB-08. LaBella Associates, D.P.C. logged the soil profile at the boring locations and oversaw the well installations; our staff

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observed and logged the 10 feet of rock core recovered at borings BWB-01 and BWB-05. The borings ranged from 16.0 to 17.5 feet deep. LaBella Associates, D.P.C. provided the field positions and surface elevations of the test locations. *A Boring and Test Pit Location Plan, Soil Probe Location Plan,* and copies of the boring, test pit, and soil probe logs are attached.

The following interpretations of the soil, bedrock, and groundwater conditions are based on widely spaced test pit, soil probe and test boring data, 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 exploration logs for soil/rock descriptions at the test locations. Call us if such variations are found so we may evaluate the impact on our conceptual findings.

A typical soil profile consisting of topsoil or asphalt over re-worked, mixed earth fills with rubble and organic laden fill, organic silt and/or lake deposits, glacial till then bedrock. The asphalt thicknesses ranged from 1¾ inches to 9 inches, with multiple layers noted at several locations. The asphalt was underlain by 'processed' shale subbase, crusher-run stone, or a sand and gravel product. The depth of the subbase as measured at the test locations, ranged from 0.9 feet to 2.1 feet below grade. No subbase material was observed below the asphalt at boring BWB-03. Six inches of concrete underlain by 1.5 feet of sand and gravel was observed at boring BWB-07.

The fill material consists of silt, sand, and gravel with varying amounts of organics, wood, brick, and other deleterious material. Possible concrete floor slabs were encountered in a few of the test pits located on the east side of the parcel. Although we did not observe old footings within the test pits, we suspect that old building foundations likely were left in-place. The fills ranged from 2.0 feet to over 7.0 feet deep at the test locations. We suspect that the depth of fill and debris runs deeper within the old building footprints that once occupied the site. (See the enclosed 1912 EDR/Sanborn map).

LaBella Associates, D.P.C.  
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The underlying natural soil is lake deposits consisting of loose to compact silt and sand with varying amounts of clay and gravel. Samples were visually classified as sandy silt (ML) or silty sand (SM) in the Unified Soil Classification System and were typically moist. A thin veneer of dense to very dense glacial till consisting of sandy silt with gravel was encountered over the bedrock. Cobbles and boulders are likely within the till matrix.

Bedrock was encountered in four of the seven test pits. The drillers encountered auger refusal in all eight borings. Broken rock was noted on the top of the bedrock surface at the test pits. The drillers recovered 97 or 100 percent of the rock cored. The RQD measurements (a measurement of the rock quality) range from 37 to 68 percent. Geologic mapping indicates that bedrock is the Lockport Group of formations. These formations consist of hard dolomite. While the percent recovered is typical of this formation, the RQD measurements are low, indicating a poor quality, more fractured/jointed rock in this area.

The drillers noted groundwater conditions as free water flowing into the test hole, wet/saturated soil samples, and water that accumulates in the boring after pulling the augers. Free water was not noted during the drilling operations. We believe that water tends to perch in porous pockets within the fill, on the less permeable glacial till, or in/on the bedrock surface. Groundwater levels should be expected to vary with seasonal and climatic changes.

Groundwater observation wells were installed by LaBella Associates, D.P.C. at borings BWB-01 through BWB-09. The measured the water levels on December 19, 2017 at the elevations shown in *Table No. 1* below.



<b>TABLE NO. 1 - GROUNDWATER ELEVATIONS</b>		
<b>WELL NUMBER</b>	<b>GROUND SURFACE ELEVATION</b>	<b>GROUNDWATER ELEVATION</b>
BWB-01	542.61	532.87
BWB-02	542.98	534.15
BWB-03	543.32	534.45
BWB-04	542.49	535.36
BWB-05	543.12	535.67
BWB-06	542.13	534.46
BWB-07	542.81	535.07
BWB-08	542.78	535.18
BWB-09	543.08	534.96

Based on these findings, we draw the following general conclusions:

- It is our opinion that the in-place rubble laden fill is not suitable to support foundations or floors. Over time, the organics will continue to decompose slowly and consolidate under the new structural loading. Fines will also migrate into the voids within the fills consequently causing sink holes. We do not have a good means of estimating the amount of settlement that will develop. If foundations were constructed over the fill, it is our opinion that unacceptable cracking in the exterior of the structure and differential settlement within the framing could result. If floors are constructed over the fill, we expect that the settlement would result in an uneven slab, cracking of interior walls, doors that stick upon opening, and excessive floor cracking.

For conceptual planning, foundations will require removing the in-place fill down to the native soil. Foundation bearing grades can be dropped to the native soil or the excavation brought back to 'normal' bearing elevations using structurally compacted fill material or lean concrete. For floor support, either utilize a structural floor slab to span over the in-place fill or remove and replace the fill under the slabs in a similar manner as the foundations.

- Limited quantities of 'clean', on-site material may be available for use as structural fill and the site will likely require use of imported granular fill. For budgeting purposes, plan to backfill excavations with an imported granular material, similar in gradation to N.Y.S.D.O.T. Item 203.07. A 'clean' approved earth fill could be considered on a case by case basis.

LaBella Associates, D.P.C.  
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- It is our opinion that wood or steel-framed residential housing (under 40 feet in height); steel-framed, office/commercial uses (under 40 feet in height); and multi-level high rise mixed-use structure (5 to 6 stories in height) can likely be supported on traditional spread footing foundations. Allowable bearing pressures/and depths will be a function of design loads and soil/rock profiles at the proposed building location.
- New York State Building Code contains provisions for seismic design. We identify the site as having a seismic site classification of A (Hard Rock profile). The spectral acceleration rates below are generated using the 2015 IBC Code. If/when the project progresses into design, these values should be assessed to see whether Code revisions have been made and these values need to be adjusted.

<b>Table No. 2 – Seismic Design Parameters</b>					
<b>Spectral Response Acceleration</b>		<b>Soil Factors</b>		<b>Design Spectral Response Acceleration</b>	
<b>S<sub>s</sub></b>	<b>S<sub>1</sub></b>	<b>S<sub>MS</sub></b>	<b>S<sub>M1</sub></b>	<b>SD<sub>s</sub></b>	<b>SD<sub>1</sub></b>
0.164g	0.060g	0.132g	0.0.48g	0.088g	0.032g

- The pavement subgrade(s) will be in-place fill material or native soils. Where asphalt pavements are placed over the in-place fill expect less time before cracking, waviness, 'bird-baths', and potholes start to form and maintenance is required. Due to the costs of removing and replacing this material, we recommend that developers/future owners accept this. The existing pavements were constructed over the in-place fill and we expect similar long-term settlement and pavement performance as this asphalt surface. For estimating purposes, we suggest budgeting for a thicker than 'normal' pavement.
- New underground utilities and light poles bases will likely be required. Bedrock was encountered within ten feet of the ground surface. Excavations will likely require mechanical fracturing (i.e. hoe-ramming) to penetrate into the bedrock (where encountered).
- Groundwater was measured within the observation wells. Refer to Table No. 1 for groundwater elevations. Additional well readings should be taken to document seasonal fluctuations in the groundwater table.
- Basement are not advised. Conflicts with the bedrock surface and groundwater table could make installing basement cost prohibitive.

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January 24, 2018  
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- We reiterate that this report is intended to compile existing subsurface data and provide potential developers an idea of what to expect for subsurface conditions on this parcel. As they progress their project design, it is our expectation that the potential developer will retain a geotechnical engineer as part of their design team to finalize design recommendations. Their geotechnical engineer will need to assess the existing information, determine what additional exploration, testing, and engineering analysis is required to finalize their project design.

Attached 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 *Pre-Development Assessment*. Call if you have questions regarding our interpretations of the soil, bedrock, and groundwater conditions as you develop concepts to develop this parcel. We look forward to hearing from you again as potential developers assess options for development of this parcel.

Very truly yours,

**FOUNDATION DESIGN, P.C.**

Elizabeth A. Ashley, P.G.  
Project Engineer  
Enc.

Jeffrey D. Netzband, P.E.  
Vice President



# 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.

## Geotechnical 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 civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you 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 the Full Report

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

## Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- 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. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

## Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by:* the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

## Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

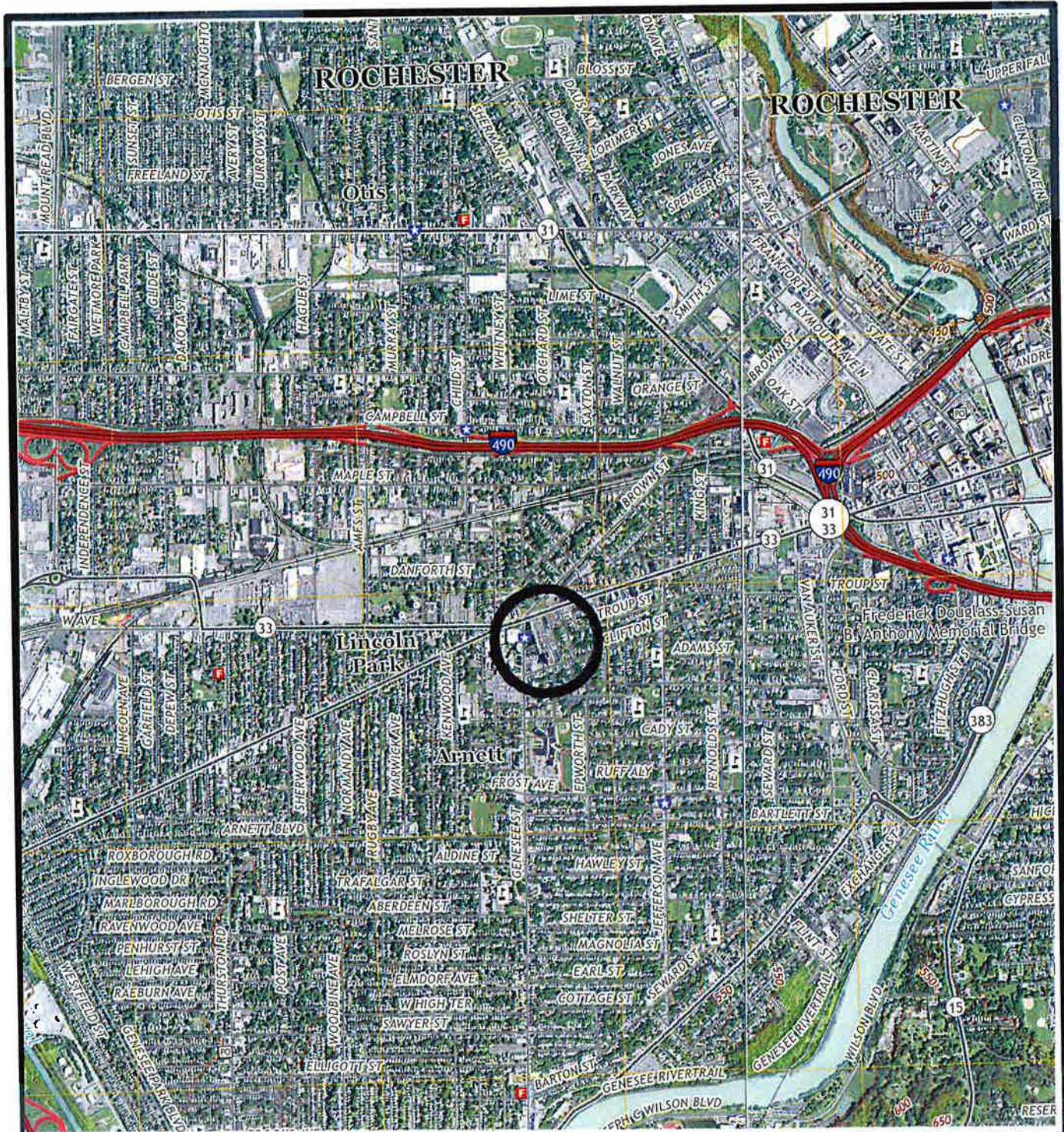
## A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

## A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly





**835-855 West Main Street**

Rochester, New York

**General Location Plan**

Adapted from: U.S.G.S. topographic mapping  
*Rochester-East and Rochester-West* quadrangles



**Foundation  
 Design, P.C.**

46A Sager Drive  
 Rochester, New York 14607  
 Phone (585) 458-0824  
 FAX (585) 458-3323

CHECKED BY: JDN

DRAWN BY:

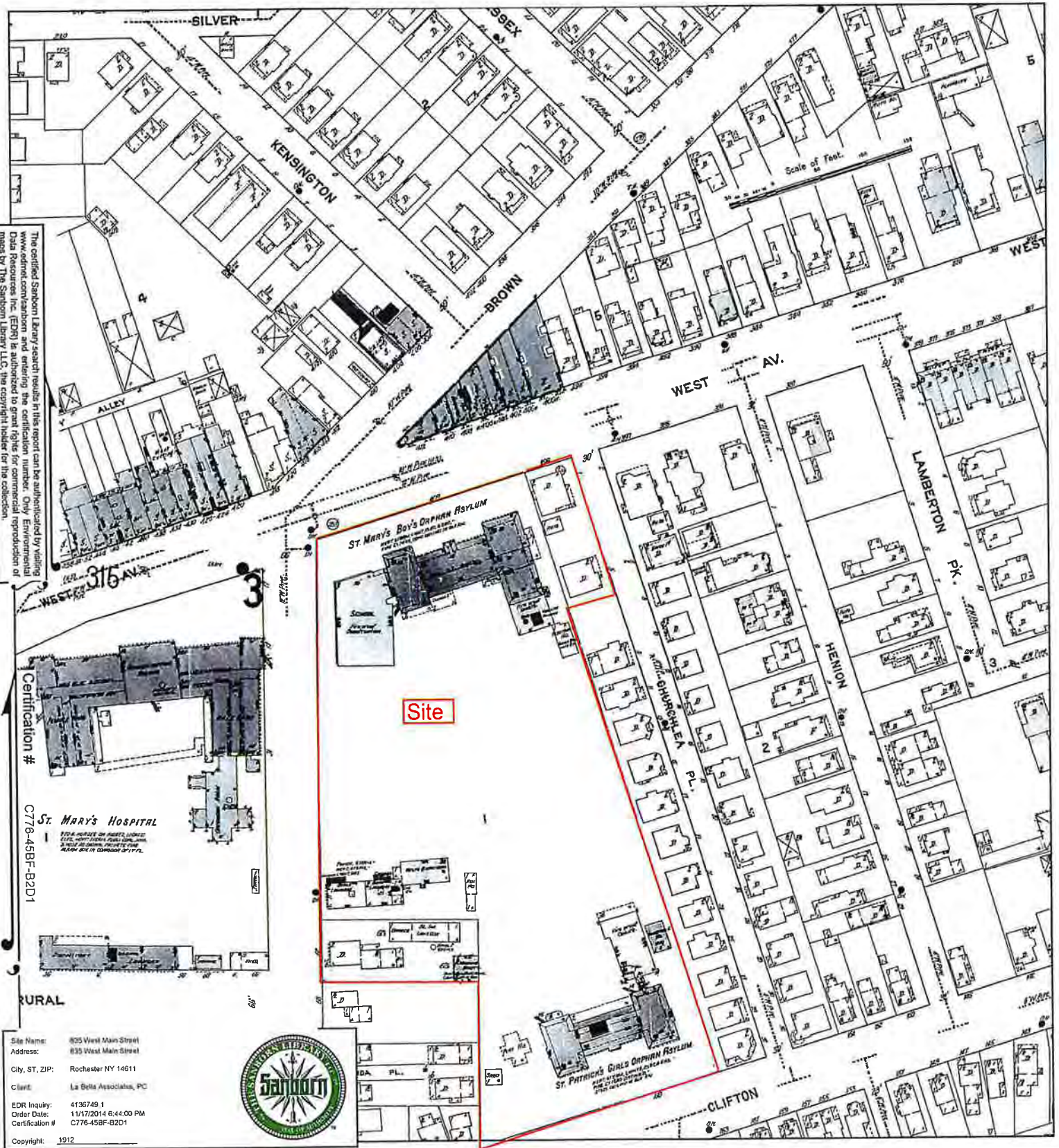
Scale 1"= 2,000'

DATE: 01.24.2018

JOB NO.: 4379.0



# 1912 Certified Sanborn Map



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**Certification #**  
C776-45BF-B2D1

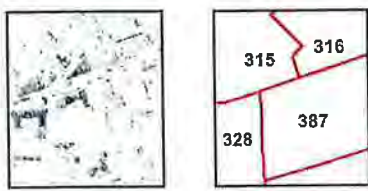
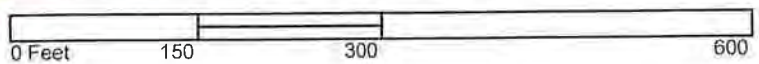
**ST. MARY'S HOSPITAL**  
THIS DRAWING OR PARTS THEREOF  
 SHALL BE VALID ONLY FOR THE DATE AND  
 AREA AS INDICATED THEREON.

**RURAL**

Site Name: 805 West Main Street  
 Address: 835 West Main Street  
 City, ST, ZIP: Rochester NY 14611  
 Client: La Beta Association, PC  
 EDR Inquiry: 4136749 1  
 Order Date: 11/17/2014 6:44:00 PM  
 Certification #: C776-45BF-B2D1  
 Copyright: 1912



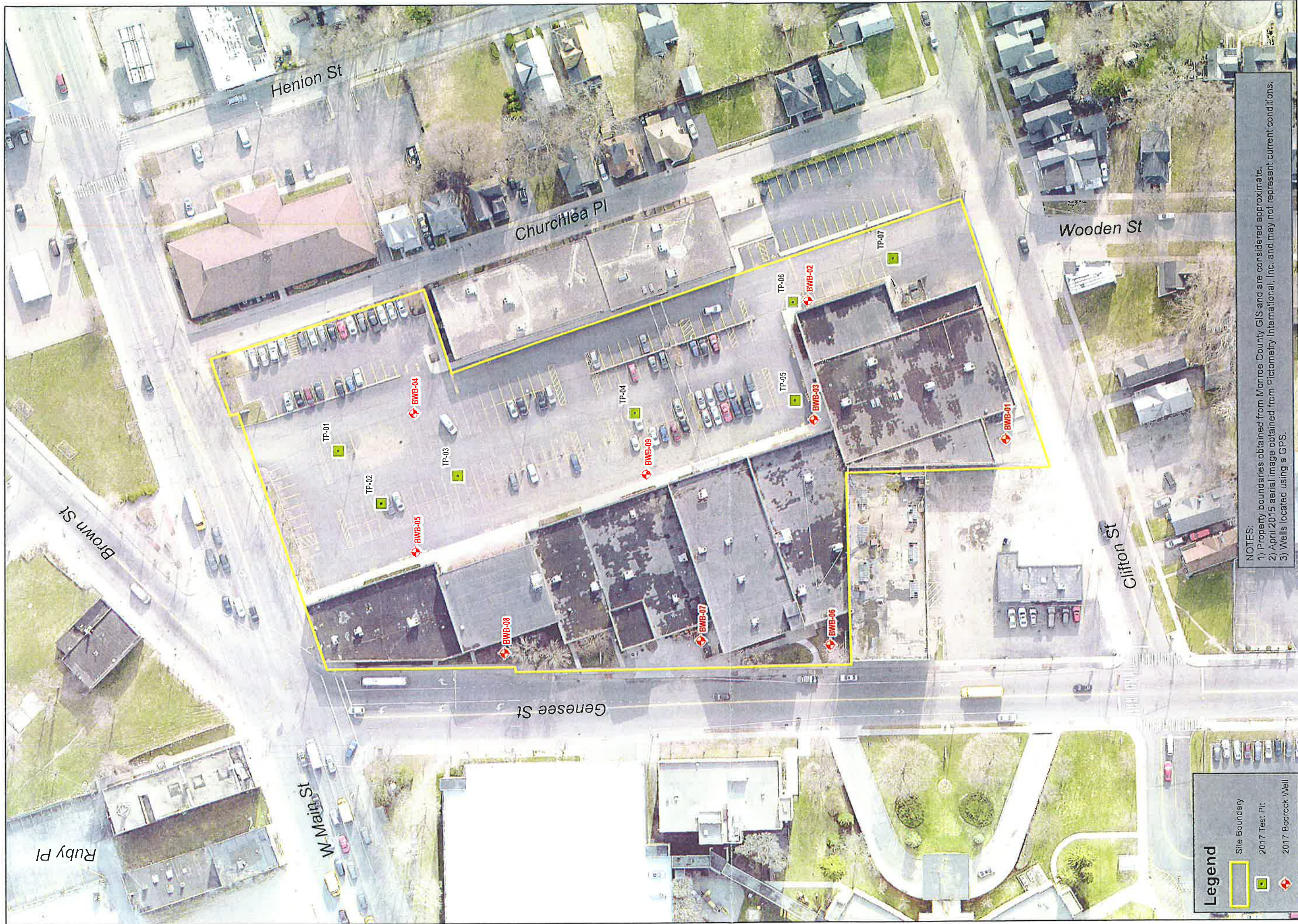
This Certified Sanborn Map combines the following sheets.  
 Outlined areas indicate map sheets within the collection.



- Volume 3, Sheet 315
- Volume 3, Sheet 316
- Volume 3, Sheet 328
- Volume 4, Sheet 387







**Legend**

- Site Boundary
- 2017 Test Pit
- ◆ 2017 Bedrock Well

**NOTES:**  
 1) Property boundaries obtained from Monroe County GIS and are considered approximate.  
 2) April 2015 aerial image obtained from Pictometry International, Inc. and may not represent current conditions.  
 3) Wells located using a GPS.

PROJECT/DRAWING NUMBER:  
2172414  
FIGURE 7

PROJECT:  
**PHASE II ESA**  
**835-855 WEST MAIN STREET**  
**ROCHESTER, NEW YORK**

DRAWING NAME:  
**Bedrock Groundwater Elevations**

CLIENT:  
DRAFT

**LABELLA**  
 Associates, D.P.C.

Engineering  
 Architecture  
 Environmental  
 Planning

300 STATE STREET  
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 F: (585) 454-3066  
 www.labellapc.com

N  
 W    E  
 S

0    50    100    Feet

1 inch = 75 feet  
 INTENDED TO PRINT AS: 11" X 17"





**Legend**

- Site Boundary
- 2017 Soil Boring

**NOTES:**  
 1) Property boundaries obtained from Monroe County GIS and are considered approximate.  
 2) April 2015 aerial image obtained from Pictometry International, Inc. and may not represent current conditions.

PROJECT/DRAWING NUMBER:  
 [ 2172414 ]  
 [ **FIGURE 1** ]

PROJECT:  
**PHASE II ESA**  
**835-855 WEST MAIN STREET**  
**ROCHESTER, NEW YORK**

DRAWING NAME:  
**Environmental Soil**  
**Testing Locations**

CLIENT:  
**DRAFT**

**LABELLA**  
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Engineering  
 Architecture  
 Environmental  
 Planning

0 40 80 Feet  
 1 inch = 60 feet  
 INTENDED TO PRINT AS: 11" X 17"



## 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.

### NON-COHESIVE SOIL

Soils composed of silt, sand and gravel, showing no cohesion or very slight cohesion

<u>DESCRIPTION</u>	<u>STP –BLOWS/FOOT</u>	<u>DESCRIPTION</u>	<u>STP –BLOWS/FOOT</u>
Very Soft	0-2	Loose	0-10
Soft	3-5	Firm	11-25
Medium	6-15	Compact	26-40
Stiff	16-25	Dense	41-50
Hard	26 or more	Very Dense	51 or more

<u>SOIL COMPOSITION</u>	<u>DESCRIPTION</u>	<u>ESTIMATED PERCENTAGE</u>
	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

<u>SOIL STRATA:</u>	<u>TERM</u>	<u>DESCRIPTION</u>
	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

<u>MATERIAL</u>	<u>SIEVE SIZE</u>
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.



## Boring Log

<b>Project No.</b>	4362.0.0	<b>Page</b>	1	<b>of</b>	1	<b>Test Boring No.</b>	BWB-01
<b>Project Name</b>	Pre-development Assessment, 835 to 855 West Main Street, Rochester, New York						
<b>Client</b>	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York						
<b>Elevation</b>	542.6	<b>Weather</b>			<b>Engineer</b>	LaBella	
<b>Date Started</b>	11.27.2017	<b>Completed</b>	11.27.2017		<b>Driller</b>	N. Short	
<b>Drilling Company:</b>	Nothnagle Drilling				<b>Drilling Equipment:</b>	CME-75 truck rig	

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
	15	10					ASPHALT 0'5"	
			8	5	18	S-1	0'-2'	
	4	4					Firm gray damp CRUSHER-RUN STONE 0'11"	
			3	3	7	S-2	2'-4'	
5	2	50/5"			50/5"	S-3	4'-4'11"	
							FILL: Firm, red-brown-black mottled moist SILT, little organic and sand, trace gravel and brick	
							S-2: loose, red-brown, moist, trace clay	
							3'10"	
							Loose red-brown moist SILT, little sand, trace gravel, and organic	
							S-3: Very dense, little clay, (no organic)	
							Auger Refusal at 6'0"	
10							6'0"	
							Hard gray DOLOMITE, horizontal fractures, high angle fracture from 8'0" to 9'6", calcite filled vugs below 9'0"	
							More broken pieces 8'6" to 9'0", shale partings 12'13'6"	
							Highly Calcerious with vugs below 14'0"	
							Run #1: 6'-9'	
							RQD: 23.5/36=65%	
							% Rec. 36/36 = 100%	
15								
							Run #2: 9'-14'	
							RQD: 22/60= 37%	
							% Rec. 58/60 = 97%	
							Run #3: 14'-16'	
							RQD: 18/24= 67%	
							% Rec. 24/24 = 100%	
20								
							16'0"	
							Boring Terminated at 16'0"	
25								
							Notes:	
							1. Advanced the bore hole using hollow stem auger casings. Bedrock cored from 6 to 16 feet.	
							2. Bedrock well installed on completion on completion.	
							3. Elevation provided by LaBella Associates, D.P.C.	
30								

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

## Boring Log

<b>Project No.</b>	4362.0.0	<b>Page</b>	1	<b>of</b>	1	<b>Test Boring No.</b>	BWB-02	
<b>Project Name</b>	Pre-development Assessment, 835 to 855 West Main Street, Rochester, New York							
<b>Client</b>	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York							
<b>Elevation</b>	543.0	<b>Weather</b>					<b>Engineer</b>	LaBella
<b>Date Started</b>	11.27.2017	<b>Completed</b>	11.27.2017				<b>Driller</b>	N. Short
<b>Drilling Company:</b>	Nothnagle Drilling					<b>Drilling Equipment:</b>	CME-75 truck rig	

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
	58	18					ASPHALT 0'9"	
			14	8	32	S-1	0'-2'	
	6	7					Compact gray dry CRUSHER-RUN STONE, little silt 1'5"	
			8	8	15	S-2	2'-4'	
5	8	9					FILL: Compact brown damp SAND, little silt, trace gravel brick, and cinders S-2: Firm, little brick, slag, ash and cinders S-3: Very dense, some gravel	
			8	50/5	17	S-3	4'-5'11"	
							Very dense tan moist SAND and GRAVEL, little silt 5'5"	
							7'0"	
10							Auger Refusal at 7'0"	
15								
20								
25								
30								

- Notes:
1. Advanced the bore hole using hollow stem auger casings. Roller bit used to penetrate 10 ft. into bedrock.
  2. Bedrock well installed on completion on completion.
  3. Elevation provided by LaBella Associates, D.P.C.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow



## Boring Log

<b>Project No.</b>	4362.0.0	<b>Page</b>	1	<b>of</b>	1	<b>Test Boring No.</b>	BWB-03	
<b>Project Name</b>	Pre-development Assessment, 835 to 855 West Main Street, Rochester, New York							
<b>Client</b>	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York							
<b>Elevation</b>	543.3	<b>Weather</b>					<b>Engineer</b>	LaBella
<b>Date Started</b>	11.27.2017	<b>Completed</b>	11.27.2017				<b>Driller</b>	N. Short
<b>Drilling Company:</b>	Nothnagle Drilling					<b>Drilling Equipment:</b>	CME-75 truck rig	

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications	
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks	
	18	4						ASPHALT	0'7"
			3	4	7	S-1	0'-2'	FILL: Loose gray-brown moist SILT and SAND, little gravel, trace glass and brick	2'0"
	4	11						FILL: Firm brown damp GRAVEL, some silt, little sand	2'5"
5	2	1						FILL: Firm red-brown dry SILT and SAND, little gravel, trace glass and brick	
			1	50/5	2	S-3	4'-5'11"	S-3: no recovery	7'0"
								Auger Refusal at 7'0"	
10									
15									
20									
25									
30									

- Notes:
1. Advanced the bore hole using hollow stem auger casings. Roller bit used to penetrate 10 ft. into bedrock.
  2. Bedrock well installed on completion on completion.
  3. Elevation provided by LaBella Associates, D.P.C.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow





## Boring Log

<b>Project No.</b>	4362.0.0	<b>Page</b>	1	<b>of</b>	1	<b>Test Boring No.</b>	BWB-04
<b>Project Name</b>	Pre-development Assessment, 835 to 855 West Main Street, Rochester, New York						
<b>Client</b>	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York						
<b>Elevation</b>	542.5	<b>Weather</b>				<b>Engineer</b>	LaBella
<b>Date Started</b>	11.27.2017	<b>Completed</b>	11.27.2017			<b>Driller</b>	N. Short
<b>Drilling Company:</b> Nothnagle Drilling						<b>Drilling Equipment:</b> CME-75 truck rig	

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
	60	30					ASPHALT 0'7"	
			19	10	49	S-1	0'-2' FILL: Dense black-brown moist SAND and GRAVEL, trace silt 1'8"	
	11	16					FILL: Dense brown damp GRAVEL, some silt, little sand 2'5"	
			9	7	25	S-2	2'-4' FILL: Firm brown dry SILT, some sand, trace gravel and brick	
5	2	1					S-2: Firm 4'0"	
			1	50/1		S-3	4'-5'7" FILL: Very dense tan damp SAND, trace brick 4'2"	
							Very dense brown moist SILT, trace sand, clay and gravel 7'0"	
10							Auger Refusal at 7'0"	
15								
20								
25								
30								

- Notes:
1. Advanced the bore hole using hollow stem auger casings. Roller bit used to penetrate 10 ft. into bedrock.
  2. Bedrock well installed on completion on completion.
  3. Elevation provided by LaBella Associates, D.P.C.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow



## Boring Log

<b>Project No.</b>	4362.0.0	<b>Page</b>	1	<b>of</b>	1	<b>Test Boring No.</b>	BWB-05
<b>Project Name</b>	Pre-development Assessment, 835 to 855 West Main Street, Rochester, New York						
<b>Client</b>	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York						
<b>Elevation</b>	543.1	<b>Weather</b>				<b>Engineer</b>	LaBella
<b>Date Started</b>	11.27.2017	<b>Completed</b>	11.27.2017			<b>Driller</b>	N. Short
<b>Drilling Company:</b>	Nothnagle Drilling					<b>Drilling Equipment:</b>	CME-75 truck rig

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
	50	20					ASPHALT 0'6"	
			14	12	34	S-1	0'-2'	
	13	12					FILL: Compact brown damp GRAVEL, some sand, some silt below 0'9" 1'3"	
			10	10	22	S-2	2'-4'	
5	2	2					FILL: Firm red-brown moist SILT, little sand, little gravel, trace brick 2'0"	
			2	50/3	4	S-3	4'-5'9"	
							S-3: Very dense, no brick, trace sand	
							Auger Refusal at 7'0" 7'0"	
10							Hard gray DOLOMITE, horizontal fractures, high angle fractures, calcite filled vugs noted	
							Run #1: 7'-10'	
							RQD: 21/36 = 58%	
							% Rec. 36/36 = 100%	
							Run #2: 10-15'	
							RQD: 41/60 = 68%	
15							% Rec. 60/60 = 100%	
							Run #3: 15'-17'	
							RQD: 19/24 = 37.5%	
							% Rec. 24/24 = 100%	
20							17'0"	
							Boring Terminated at 17'0"	
							Notes:	
							1. Advanced the bore hole using hollow stem auger casings. Bedrock cored using diamond bit core barrell.	
							2. Bedrock well installed on completion on completion.	
							3. Elevation provided by LaBella Associates, D.P.C.	
30								

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow







## Boring Log

<b>Project No.</b>	4362.0.0	<b>Page</b>	1	<b>of</b>	1	<b>Test Boring No.</b>	BWB-07	
<b>Project Name</b>	Pre-development Assessment, 835 to 855 West Main Street, Rochester, New York							
<b>Client</b>	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York							
<b>Elevation</b>	542.8	<b>Weather</b>					<b>Engineer</b>	LaBella
<b>Date Started</b>	11.28.2017	<b>Completed</b>	11.28.2017				<b>Driller</b>	N. Short
<b>Drilling Company:</b>	Nothnagle Drilling			<b>Drilling Equipment:</b>				CME-75 truck rig

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
		1						CONCRETE 0'6"
			4	4	8	S-1	0'-2'	FILL: Loose brown damp GRAVEL, some sand, 2'0"
	1	2						FILL: Loose brown moist SILT, little sand, trace gravel and brick
			5	8	7	S-2	2'-4'	S-3: Loose, no brick
5	2	4						
			5	14	9	S-3	4'-6'	Very dense brown, moist SILT, trace sand, 6'0"
	50/6				50/6"	S-4	6'-6'6"	trace gravel 7'6"
								Auger Refusal at 7'6"
10								
15								
20								
25								
30								

- Notes:
1. Advanced the bore hole using hollow stem auger casings. Roller bit used to penetrate 10 ft. into bedrock.
  2. Bedrock well installed on completion on completion.
  3. Elevation provided by LaBella Associates, D.P.C.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow

## Boring Log

<b>Project No.</b> 4362.0.0	<b>Page</b> 1 <b>of</b> 1	<b>Test Boring No.</b> BWB-08
<b>Project Name</b> Pre-development Assessment, 835 to 855 West Main Street, Rochester, New York		
<b>Client</b> LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York		
<b>Elevation</b> 542.8	<b>Weather</b>	<b>Engineer</b> LaBella
<b>Date Started</b> 11.28.2017	<b>Completed</b> 11.28.2017	<b>Driller</b> N. Short
<b>Drilling Company:</b> Nothnagle Drilling		<b>Drilling Equipment:</b> CME-75 truck rig

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
								AUGERED TO REFUSAL, NO SAMPLING PERFORMED            Notes: 1. Advanced the bore hole using hollow stem auger casings. Roller bit used to penetrate 10 ft. into bedrock. 2. Bedrock well installed on completion on completion. 3. Elevation provided by LaBella Associates, D.P.C.
5								
10								
15								
20								
25								
30								

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow



## Boring Log

<b>Project No.</b>	4362.0.0	<b>Page</b>	1	<b>of</b>	1	<b>Test Boring No.</b>	BWB-09
<b>Project Name</b>	Pre-development Assessment, 835 to 855 West Main Street, Rochester, New York						
<b>Client</b>	LaBella Associates, DPC, 300 State Street, Suite 201, Rochester, New York						
<b>Elevation</b>	543.1	<b>Weather</b>			<b>Engineer</b>	LaBella	
<b>Date Started</b>	11.30.2017	<b>Completed</b>	11.30.2017		<b>Driller</b>	N. Short	
<b>Drilling Company:</b>	Nothnagle Drilling			<b>Drilling Equipment:</b>	CME-75 truck rig		

Ft.	Blows Per Six Inches				N Value	Sample No.	Depth	Visual Soil and Rock Classifications
	0"/6"	6"/12"	12"/18"	18"/24"				Remarks
	100	30						ASPHALT 0'7"
			15	11	45	S-1	0'-2'	FILL: Dense black-brown dry GRAVEL, little sand, little silt 1'5"
	9	29						FILL: Dense brown damp, SILT, some sand, trace to little gravel 2'10"
			8	5	37	S-2	2'-4'	FILL: Compact gray dry GRAVEL and SAND, little concrete 3'9"
5	19	38						Very dense brown moist SILT, some sand 4'6"
			50/5		88/11	S-3	4'-5'5"	Very dense brown moist SILT, some gravel, little sand 6'6"
								Auger Refusal at 6'6"
10								
15								
20								
25								
30								

- Notes:
1. Advanced the bore hole using hollow stem auger casings. Roller bit used to penetrate 10 ft. into bedrock.
  2. Bedrock well installed on completion on completion.
  3. Elevation provided by LaBella Associates, D.P.C.

N=No. of blows to Drive 2" Spoon 12" with 140 lb. Wt. 30" Ea. Blow



## Test Pit Log

Project No.	4362.0	Page	1	of	1	Test Pit No.	TP17-1
Project Name	835-855 West Main Street, Rochester, New York						
Client	LaBella Associates, DPC, 300 State Street, Rochester, New York						
Elevation		Weather	Overcast/Rain 40's			Technician	E. Ashley
Date Started	10.31.17	Completed	10.31.17			Operator	Pete
Backhoe Subcontractor	LaBella Associates, DPC			Equipment	CAT 303.5 E		

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
2			ASPHALT 0'6 1/2" FILL: Compact grey moist WEATHERED SHALE (fragments and pieces), little silt, trace sand 2'1"
4			FILL: Firm to compact SAND, SILT, BRICK, numerous pieces of SLAB ROCK, ORGANICS, WOOD, CONCRETE, METAL CONDUIT 3'9" CONCRETE SLAB 4'1" Firm brown moist SAND, some silt, little gravel 5'0" Refusal at 5'0"
6			
8			
10			
12			Notes: 1. Sides sloughed. 2. Dry on completion. 3. Staked location and elevation provided by LaBella Associates, DPC.

## Site Pictures



TP17-1



Spoil Pile

## Test Pit Log

**Project No.** 4362.0    **Page** 1 **of** 1    **Test Pit No.** TP17-2  
**Project Name** 835-855 West Main Street, Rochester, New York  
**Client** LaBella Associates, DPC, 300 State Street, Rochester, New York  
**Elevation** \_\_\_\_\_    **Weather** Overcast/Rain 40's    **Technician** E. Ashley  
**Date Started** 10.31.17    **Completed** 10.31.17    **Operator** Pete  
**Backhoe Subcontractor** LaBella Associates    **Equipment** CAT 303.5 E

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications
			Remarks
			ASPHALT <span style="float: right;">0'6"</span>
2			FILL: Firm to compact grey moist WEATHERED SHALE pieces and fragments, little silt, trace clay, trace brick and organic <span style="float: right;">2'0"</span>
4			Firm to compact red-brown moist SILT, some sand, little to some gravel, trace clay, few cobbles and slab rocks
6			Probable cap rock below 4'8"  <span style="float: right;">5'3"</span> Refusal at 5'3"
8			
10			
12			Notes: 1. Sides vertical upon completion 2. Dry on completion. 3. Staked location and elevation provided by LaBella Associates, DPC.

## Site Pictures



TP17-2



Spoil Pile





SOIL • BEDROCK • GROUNDWATER

## Test Pit Log

**Project No.** 4362.0    **Page** 1 **of** 1    **Test Pit No.** TP17-3  
**Project Name** 835-855 West Main Street, Rochester, New York  
**Client** LaBella Associates, DPC, 300 State Street, Rochester, New York  
**Elevation** \_\_\_\_\_    **Weather** Overcast/Rain 40's    **Technician** E. Ashley  
**Date Started** 10.31.17    **Completed** 10.31.17    **Operator** Pete  
**Backhoe Subcontractor** LaBella Associates    **Equipment** CAT 303.5 E

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	
			Remarks	
2			ASPHALT	0'6 1/2"
			FILL: Compact grey-brown moist WEATHERED SHALE, some silt, trace clay and sand	1'6"
4			FILL: Firm red-brown moist SILT, SAND, GRAVEL, COBBLES, BRICK, and ORGANIC, 1, 2 foot diameter boulder	2'7"
			Firm red-brown moist SILT, some sand, little to some gravel, few cobbles, few slab rock (possible fill)	
6			Refusal at 5'4"	5'4"
8				
10				
12			Notes: 1. Sides vertical upon completion 2. Dry on completion. 3. Staked location and elevation provided by LaBella Associates, DPC.	

## Site Pictures



TP17-3



Spoil Pile



## Test Pit Log

**Project No.** 4362.0 **Page** 1 **of** 1 **Test Pit No.** TP17-4  
**Project Name** 835-855 West Main Street, Rochester, New York  
**Client** LaBella Associates, DPC, 300 State Street, Rochester, New York  
**Elevation** **Weather** Overcast/Rain 40's **Technician** E. Ashley  
**Date Started** 10.31.17 **Completed** 10.31.17 **Operator** Pete  
**Backhoe Subcontractor** LaBella Associates **Equipment** CAT 303.5 E

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications	
			Remarks	
			ASPHALT	0'7 1/2"
2			FILL: Compact grey moist WEATHERED SHALE, little silt, trace to little sand	1'8"
4			FILL: Firm to compact brown-black mottled moist SILT, SAND, and GRAVEL, little cobbles, slab rock and organic, trace glass and brick	2'8"
			Firm black moist ORGANIC SILT, little roots	4'6"
6			Firm red-brown moist SILT, some sand, little gravel, trace clay	4'10"
8			Test Pit Terminated at 4'10"	
10				
12			Notes: 1. Sides vertical upon completion 2. Dry on completion. 3. Staked location and elevation provided by LaBella Associates, DPC.	

## Site Pictures



TP17-4



Spoil Pile

## Test Pit Log

**Project No.** 4362.0      **Page** 1 **of** 1      **Test Pit No.** TP17-5  
**Project Name** 835-855 West Main Street, Rochester, New York  
**Client** LaBella Associates, DPC, 300 State Street, Rochester, New York  
**Elevation** \_\_\_\_\_      **Weather** Overcast/Rain 40's      **Technician** J. Baker  
**Date Started** 11.01.17      **Completed** 11.01.17      **Operator** Pete  
**Backhoe Subcontractor** LaBella Associates      **Equipment** CAT 303.5 E

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications
			Remarks
2			ASPHALT, multiple layers 0'8"
			Broken/platy SHALE 'subbase' 1'10"
4			FILL: Firm medium brown moist SILT, little sand, trace brick and concrete 3'0"
			FILL: BRICK, BLOCK, METAL, and MISCELLANEOUS DEBRIS 5'8"
6			Test Pit Terminated in rubble due to access constraints at 5'8"
8			
10			
12			Notes: 1. Sides vertical upon completion 2. Dry on completion. 3. Staked location and elevation provided by LaBella Associates, DPC.

## Site Pictures



TP17-5



## Test Pit Log

<b>Project No.</b>	<u>4362.0</u>	<b>Page</b>	<u>1</u>	<b>of</b>	<u>1</u>	<b>Test Pit No.</b>	<u>TP17-6</u>
<b>Project Name</b>	<u>835-855 West Main Street, Rochester, New York</u>						
<b>Client</b>	<u>LaBella Associates, DPC, 300 State Street, Rochester, New York</u>						
<b>Elevation</b>		<b>Weather</b>	<u>Overcast/Rain 40's</u>			<b>Technician</b>	<u>J. Baker</u>
<b>Date Started</b>	<u>11.01.17</u>	<b>Completed</b>	<u>11.01.17</u>			<b>Operator</b>	<u>Pete</u>
<b>Backhoe Subcontractor</b>	<u>LaBella Associates</u>			<b>Equipment</b>	<u>CAT 303.5 E</u>		

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
			ASPHALT, multiple layers 0'9"
			SHALE 'Subbase' 1'10"
2			FILL: BRICKS, little concrete and masonry blocks
			3'6"
4			Test Pit Terminated on Intact Slab at 3'6"
6			
8			
10			
			Notes: 1. Sides vertical upon completion 2. Dry on completion. 3. Staked location and elevation provided by LaBella Associates, DPC.
12			

## Site Pictures



TP17-6



Spoil Pile



## Test Pit Log

<b>Project No.</b>	<u>4362.0</u>	<b>Page</b>	<u>1</u>	<b>of</b>	<u>1</u>	<b>Test Pit No.</b>	<u>TP17-7</u>
<b>Project Name</b>	<u>835-855 West Main Street, Rochester, New York</u>						
<b>Client</b>	<u>LaBella Associates, DPC, 300 State Street, Rochester, New York</u>						
<b>Elevation</b>		<b>Weather</b>	<u>Overcast/Rain 40's</u>			<b>Technician</b>	<u>J. Baker</u>
<b>Date Started</b>	<u>11.01.17</u>	<b>Completed</b>	<u>11.01.17</u>			<b>Operator</b>	<u>Pete</u>
<b>Backhoe Subcontractor</b>	<u>LaBella Associates</u>			<b>Equipment</b>	<u>CAT 303.5 E</u>		

Depth Below Surface	Sample Number	Depth of Sample	Soil and Rock Classifications Remarks
			ASPHALT, multiple layers
			0'7"
			SHALE 'subbase'
			1'4"
2			RUBBLE FILL: Brick, some mortar sand, little concrete, little masonry block, trace metal
4			
6			5'6"
			Test pit terminated in fill at 5'6" due to access constraints
8			
10			
12			Notes: 1. Sides vertical upon completion 2. Dry on completion. 3. Staked location and elevation provided by LaBella Associates, DPC.

## Site Pictures



TP17-7



Spoil Pile



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-01  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC  
DRILLER: M. Pepe  
LABELLA REPRESENTATIVE: A. Brett

BORING LOCATION: See Figure  
GROUND SURFACE ELEVATION: NA  
START DATE: 11/6/2017 END DATE 11/6/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 6620DT  
AUGER SIZE AND TYPE: NA  
OVERBURDEN SAMPIING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push  
INSIDE DIAMETER: 2"  
OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 52%	0.0'	Asphalt	0	
			0.5'	Gray-brown SILT and SAND, little coarse to fine subangular to angular gravel, moist, no odor.		
2			1.7'	Red-brown SILT, little sand, trace clay, moist, no odor.		
4					0	
	5.0-6.1'	S2 91%	5.0'	Similar to above	0	
6			6.0'	Weathered bedrock	0	
				End Boring - 6.1-ft - Refusal		
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.1'	NA	

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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-01



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-02  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC  
DRILLER: M. Pepe  
LABELLA REPRESENTATIVE: A. Brett

BORING LOCATION: See Figure  
GROUND SURFACE ELEVATION: NA  
START DATE: 11/6/2017 END DATE 11/6/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 6620DT  
AUGER SIZE AND TYPE: NA  
OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push  
INSIDE DIAMETER: 2"  
OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.9'	S1 59%	0.0'	Asphalt	0	
			0.5'	Gray-brown SILT and SAND, dry, no odor.	0	
2			1.0'	Black, tan, and gray coarse to fine SAND, some coarse to fine gravel, little brick pieces, trace white fibrous material (picture taken), moist, no odor. (FILL)	0	
			2.5'	Red-brown SILT, little sand, trace clay, moist, no odor.	0	
4					0	
			5.3'	Light brown fine SAND, dry to moist, no odor.	0	
6				End Boring - 5.9-ft - Refusal	20	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.9'	NA	

GENERAL NOTES

- STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-02





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-03  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC  
**DRILLER:** M. Pepe  
**LABELLA REPRESENTATIVE:** A.Brett

**BORING LOCATION:** See Figure  
**GROUND SURFACE ELEVATION:** NA  
**START DATE:** 11/6/2017 **END DATE:** 11/6/2017

**DATUM:** NA

**TYPE OF DRILL RIG:** Geoprobe 6620DT  
**AUGER SIZE AND TYPE:** NA  
**OVERBURDEN SAMPLING METHOD:** Macrocore

**DRIVE SAMPLER TYPE:** Direct push  
**INSIDE DIAMETER:** 2"  
**OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.8'	S1 58%	0.0'	Brown to dark brown SILT, little fine sand, trace clay and roots, moist, organic odor (topsoil)	0	
			0.9'	Concrete (FILL)	0	
			1.0'	Red-Brown SILT, little fine sand, trace clay, moist, no odor	0	
2					0	
4					0	
			4.7'	Weathered bedrock	0	
6				End Boring - 4.8-ft - Refusal		
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.8'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-03



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-04  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC  
**DRILLER:** M. Pepe  
**LABELLA REPRESENTATIVE:** A.Brett

**BORING LOCATION:** See Figure  
**GROUND SURFACE ELEVATION:** NA  
**START DATE:** 11/6/2017 **END DATE:** 11/6/2017

**DATUM:** NA

**TYPE OF DRILL RIG:** Geoprobe 6620DT  
**AUGER SIZE AND TYPE:** NA  
**OVERBURDEN SAMPLING METHOD:** Macrocore

**DRIVE SAMPLER TYPE:** Direct push  
**INSIDE DIAMETER:** 2"  
**OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.8'	S1 48%	0.0' 0.5'	Asphalt Red-brown SILT, some fine to medium Sand, little to trace coarse to fine subrounded to subangular gravel, trace clay, moist, no odor,	0	
2			2.0'	Brown coarse to fine SAND and GRAVEL, trace silt, moist, no odor.	0	
4				End Boring - 4.8-ft - Refusal	0	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.8'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-04



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-05  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC  
DRILLER: M. Pepe  
LABELLA REPRESENTATIVE: A. Brett

BORING LOCATION: See Figure  
GROUND SURFACE ELEVATION: NA  
START DATE: 11/6/2017 END DATE 11/6/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 6620DT  
AUGER SIZE AND TYPE: NA  
OVERBURDEN SAMPING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push  
INSIDE DIAMETER: 2"  
OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-6.7'	S1 49%	0.0'	Asphalt		
			0.5'	Brown coarse to fine SAND, little gravel, trace silt, moist, no odor	130	
			1.1'	Red-Brown SILT, little fine sand, little clay, trace gravel, moist, no odor.	72	
2					25	
					78	
4					90	
			6.0'	Broken weathered bedrock, little fine to medium sand, moist, no odor.	518	
				End Boring - 6.7-ft - Refusal		
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.7'	NA	

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-05





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**

Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING: SB-06**

**SHEET 1 OF 1**  
**JOB: 2172414**  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC  
**DRILLER:** M. Pepe  
**LABELLA REPRESENTATIVE:** A. Brett

**BORING LOCATION:** See Figure  
**GROUND SURFACE ELEVATION:** NA  
**START DATE:** 11/6/2017 **END DATE:** 11/6/2017

**DATUM:** NA

**TYPE OF DRILL RIG:** Geoprobe 6620DT  
**AUGER SIZE AND TYPE:** NA  
**OVERBURDEN SAMPLING METHOD:** Macrocore

**DRIVE SAMPLER TYPE:** Direct push  
**INSIDE DIAMETER:** 2"  
**OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-6.5'	S1 46%	0.0'	Asphalt		
			0.6'	Brown coarse to fine SAND, little coarse to fine gravel, moist, no odor.	132	
2			1.0'	Brown SILT, little coarse to fine brown to black sand, trace clay, moist, no odor,	12	
			2.5'	Brown SILT, little fine sand, little coke, trace building materials, trace gravel, trace clay, moist, no odor. (FILL)	10	
4					7	
					131	
6			6.4'	Weathered bedrock	417	
				End Boring - 6.5-ft - Refusal		
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.5'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING: SB-06**



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-07  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC  
**DRILLER:** M. Pepe  
**LABELLA REPRESENTATIVE:** A.Brett

**BORING LOCATION:** See Figure  
**GROUND SURFACE ELEVATION:** NA  
**START DATE:** 11/6/2017 **END DATE:** 11/6/2017

**DATUM:** NA

**TYPE OF DRILL RIG:** Geoprobe 6620DT  
**AUGER SIZE AND TYPE:** NA  
**OVERBURDEN SAMPLING METHOD:** Macrocore

**DRIVE SAMPLER TYPE:** Direct push  
**INSIDE DIAMETER:** 2"  
**OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.2'	S1 76%	0.0'	Asphalt	325	
			0.7'	Gray-brown coarse to fine SAND and subangular to angular GRAVEL, moist to dry, no odor.	811	
2			1.3'	Brown to dark brown SILT, little coarse to fine gravel, trace fine sand, trace clay, moist, no odor.	72	
					10	
4			3.9'	Weathered bedrock.	182	
				End Boring - 4.2-ft - Refusal		
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.2'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-07



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**

Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING: SB-08**

**SHEET 1 OF 1**

**JOB: 2172414**

**CHKD BY:**

CONTRACTOR: LaBella Env. LLC

DRILLER: M. Pepe

LABELLA REPRESENTATIVE: A.Brett

BORING LOCATION: See Figure

GROUND SURFACE ELEVATION: NA

START DATE: 11/6/2017 END DATE 11/6/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 6620DT

AUGER SIZE AND TYPE: NA

OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push

INSIDE DIAMETER: 2"

OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0,0-4,0'	S1 48%	0.0'	Asphalt	122	
			0.6'	Gray-brown coarse to fine SAND and subangular to angular GRAVEL, moist, no odor.	302	
2			1.2'	Brown SILT, little coarse to fine subangular to angular gravel, little brick pieces, trace sand, trace silt, moist, no odor. (FILL)	422	
					202	
4				End Boring - 4.0-ft - Refusal	48	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING: SB-08**





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**

Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING: SB-09**

**SHEET 1 OF 1**

**JOB: 2172414**

**CHKD BY:**

CONTRACTOR: LaBella Env. LLC

DRILLER: M. Pepe

LABELLA REPRESENTATIVE: A.Brett

BORING LOCATION: See Figure

GROUND SURFACE ELEVATION: NA

START DATE: 11/6/2017 END DATE 11/6/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 6620DT

AUGER SIZE AND TYPE: NA

OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push

INSIDE DIAMETER: 2"

OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 66%	0.0' 0.6'	Asphalt Red-brown to brown SAND and SILT, moist, no odor.	0	
2			2.0'	Light brown SILT, some fine Sand, moist, no odor.	0	
4					0	
6					0	
8					0	
10					0	
12					0	
14					0	
16				End Boring - 5.0-ft - Refusal	12	

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	5.0'	5.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING: SB-09**



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**

Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING: SB-10**

**SHEET 1 OF 1**

**JOB: 2172414**

**CHKD BY:**

CONTRACTOR: LaBella Env. LLC  
DRILLER: M. Pepe  
LABELLA REPRESENTATIVE: A.Brett

BORING LOCATION: See Figure  
GROUND SURFACE ELEVATION: NA  
START DATE: 11/6/2017 END DATE 11/6/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 6620DT  
AUGER SIZE AND TYPE: NA  
OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push  
INSIDE DIAMETER: 2"  
OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-3.9'	S1 41%	0.0'	Asphalt	185	
			0.6'	Gray-brown coarse to fine SAND, some coarse to fine Gravel, moist to dry, no odor.	132	
2			0.9'	Brown SILT, little coarse to fine sand, little coarse to fine subangular to angular gravel, moist, no odor.	75	
			3.4'	Brown fine SAND, trace silt, wet at bottom, no odor.	45	
4				End Boring - 3.9-ft - Refusal	2192	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	3.9'	3.9'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING: SB-10**



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING: SB-11**  
**SHEET 1 OF 1**  
**JOB: 2172414**  
**CHKD BY:**

CONTRACTOR: LaBella Env. LLC  
DRILLER: M. Pepe  
LABELLA REPRESENTATIVE: A. Brett

BORING LOCATION: See Figure  
GROUND SURFACE ELEVATION: NA  
START DATE: 11/6/2017 END DATE 11/6/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 6620DT  
AUGER SIZE AND TYPE: NA  
OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push  
INSIDE DIAMETER: 2"  
OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.7'	S1 53%	0.0'	Asphalt		
			0.3'	Gray coarse to fine angular GRAVEL, dry, no odor.	0	
			0.7'	Dark brown SILT, little coarse to fine sand, trace clay, little to trace coke and wood, moist no odor. (FILL)	0	
			1.4'	Similar to above, fill only consisting of wood, organic odor.	23	
2			2.5'	Light brown SILT, little coarse to fine sand, little clay, moist, no odor.	25	
					12	
4				End Boring - 4.7-ft - Refusal	0	
					0	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.7'	NA	

**GENERAL NOTES**

- 1) STRATIFICATION LINES REPRESENT APPROXMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING: SB-11**





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**

Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-12

**SHEET** 1 OF 1

**JOB:** 2172414

**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC  
**DRILLER:** M. Pepe  
**LABELLA REPRESENTATIVE:** A. Brett

**BORING LOCATION:** See Figure

**GROUND SURFACE ELEVATION:** NA

**DATUM:** NA

**START DATE:** 11/7/2017 **END DATE:** 11/7/2017

**TYPE OF DRILL RIG:** Geoprobe 6620DT  
**AUGER SIZE AND TYPE:** NA  
**OVERBURDEN SAMPLING METHOD:** Macrocore

**DRIVE SAMPLER TYPE:** Direct push  
**INSIDE DIAMETER:** 2"  
**OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 50%	0.0'	Asphalt	0	
			0.5'	Gray GRAVEL, little silt and sand, moist, no odor.	0	
			1.0'	Gray-brown SILT and coarse to fine SAND, some coarse to fine Gravel, moist, no odor.	0	
2			2.0'	Red-brown SILT, little to trace fine sand, trace coarse to fine gravel, moist, no odor.	0	
4					0	
				End Boring - 5.0-ft - Refusal	4	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.0'	NA	

**GENERAL NOTES**

- 1) STRATIFICATION LINES REPRESENT APPROXMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-12



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-13  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC  
**DRILLER:** M. Pepe  
**LABELLA REPRESENTATIVE:** A. Brett

**BORING LOCATION:** See Figure  
**GROUND SURFACE ELEVATION:** NA  
**START DATE:** 11/7/2017 **END DATE:** 11/7/2017

**DATUM:** NA

**TYPE OF DRILL RIG:** Geoprobe 54LT  
**AUGER SIZE AND TYPE:** NA  
**OVERBURDEN SAMPLING METHOD:** Macrocore

**DRIVE SAMPLER TYPE:** Direct push  
**INSIDE DIAMETER:** 2"  
**OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.2'	S1 31%	0.0'	Concrete	0	
			0.4'	Bricks	0	
			0.5'	Brown coarse to fine SAND, little silt, trace ash material, moist, no odor. (FILL)	0	
2			1.4'	Brown SILT, some coarse to fine Sand, moist, no odor	0	
4					0	
6				End Boring - 5.2-ft - Refusal	0	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	5.2'	5.2'	NA	

**GENERAL NOTES**

- STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-13



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-14  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC  
**DRILLER:** M. Pepe  
**LABELLA REPRESENTATIVE:** A. Brett

**BORING LOCATION:** See Figure  
**GROUND SURFACE ELEVATION:** NA  
**START DATE:** 11/7/2017 **END DATE:** 11/7/2017

**DATUM:** NA

**TYPE OF DRILL RIG:** Geoprobe 6620DT  
**AUGER SIZE AND TYPE:** NA  
**OVERBURDEN SAMPLING METHOD:** Macrocore

**DRIVE SAMPLER TYPE:** Direct push  
**INSIDE DIAMETER:** 2"  
**OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-2.5'	S1 60%	0.0' 0.5' 0.6'	Concrete Brown SAND and GRAVEL, little cinders, moist, no odor. (FILL) Brown coarse to fine SAND, little silt, little coarse to fine gravel, trash ash material, moist, no odor. (FILL)	0 0 0	
2				End Boring - 2.5' - End Boring	0	
4						
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	2.5'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-14





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**

Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-15

SHEET 1 OF 1

JOB: 2172414

CHKD BY:

CONTRACTOR: LaBella Env. LLC

DRILLER: M. Pepe

LABELLA REPRESENTATIVE: A.Brett

BORING LOCATION: See Figure

GROUND SURFACE ELEVATION: NA

START DATE: 11/7/2017 END DATE 11/7/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 6620DT

AUGER SIZE AND TYPE: NA

OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push

INSIDE DIAMETER: 2"

OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-7.4'	S1 18%	0.0' 0.5'	Concrete Brown SILT, little coarse to fine sand and gravel, moist, no odor.	0	
2					0	
4					0	
6					90	
					98	
				Refusal - 7.4-ft - End Boring	0	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	7.4'	NA	

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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-15



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-16  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC  
**DRILLER:** M. Pepe  
**LABELLA REPRESENTATIVE:** A.Brett

**BORING LOCATION:** See Figure  
**GROUND SURFACE ELEVATION:** NA  
**START DATE:** 11/7/2017 **END DATE:** 11/7/2017

**DATUM:** NA

**TYPE OF DRILL RIG:** Geoprobe 6620DT  
**AUGER SIZE AND TYPE:** NA  
**OVERBURDEN SAMPLING METHOD:** Macrocore

**DRIVE SAMPLER TYPE:** Direct push  
**INSIDE DIAMETER:** 2"  
**OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-6.0'	S1 58%	0.0'	Concrete		
			0.5'	Brown SAND, little asphalt, little silt, moist, no odor.	0	
			0.6'	Brown SILT and fine SAND, trace subrounded gravel, trace white shards/pieces, moist, no odor. (FILL)	0	
			1.0'	Brown fine to medium SAND, little silt, trace gravel, moist, no odor.	0	
2			1.4'	Dark Brown SILT, some fine Sand, trace gravel, moist, no odor.	0	
			2.5'	Tan-brown to brown SILT, little clay, moist, no odor,	5	
4					5	
					5	
					5	
6				End Boring - 6.0-ft - Refusal		
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.0'	NA	

**GENERAL NOTES**

- STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-16



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-17  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC BORING LOCATION: See Figure  
DRILLER: M. Pepe GROUND SURFACE ELEVATION: NA DATUM: NA  
LABELLA REPRESENTATIVE: A. Brett START DATE: 11/8/2017 END DATE 11/8/2017

TYPE OF DRILL RIG: Geoprobe 54LT DRIVE SAMPLER TYPE: Direct push  
AUGER SIZE AND TYPE: NA INSIDE DIAMETER: 2"  
OVERBURDEN SAMPLING METHOD: Macrocore OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-6.8'	S1 47%	0.0'	Concrete	0	
			0.4'	Brown fine to medium SAND, little silt, trace coarse sand, trace gravel, moist, no odor.	0	
2			1.1'	Brown SILT and coarse to fine SAND, little concrete, trace ash, trace glass moist, no odor. (FILL)	0	
			1.8'	Dark brown SILT, trace fine sand, moist, no odor.	0	
			1.9'	Similar to above, light brown.	0	
4					0	
6					0	
				End Boring - 6.8-ft - Refusal	0	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
			NA	NA	NA	

GENERAL NOTES

- STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-17





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-18  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC  
DRILLER: M. Pepe  
LABELLA REPRESENTATIVE: A.Brett

BORING LOCATION: See Figure  
GROUND SURFACE ELEVATION: NA  
START DATE: 11/8/2017 END DATE 11/8/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 54LT  
AUGER SIZE AND TYPE: NA  
OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push  
INSIDE DIAMETER: 2"  
OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.2'	S1 44%	0.0'	Concrete	0	
			0.4'	Black gravel, trace cinders, moist, no odor.	0	
2			0.8'	Brown Silt and coarse to fine SAND, little building materials, wood/ash, moist, no odor. (FILL)	0	
4					0	
6			5.1'	Broken weathered bedrock. End Boring - 5.2-ft - Refusal	9	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.2'	NA	

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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-18



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-19  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC      BORING LOCATION: See Figure  
DRILLER: M. Pepe      GROUND SURFACE ELEVATION: NA      DATUM: NA  
LABELLA REPRESENTATIVE: A.Brett      START DATE: 11/8/2017      END DATE 11/8/2017

TYPE OF DRILL RIG: Geoprobe 54LT      DRIVE SAMPLER TYPE: Direct push  
AUGER SIZE AND TYPE: NA      INSIDE DIAMETER: 2"  
OVERBURDEN SAMPING METHOD: Macrocore      OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.7'	S1 53%	0.0'	Concrete		
			0.5'	Brown-gray coarse to fine subrounded to angular GRAVEL and SAND, little silt, moist, no odor.	352	
			1.2'	Brown coarse to fine SAND, some pieces of concrete, moist, no odor.	389	
2			2.2'	Light tan GRAVEL, little concrete, little dark brown silt, dry, no odor.	416	
					1167	
4				End Boring - 4.7-ft - Refusal	190	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	4.7'	4.7'	NA	

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-19



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-20  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC  
DRILLER: M. Pepe  
LABELLA REPRESENTATIVE: A. Brett

BORING LOCATION: See Figure  
GROUND SURFACE ELEVATION: NA  
START DATE: 11/8/2017 END DATE 11/8/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 54LT  
AUGER SIZE AND TYPE: NA  
OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push  
INSIDE DIAMETER: 2"  
OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-4.0'	S1 55%	0.0'	Concrete		
			0.5'	Brown-gray coarse to fine subrounded to angular GRAVEL and SAND, little silt, moist, no odor.	106	
			1.8'	Brown and black coarse to fine SAND and GRAVEL, moist, no odor.	149	
2					264	
					100	
4				End Boring - 4.0-ft - Refusal	65	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	4.0'	NA	

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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-20





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING: SB-21**  
**SHEET 1 OF 1**  
**JOB: 2172414**  
**CHKD BY:**

CONTRACTOR: LaBella Env. LLC  
DRILLER: M. Pepe  
LABELLA REPRESENTATIVE: A. Brett

BORING LOCATION: See Figure  
GROUND SURFACE ELEVATION: NA  
START DATE: 11/8/2017 END DATE 11/8/2017

DATUM: NA

TYPE OF DRILL RIG: Jackhammer  
AUGER SIZE AND TYPE: NA  
OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push  
INSIDE DIAMETER: 2"  
OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-2.0'	S1 63%	0.0' 0.5'	Concrete Brown coarse to fine SAND and GRAVEL, little silt, trace brick, trace crushed concrete or ash, moist, no odor. (FILL)	102 305	
2	2.0-5.5'	S2 14%	2.0'	Similar to above, no brick, concrete or ash.	468 329 239	
4			5.4'	Bedrock fragments End Boring - 5.5' - Refusal	102	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELAPSED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	5.5'	5.5'	NA	

**GENERAL NOTES**

- STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING: SB-21**



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-22  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC      BORING LOCATION: See Figure  
DRILLER: M. Pepe      GROUND SURFACE ELEVATION: NA      DATUM: NA  
LABELLA REPRESENTATIVE: A Brett      START DATE: 11/8/2017      END DATE 11/8/2017

TYPE OF DRILL RIG: Jackhammer      DRIVE SAMPLER TYPE: Direct push  
AUGER SIZE AND TYPE: NA      INSIDE DIAMETER: 2"  
OVERBURDEN SAMPING METHOD: Macrocore      OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-2.0'	S1 55%	0.0'	Concrete		
			0.5'	Brown and black coarse to fine SAND, little gravel, trace concrete, trace coal, trace brick, moist, no odor. (FILL)	92	
			0.9'	Brown SILT, some coarse to fine SAND, trace coarse to fine gravel, moist, no odor.	128	
2	2.0-6.0'	S2 51%	2.2'	Dark brown SILT, moist, no odor.	115	
4			4.0'	Similar to above, trace sand and gravel.	185	
6				End Boring - 6.0-ft - Refusal	264	
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	6.0'	NA	

GENERAL NOTES

- 1) STRATIFICATION LINES REPRESENT APPROXMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
- 2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-22



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

PROJECT  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

BORING: SB-23  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC  
DRILLER: J. Constantino  
LABELLA REPRESENTATIVE: A. Brett

BORING LOCATION: See Figure  
GROUND SURFACE ELEVATION: NA  
START DATE: 11/13/2017 END DATE 11/13/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 54LT  
AUGER SIZE AND TYPE: NA  
OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push  
INSIDE DIAMETER: 2"  
OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 64%	0.0'	Dark brown SILT and SAND, roots, moist, organic odor (topsoil).	0	
			0.5'	Similar to above, brown.	0	
			0.7'	Brown SILT, some coarse to fine Sand, little coarse to fine subrounded to subangular gravel, trace fill consisting of brick, coal, plastic, and asphalt, moist, no odor. (FILL)	0	
2					0	
			2.7'	Brown SILT, little sand, trace clay, moist to wet, no odor.	0	
4					0	
				End Boring - 5.0-ft - Refusal	0	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.0'	NA	

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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

BORING: SB-23





300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING: SB-24**  
SHEET 1 OF 1  
JOB: 2172414  
CHKD BY:

CONTRACTOR: LaBella Env. LLC  
DRILLER: J. Constantino  
LABELLA REPRESENTATIVE: A.Brett

BORING LOCATION: See Figure  
GROUND SURFACE ELEVATION: NA  
START DATE: 11/13/2017 END DATE 11/13/2017

DATUM: NA

TYPE OF DRILL RIG: Geoprobe 54LT  
AUGER SIZE AND TYPE: NA  
OVERBURDEN SAMPLING METHOD: Macrocore

DRIVE SAMPLER TYPE: Direct push  
INSIDE DIAMETER: 2"  
OTHER:

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 98%	0.0'	Dark brown SILT, little coarse to fine sand, moist, organic odor (topsoil).	0	
			0.4'	Gray brown coarse to fine SAND and coarse to fine angular GRAVEL, moist, no odor.	0	
2			1.4'	Brown SILT, little brick and coal/coke, trace coarse to fine sand, trace coarse to fine gravel, moist, no odor. (FILL)	0	
			2.2'	Broken cobble/gravel.	0	
4			2.4'	Brown SILT, little coal/coke with ash and brick pieces, trace sand, moist, no odor. (FILL)	46	
			3.7'	Brown SILT, moist to wet, no odor.	573	
				End Boring - 5.0-ft - Refusal	468	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING: SB-24**



300 STATE STREET, ROCHESTER, NY  
ENVIRONMENTAL ENGINEERING CONSULTANTS

**PROJECT**  
Bulls Head Plaza Phase II ESA  
835-855 West Main Street  
Rochester, NY  
City of Rochester

**BORING:** SB-27  
**SHEET** 1 OF 1  
**JOB:** 2172414  
**CHKD BY:**

**CONTRACTOR:** LaBella Env. LLC      **BORING LOCATION:** See Figure  
**DRILLER:** J. Constantino      **GROUND SURFACE ELEVATION:** NA      **DATUM:** NA  
**LABELLA REPRESENTATIVE:** A.Brett      **START DATE:** 11/13/2017      **END DATE:** 11/13/2017

**TYPE OF DRILL RIG:** Geoprobe 54LT      **DRIVE SAMPLER TYPE:** Direct push  
**AUGER SIZE AND TYPE:** NA      **INSIDE DIAMETER:** 2"  
**OVERBURDEN SAMPLING METHOD:** Macrocore      **OTHER:**

DEPTH	SAMPLE			VISUAL CLASSIFICATION	PID FIELD SCREEN (PPB)	REMARKS
	SAMPLE DEPTH	SAMPLE NO. AND RECOVERY	STRATA CHANGE			
0	0.0-5.0'	S1 80%	0.0'	Brown SILT, little coarse to fine sand, little to trace clay, roots, moist, organic odor (topsoil).	0	
			0.8'	Brown SILT, some coarse to fine Sand, little gravel, trace asphalt, moist, no odor. (FILL)	0	
2			1.5'	Brown SILT, little coarse to fine gravel, little coarse to fine sand, moist, no odor.	0	
					0	
4			3.5'	Similar to above, trace asphalt.	0	
			4.9'	Gray rock	12	
				End Boring - 5.0-ft - Refusal	6	
6						
8						
10						
12						
14						
16						

WATER LEVEL DATA			DEPTH (FT)			NOTES:
DATE	TIME	ELASPED TIME	BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	
NA	NA	NA	NA	5.0'	NA	

**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 MAY OCCURE DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE

**BORING:** SB-27



# APPENDIX 3

Laboratory Report





## ANALYTICAL REPORT

Lab Number:	L1740405
Client:	LaBella Associates, P.C. 300 State Street Suite 201 Rochester, NY 14614
ATTN:	Jennifer Gillen
Phone:	(585) 454-6110
Project Name:	BULLSHEAD PLAZA
Project Number:	2172414
Report Date:	11/14/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1740405-01	TP-03	SOIL	835 AB ROCHESTER, NY	10/31/17 13:05	11/03/17
L1740405-02	TP-05	SOIL	835 AB ROCHESTER, NY	11/01/17 11:50	11/03/17
L1740405-03	BLIND DUPLICATE	SOIL	835 AB ROCHESTER, NY	10/31/17 00:00	11/03/17

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

### 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.

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**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

### 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

L1740405-01, -02 and -03: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1060209-3/-4 MS/MSD recoveries, performed on L1740405-01, are outside the acceptance criteria for mercury (154%/141%). A post digestion spike was performed and was within acceptance criteria.

The WG1060640-3/-4 MS/MSD recoveries, performed on L1740405-01, is outside the acceptance criteria for antimony (MS 61%), lead (48%/66%) and zinc (MSD 74%). A post digestion spike was performed and was within acceptance criteria.

The WG1060640-3/-4 MS/MSD recoveries for aluminum (MS 460%), calcium (449%/2470%), iron (0%/0%), magnesium (230%/535%) and manganese (MSD 130%), performed on L1740405-01, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1060640-3/-4 MS/MSD RPDs, performed on L1740405-01, are above the acceptance criteria for calcium (56%) and magnesium (27%).

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

Authorized Signature:

 Melissa Cripps

Title: Technical Director/Representative

Date: 11/14/17

# ORGANICS

# VOLATILES



**Project Name:** BULLSHEAD PLAZA**Lab Number:** L1740405**Project Number:** 2172414**Report Date:** 11/14/17**SAMPLE RESULTS**

Lab ID: L1740405-01  
 Client ID: TP-03  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 10/31/17 13:05  
 Date Received: 11/03/17  
 Field Prep: Not Specified

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 11/13/17 17:28  
 Analyst: JC  
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	12	2.0	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.32	1
Chloroform	ND		ug/kg	1.8	0.44	1
Carbon tetrachloride	ND		ug/kg	1.2	0.41	1
1,2-Dichloropropane	ND		ug/kg	4.1	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.21	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.37	1
Tetrachloroethene	ND		ug/kg	1.2	0.36	1
Chlorobenzene	ND		ug/kg	1.2	0.41	1
Trichlorofluoromethane	ND		ug/kg	5.9	0.49	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.41	1
Bromodichloromethane	ND		ug/kg	1.2	0.36	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.25	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.27	1
Bromoform	ND		ug/kg	4.7	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.35	1
Benzene	ND		ug/kg	1.2	0.23	1
Toluene	0.29	J	ug/kg	1.8	0.23	1
Ethylbenzene	ND		ug/kg	1.2	0.20	1
Chloromethane	ND		ug/kg	5.9	0.52	1
Bromomethane	ND		ug/kg	2.4	0.40	1
Vinyl chloride	ND		ug/kg	2.4	0.37	1
Chloroethane	ND		ug/kg	2.4	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.44	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.28	1
Trichloroethene	ND		ug/kg	1.2	0.36	1
1,2-Dichlorobenzene	ND		ug/kg	5.9	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	5.9	0.26	1
1,4-Dichlorobenzene	ND		ug/kg	5.9	0.22	1

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

**Lab ID:** L1740405-01  
**Client ID:** TP-03  
**Sample Location:** 835 AB ROCHESTER, NY

**Date Collected:** 10/31/17 13:05  
**Date Received:** 11/03/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	2.4	0.18	1
p/m-Xylene	ND		ug/kg	2.4	0.42	1
o-Xylene	ND		ug/kg	2.4	0.40	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.40	1
Styrene	ND		ug/kg	2.4	0.48	1
Dichlorodifluoromethane	ND		ug/kg	12	0.59	1
Acetone	ND		ug/kg	12	2.7	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.82	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.29	1
2-Hexanone	ND		ug/kg	12	0.79	1
Bromochloromethane	ND		ug/kg	5.9	0.42	1
1,2-Dibromoethane	ND		ug/kg	4.7	0.24	1
n-Butylbenzene	ND		ug/kg	1.2	0.27	1
sec-Butylbenzene	ND		ug/kg	1.2	0.26	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.9	0.47	1
Isopropylbenzene	ND		ug/kg	1.2	0.23	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.24	1
Naphthalene	ND		ug/kg	5.9	0.16	1
n-Propylbenzene	ND		ug/kg	1.2	0.25	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.9	0.30	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.9	0.25	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.9	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.9	0.22	1
Methyl Acetate	ND		ug/kg	24	0.55	1
Cyclohexane	ND		ug/kg	24	0.51	1
1,4-Dioxane	ND		ug/kg	47	17.	1
Freon-113	ND		ug/kg	24	0.61	1
Methyl cyclohexane	ND		ug/kg	4.7	0.28	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	96		70-130

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-02  
 Client ID: TP-05  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 11/01/17 11:50  
 Date Received: 11/03/17  
 Field Prep: Not Specified

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 11/13/17 16:37  
 Analyst: JC  
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	9.5	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.26	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.95	0.33	1
1,2-Dichloropropane	ND		ug/kg	3.3	0.22	1
Dibromochloromethane	ND		ug/kg	0.95	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.30	1
Tetrachloroethene	15		ug/kg	0.95	0.28	1
Chlorobenzene	ND		ug/kg	0.95	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.39	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.95	0.33	1
Bromodichloromethane	ND		ug/kg	0.95	0.29	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.95	0.22	1
Bromoform	ND		ug/kg	3.8	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.95	0.28	1
Benzene	ND		ug/kg	0.95	0.18	1
Toluene	0.19	J	ug/kg	1.4	0.18	1
Ethylbenzene	ND		ug/kg	0.95	0.16	1
Chloromethane	ND		ug/kg	4.7	0.41	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.30	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.23	1
Trichloroethene	ND		ug/kg	0.95	0.28	1
1,2-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.7	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	4.7	0.17	1



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

**Lab ID:** L1740405-02  
**Client ID:** TP-05  
**Sample Location:** 835 AB ROCHESTER, NY

**Date Collected:** 11/01/17 11:50  
**Date Received:** 11/03/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.9	0.14	1
p/m-Xylene	ND		ug/kg	1.9	0.33	1
o-Xylene	ND		ug/kg	1.9	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.32	1
Styrene	ND		ug/kg	1.9	0.38	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.47	1
Acetone	2.6	J	ug/kg	9.5	2.2	1
Carbon disulfide	ND		ug/kg	9.5	1.0	1
2-Butanone	ND		ug/kg	9.5	0.65	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	0.23	1
2-Hexanone	ND		ug/kg	9.5	0.63	1
Bromochloromethane	ND		ug/kg	4.7	0.34	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.19	1
n-Butylbenzene	ND		ug/kg	0.95	0.22	1
sec-Butylbenzene	ND		ug/kg	0.95	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	0.38	1
Isopropylbenzene	ND		ug/kg	0.95	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.19	1
Naphthalene	0.70	J	ug/kg	4.7	0.13	1
n-Propylbenzene	ND		ug/kg	0.95	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.7	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.7	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.7	0.15	1
1,2,4-Trimethylbenzene	0.22	J	ug/kg	4.7	0.18	1
Methyl Acetate	ND		ug/kg	19	0.44	1
Cyclohexane	ND		ug/kg	19	0.41	1
1,4-Dioxane	ND		ug/kg	38	14.	1
Freon-113	ND		ug/kg	19	0.49	1
Methyl cyclohexane	ND		ug/kg	3.8	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

**Lab ID:** L1740405-03  
**Client ID:** BLIND DUPLICATE  
**Sample Location:** 835 AB ROCHESTER, NY

**Date Collected:** 10/31/17 00:00  
**Date Received:** 11/03/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/13/17 17:03  
**Analyst:** JC  
**Percent Solids:** 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	10	1.7	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.28	1
Chloroform	ND		ug/kg	1.6	0.39	1
Carbon tetrachloride	ND		ug/kg	1.0	0.36	1
1,2-Dichloropropane	ND		ug/kg	3.7	0.24	1
Dibromochloromethane	ND		ug/kg	1.0	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.0	0.32	1
Chlorobenzene	ND		ug/kg	1.0	0.36	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.37	1
Bromodichloromethane	ND		ug/kg	1.0	0.32	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.24	1
Bromoform	ND		ug/kg	4.2	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.31	1
Benzene	ND		ug/kg	1.0	0.20	1
Toluene	0.22	J	ug/kg	1.6	0.20	1
Ethylbenzene	ND		ug/kg	1.0	0.18	1
Chloromethane	ND		ug/kg	5.2	0.46	1
Bromomethane	ND		ug/kg	2.1	0.35	1
Vinyl chloride	ND		ug/kg	2.1	0.33	1
Chloroethane	ND		ug/kg	2.1	0.33	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.39	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.25	1
Trichloroethene	ND		ug/kg	1.0	0.32	1
1,2-Dichlorobenzene	ND		ug/kg	5.2	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	5.2	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	5.2	0.19	1

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

**Lab ID:** L1740405-03  
**Client ID:** BLIND DUPLICATE  
**Sample Location:** 835 AB ROCHESTER, NY

**Date Collected:** 10/31/17 00:00  
**Date Received:** 11/03/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	2.1	0.16	1
p/m-Xylene	ND		ug/kg	2.1	0.37	1
o-Xylene	ND		ug/kg	2.1	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.36	1
Styrene	ND		ug/kg	2.1	0.42	1
Dichlorodifluoromethane	ND		ug/kg	10	0.52	1
Acetone	ND		ug/kg	10	2.4	1
Carbon disulfide	ND		ug/kg	10	1.2	1
2-Butanone	ND		ug/kg	10	0.72	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.26	1
2-Hexanone	ND		ug/kg	10	0.70	1
Bromochloromethane	ND		ug/kg	5.2	0.37	1
1,2-Dibromoethane	ND		ug/kg	4.2	0.21	1
n-Butylbenzene	ND		ug/kg	1.0	0.24	1
sec-Butylbenzene	ND		ug/kg	1.0	0.23	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.2	0.41	1
Isopropylbenzene	ND		ug/kg	1.0	0.20	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.21	1
Naphthalene	ND		ug/kg	5.2	0.14	1
n-Propylbenzene	ND		ug/kg	1.0	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.2	0.26	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.2	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.2	0.17	1
1,2,4-Trimethylbenzene	0.29	J	ug/kg	5.2	0.19	1
Methyl Acetate	ND		ug/kg	21	0.48	1
Cyclohexane	ND		ug/kg	21	0.45	1
1,4-Dioxane	ND		ug/kg	42	15.	1
Freon-113	ND		ug/kg	21	0.54	1
Methyl cyclohexane	ND		ug/kg	4.2	0.25	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	98		70-130



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/13/17 08:47  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-03 Batch: WG1062428-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	0.74	J	ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/13/17 08:47  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-03 Batch: WG1062428-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	0.16	J	ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 11/13/17 08:47  
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-03 Batch: WG1062428-5					
Methyl cyclohexane	ND		ug/kg	4.0	0.24

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/13/17 08:47  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1062717-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	0.53	J	ug/kg	5.0	0.44
Bromomethane	1.4	J	ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/13/17 08:47  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1062717-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/13/17 08:47  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1062717-5					
Methyl cyclohexane	ND		ug/kg	4.0	0.24

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	90		70-130



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG1062428-3 WG1062428-4								
Methylene chloride	86		84		70-130	2		30
1,1-Dichloroethane	121		119		70-130	2		30
Chloroform	109		106		70-130	3		30
Carbon tetrachloride	115		114		70-130	1		30
1,2-Dichloropropane	123		121		70-130	2		30
Dibromochloromethane	101		102		70-130	1		30
1,1,2-Trichloroethane	99		100		70-130	1		30
Tetrachloroethene	105		104		70-130	1		30
Chlorobenzene	100		99		70-130	1		30
Trichlorofluoromethane	99		96		70-139	3		30
1,2-Dichloroethane	119		119		70-130	0		30
1,1,1-Trichloroethane	113		109		70-130	4		30
Bromodichloromethane	107		107		70-130	0		30
trans-1,3-Dichloropropene	106		106		70-130	0		30
cis-1,3-Dichloropropene	113		113		70-130	0		30
Bromoform	99		100		70-130	1		30
1,1,2,2-Tetrachloroethane	89		90		70-130	1		30
Benzene	105		103		70-130	2		30
Toluene	94		94		70-130	0		30
Ethylbenzene	99		97		70-130	2		30
Chloromethane	128		122		52-130	5		30
Bromomethane	99		96		57-147	3		30
Vinyl chloride	102		96		67-130	6		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG1062428-3 WG1062428-4								
Chloroethane	103		98		50-151	5		30
1,1-Dichloroethene	106		103		65-135	3		30
trans-1,2-Dichloroethene	108		105		70-130	3		30
Trichloroethene	108		108		70-130	0		30
1,2-Dichlorobenzene	94		93		70-130	1		30
1,3-Dichlorobenzene	95		94		70-130	1		30
1,4-Dichlorobenzene	93		93		70-130	0		30
Methyl tert butyl ether	109		110		66-130	1		30
p/m-Xylene	101		100		70-130	1		30
o-Xylene	104		103		70-130	1		30
cis-1,2-Dichloroethene	108		107		70-130	1		30
Styrene	98		98		70-130	0		30
Dichlorodifluoromethane	105		102		30-146	3		30
Acetone	122		121		54-140	1		30
Carbon disulfide	104		99		59-130	5		30
2-Butanone	117		116		70-130	1		30
4-Methyl-2-pentanone	106		109		70-130	3		30
2-Hexanone	107		112		70-130	5		30
Bromochloromethane	114		113		70-130	1		30
1,2-Dibromoethane	98		100		70-130	2		30
n-Butylbenzene	95		93		70-130	2		30
sec-Butylbenzene	95		94		70-130	1		30
1,2-Dibromo-3-chloropropane	88		92		68-130	4		30

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-03 Batch: WG1062428-3 WG1062428-4								
Isopropylbenzene	95		93		70-130	2		30
p-Isopropyltoluene	96		94		70-130	2		30
Naphthalene	93		96		70-130	3		30
n-Propylbenzene	94		91		70-130	3		30
1,2,3-Trichlorobenzene	101		102		70-130	1		30
1,2,4-Trichlorobenzene	102		102		70-130	0		30
1,3,5-Trimethylbenzene	95		93		70-130	2		30
1,2,4-Trimethylbenzene	94		93		70-130	1		30
Methyl Acetate	125		125		51-146	0		30
Cyclohexane	136		132		59-142	3		30
1,4-Dioxane	96		98		65-136	2		30
Freon-113	110		107		50-139	3		30
Methyl cyclohexane	112		109		70-130	3		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	103		103		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	97		96		70-130
Dibromofluoromethane	104		105		70-130





## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

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: WG1062717-3 WG1062717-4								
Methylene chloride	90		90		70-130	0		30
1,1-Dichloroethane	92		93		70-130	1		30
Chloroform	92		93		70-130	1		30
Carbon tetrachloride	90		90		70-130	0		30
1,2-Dichloropropane	92		93		70-130	1		30
Dibromochloromethane	83		84		70-130	1		30
1,1,2-Trichloroethane	97		98		70-130	1		30
Tetrachloroethene	91		92		70-130	1		30
Chlorobenzene	92		92		70-130	0		30
Trichlorofluoromethane	93		95		70-139	2		30
1,2-Dichloroethane	94		96		70-130	2		30
1,1,1-Trichloroethane	92		93		70-130	1		30
Bromodichloromethane	90		94		70-130	4		30
trans-1,3-Dichloropropene	91		91		70-130	0		30
cis-1,3-Dichloropropene	86		88		70-130	2		30
Bromoform	76		75		70-130	1		30
1,1,2,2-Tetrachloroethane	96		97		70-130	1		30
Benzene	90		92		70-130	2		30
Toluene	92		92		70-130	0		30
Ethylbenzene	93		94		70-130	1		30
Chloromethane	95		96		52-130	1		30
Bromomethane	101		98		57-147	3		30
Vinyl chloride	90		92		67-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

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: WG1062717-3 WG1062717-4								
Chloroethane	89		92		50-151	3		30
1,1-Dichloroethene	91		91		65-135	0		30
trans-1,2-Dichloroethene	91		92		70-130	1		30
Trichloroethene	90		92		70-130	2		30
1,2-Dichlorobenzene	93		94		70-130	1		30
1,3-Dichlorobenzene	93		94		70-130	1		30
1,4-Dichlorobenzene	93		92		70-130	1		30
Methyl tert butyl ether	97		98		66-130	1		30
p/m-Xylene	94		94		70-130	0		30
o-Xylene	94		95		70-130	1		30
cis-1,2-Dichloroethene	92		93		70-130	1		30
Styrene	90		92		70-130	2		30
Dichlorodifluoromethane	93		93		30-146	0		30
Acetone	95		95		54-140	0		30
Carbon disulfide	85		85		59-130	0		30
2-Butanone	93		95		70-130	2		30
4-Methyl-2-pentanone	87		90		70-130	3		30
2-Hexanone	85		84		70-130	1		30
Bromochloromethane	98		98		70-130	0		30
1,2-Dibromoethane	96		99		70-130	3		30
n-Butylbenzene	97		97		70-130	0		30
sec-Butylbenzene	94		95		70-130	1		30
1,2-Dibromo-3-chloropropane	86		86		68-130	0		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

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: WG1062717-3 WG1062717-4								
Isopropylbenzene	93		93		70-130	0		30
p-Isopropyltoluene	95		94		70-130	1		30
Naphthalene	96		96		70-130	0		30
n-Propylbenzene	93		93		70-130	0		30
1,2,3-Trichlorobenzene	95		95		70-130	0		30
1,2,4-Trichlorobenzene	94		95		70-130	1		30
1,3,5-Trimethylbenzene	93		93		70-130	0		30
1,2,4-Trimethylbenzene	95		95		70-130	0		30
Methyl Acetate	90		88		51-146	2		30
Cyclohexane	94		95		59-142	1		30
1,4-Dioxane	82		82		65-136	0		30
Freon-113	94		94		50-139	0		30
Methyl cyclohexane	94		94		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		99		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	100		100		70-130
Dibromofluoromethane	99		100		70-130



## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA

**Lab Number:** L1740405

**Project Number:** 2172414

**Report Date:** 11/14/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1062717-6 WG1062717-7 QC Sample: L1740405-01 Client ID: TP-03												
Methylene chloride	ND	104	76	73		83	76		70-130	9		30
1,1-Dichloroethane	ND	104	89	86		98	90		70-130	10		30
Chloroform	ND	104	83	80		91	83		70-130	10		30
Carbon tetrachloride	ND	104	89	85		100	92		70-130	13		30
1,2-Dichloropropane	ND	104	83	80		91	83		70-130	9		30
Dibromochloromethane	ND	104	62	59	Q	67	61	Q	70-130	8		30
1,1,2-Trichloroethane	ND	104	74	71		80	72		70-130	8		30
Tetrachloroethene	ND	104	60	57	Q	70	64	Q	70-130	16		30
Chlorobenzene	ND	104	56	54	Q	62	57	Q	70-130	12		30
Trichlorofluoromethane	ND	104	100	96		110	103		70-139	12		30
1,2-Dichloroethane	ND	104	77	74		84	76		70-130	8		30
1,1,1-Trichloroethane	ND	104	91	87		100	92		70-130	11		30
Bromodichloromethane	ND	104	80	77		88	81		70-130	9		30
trans-1,3-Dichloropropene	ND	104	56	54	Q	63	57	Q	70-130	11		30
cis-1,3-Dichloropropene	ND	104	63	60	Q	70	64	Q	70-130	11		30
Bromoform	ND	104	50	48	Q	53	48	Q	70-130	6		30
1,1,2,2-Tetrachloroethane	ND	104	64	62	Q	67	61	Q	70-130	4		30
Benzene	ND	104	81	78		90	82		70-130	10		30
Toluene	0.29J	104	71	68	Q	80	73		70-130	12		30
Ethylbenzene	ND	104	63	61	Q	73	66	Q	70-130	14		30
Chloromethane	ND	104	97	94		110	97		52-130	9		30
Bromomethane	ND	104	81	77		95	87		57-147	17		30
Vinyl chloride	ND	104	93	89		110	98		67-130	15		30
Chloroethane	ND	104	89	86		110	97		50-151	18		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA

**Lab Number:** L1740405

**Project Number:** 2172414

**Report Date:** 11/14/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1062717-6 WG1062717-7 QC Sample: L1740405-01 Client ID: TP-03												
1,1-Dichloroethene	ND	104	87	84		99	90		65-135	13		30
trans-1,2-Dichloroethene	ND	104	71	68	Q	82	75		70-130	15		30
Trichloroethene	ND	104	72	69	Q	82	75		70-130	13		30
1,2-Dichlorobenzene	ND	104	33	32	Q	37	33	Q	70-130	10		30
1,3-Dichlorobenzene	ND	104	33	31	Q	37	34	Q	70-130	13		30
1,4-Dichlorobenzene	ND	104	31	30	Q	35	32	Q	70-130	13		30
Methyl tert butyl ether	ND	104	85	81		92	84		66-130	8		30
p/m-Xylene	ND	208	120	58	Q	140	64	Q	70-130	15		30
o-Xylene	ND	208	120	59	Q	140	64	Q	70-130	13		30
cis-1,2-Dichloroethene	ND	104	72	70		81	74		70-130	11		30
Styrene	ND	208	100	50	Q	120	52	Q	70-130	11		30
Dichlorodifluoromethane	ND	104	100	100		120	105		30-146	10		30
Acetone	ND	104	90	87		98	90		54-140	9		30
Carbon disulfide	ND	104	65	62		79	72		59-130	20		30
2-Butanone	ND	104	81	78		89	81		70-130	10		30
4-Methyl-2-pentanone	ND	104	73	70		81	74		70-130	10		30
2-Hexanone	ND	104	67	64	Q	74	67	Q	70-130	10		30
Bromochloromethane	ND	104	73	70		80	73		70-130	10		30
1,2-Dibromoethane	ND	104	64	62	Q	70	64	Q	70-130	8		30
n-Butylbenzene	ND	104	28	27	Q	35	32	Q	70-130	22		30
sec-Butylbenzene	ND	104	39	37	Q	47	43	Q	70-130	19		30
1,2-Dibromo-3-chloropropane	ND	104	47	45	Q	49	44	Q	68-130	4		30
Isopropylbenzene	ND	104	55	53	Q	65	59	Q	70-130	17		30
p-Isopropyltoluene	ND	104	37	36	Q	45	41	Q	70-130	19		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA

**Lab Number:** L1740405

**Project Number:** 2172414

**Report Date:** 11/14/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1062717-6 WG1062717-7 QC Sample: L1740405-01 Client ID: TP-03												
Naphthalene	ND	104	25	24	Q	26	24	Q	70-130	4		30
n-Propylbenzene	ND	104	47	45	Q	56	51	Q	70-130	18		30
1,2,3-Trichlorobenzene	ND	104	14	14	Q	15	14	Q	70-130	6		30
1,2,4-Trichlorobenzene	ND	104	15	14	Q	16	14	Q	70-130	9		30
1,3,5-Trimethylbenzene	ND	104	46	44	Q	54	50	Q	70-130	17		30
1,2,4-Trimethylbenzene	ND	104	45	44	Q	53	48	Q	70-130	16		30
Methyl Acetate	ND	104	110	105		120	105		51-146	5		30
Cyclohexane	ND	104	80	77		94	86		59-142	17		30
1,4-Dioxane	ND	5200	5700	109		6200	112		65-136	8		30
Freon-113	ND	104	90	86		100	92		50-139	12		30
Methyl cyclohexane	ND	104	56	54	Q	68	62	Q	70-130	20		30

<i>Surrogate</i>	<i>MS % Recovery</i>	<i>Qualifier</i>	<i>MSD % Recovery</i>	<i>Qualifier</i>	<i>Acceptance Criteria</i>
1,2-Dichloroethane-d4	105		105		70-130
4-Bromofluorobenzene	101		103		70-130
Dibromofluoromethane	104		104		70-130
Toluene-d8	99		99		70-130



# SEMIVOLATILES

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-01  
 Client ID: TP-03  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 10/31/17 13:05  
 Date Received: 11/03/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/12/17 19:14

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 11/13/17 16:51  
 Analyst: CB  
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	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	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	95	J	ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	53	J	ug/kg	120	22.	1
Benzo(a)pyrene	54	J	ug/kg	150	47.	1
Benzo(b)fluoranthene	74	J	ug/kg	120	32.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

## SAMPLE RESULTS

Lab ID: L1740405-01  
 Client ID: TP-03  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 10/31/17 13:05  
 Date Received: 11/03/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	52	J	ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	40	J	ug/kg	150	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	39	J	ug/kg	120	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	40	J	ug/kg	150	27.	1
Pyrene	80	J	ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	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	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	93.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	ND		ug/kg	190	19.	1
Atrazine	ND		ug/kg	150	68.	1
Benzaldehyde	ND		ug/kg	250	52.	1
Caprolactam	ND		ug/kg	190	59.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1



**Project Name:** BULLSHEAD PLAZA**Lab Number:** L1740405**Project Number:** 2172414**Report Date:** 11/14/17**SAMPLE RESULTS**

Lab ID: L1740405-01

Date Collected: 10/31/17 13:05

Client ID: TP-03

Date Received: 11/03/17

Sample Location: 835 AB ROCHESTER, NY

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	92		25-120
Phenol-d6	96		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	92		10-136
4-Terphenyl-d14	68		18-120

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-02  
 Client ID: TP-05  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 11/01/17 11:50  
 Date Received: 11/03/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/12/17 19:14

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 11/13/17 17:19  
 Analyst: CB  
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	770		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	8800	E	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	160	24.	1
Naphthalene	350		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	63.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	62.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	4300		ug/kg	110	21.	1
Benzo(a)pyrene	3800		ug/kg	150	45.	1
Benzo(b)fluoranthene	4800		ug/kg	110	31.	1
Benzo(k)fluoranthene	1400		ug/kg	110	29.	1

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

## SAMPLE RESULTS

Lab ID: L1740405-02  
 Client ID: TP-05  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 11/01/17 11:50  
 Date Received: 11/03/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	3800		ug/kg	110	19.	1
Acenaphthylene	110	J	ug/kg	150	28.	1
Anthracene	1900		ug/kg	110	36.	1
Benzo(ghi)perylene	2000		ug/kg	150	22.	1
Fluorene	750		ug/kg	180	18.	1
Phenanthrene	7200		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	540		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	2300		ug/kg	150	26.	1
Pyrene	7800	E	ug/kg	110	18.	1
Biphenyl	63	J	ug/kg	420	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	420		ug/kg	180	17.	1
2-Methylnaphthalene	220		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	160	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	85.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Carbazole	740		ug/kg	180	18.	1
Atrazine	ND		ug/kg	150	64.	1
Benzaldehyde	ND		ug/kg	240	50.	1
Caprolactam	ND		ug/kg	180	56.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	37.	1



**Project Name:** BULLSHEAD PLAZA**Lab Number:** L1740405**Project Number:** 2172414**Report Date:** 11/14/17**SAMPLE RESULTS**

Lab ID: L1740405-02

Date Collected: 11/01/17 11:50

Client ID: TP-05

Date Received: 11/03/17

Sample Location: 835 AB ROCHESTER, NY

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	64		18-120

**Project Name:** BULLSHEAD PLAZA**Lab Number:** L1740405**Project Number:** 2172414**Report Date:** 11/14/17**SAMPLE RESULTS**

Lab ID: L1740405-02 D  
 Client ID: TP-05  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 11/01/17 11:50  
 Date Received: 11/03/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/12/17 19:14

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 11/14/17 14:23  
 Analyst: CB  
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	10000		ug/kg	440	84.	4
Pyrene	9100		ug/kg	440	73.	4

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-03  
 Client ID: BLIND DUPLICATE  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 10/31/17 00:00  
 Date Received: 11/03/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/12/17 19:14

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 11/13/17 17:48  
 Analyst: CB  
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	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	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	78	J	ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	180	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	29.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	43	J	ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	150	47.	1
Benzo(b)fluoranthene	50	J	ug/kg	120	32.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1



Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

## SAMPLE RESULTS

Lab ID: L1740405-03  
 Client ID: BLIND DUPLICATE  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 10/31/17 00:00  
 Date Received: 11/03/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	38	J	ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	27	J	ug/kg	150	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	48	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	29	J	ug/kg	150	27.	1
Pyrene	64	J	ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	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	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	93.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	ND		ug/kg	190	19.	1
Atrazine	ND		ug/kg	150	68.	1
Benzaldehyde	ND		ug/kg	260	52.	1
Caprolactam	ND		ug/kg	190	59.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-03  
 Client ID: BLIND DUPLICATE  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 10/31/17 00:00  
 Date Received: 11/03/17  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	105		25-120
Phenol-d6	110		10-120
Nitrobenzene-d5	103		23-120
2-Fluorobiphenyl	84		30-120
2,4,6-Tribromophenol	96		10-136
4-Terphenyl-d14	59		18-120

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/12/17 22:47  
**Analyst:** RC

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/12/17 08:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1062197-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
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	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
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	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/12/17 22:47  
**Analyst:** RC

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/12/17 08:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1062197-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	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	15.
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	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/12/17 22:47  
**Analyst:** RC

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/12/17 08:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1062197-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Tentatively Identified Compounds

No Tentatively Identified Compounds      ND      ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	71		18-120

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1062197-2 WG1062197-3								
Acenaphthene	70		69		31-137	1		50
Hexachlorobenzene	67		68		40-140	1		50
Bis(2-chloroethyl)ether	63		65		40-140	3		50
2-Chloronaphthalene	67		69		40-140	3		50
3,3'-Dichlorobenzidine	44		44		40-140	0		50
2,4-Dinitrotoluene	66		68		40-132	3		50
2,6-Dinitrotoluene	70		75		40-140	7		50
Fluoranthene	70		69		40-140	1		50
4-Chlorophenyl phenyl ether	69		69		40-140	0		50
4-Bromophenyl phenyl ether	63		64		40-140	2		50
Bis(2-chloroisopropyl)ether	65		67		40-140	3		50
Bis(2-chloroethoxy)methane	65		68		40-117	5		50
Hexachlorobutadiene	72		70		40-140	3		50
Hexachlorocyclopentadiene	73		74		40-140	1		50
Hexachloroethane	68		68		40-140	0		50
Isophorone	63		68		40-140	8		50
Naphthalene	69		68		40-140	1		50
Nitrobenzene	64		69		40-140	8		50
NDPA/DPA	67		68		36-157	1		50
n-Nitrosodi-n-propylamine	62		66		32-121	6		50
Bis(2-ethylhexyl)phthalate	72		72		40-140	0		50
Butyl benzyl phthalate	69		69		40-140	0		50
Di-n-butylphthalate	71		71		40-140	0		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1062197-2 WG1062197-3								
Di-n-octylphthalate	70		69		40-140	1		50
Diethyl phthalate	68		69		40-140	1		50
Dimethyl phthalate	63		66		40-140	5		50
Benzo(a)anthracene	65		66		40-140	2		50
Benzo(a)pyrene	67		65		40-140	3		50
Benzo(b)fluoranthene	66		64		40-140	3		50
Benzo(k)fluoranthene	74		70		40-140	6		50
Chrysene	73		72		40-140	1		50
Acenaphthylene	66		68		40-140	3		50
Anthracene	71		71		40-140	0		50
Benzo(ghi)perylene	72		64		40-140	12		50
Fluorene	69		69		40-140	0		50
Phenanthrene	70		69		40-140	1		50
Dibenzo(a,h)anthracene	68		64		40-140	6		50
Indeno(1,2,3-cd)pyrene	66		60		40-140	10		50
Pyrene	68		67		35-142	1		50
Biphenyl	65		68		54-104	5		50
4-Chloroaniline	50		50		40-140	0		50
2-Nitroaniline	68		73		47-134	7		50
3-Nitroaniline	57		53		26-129	7		50
4-Nitroaniline	62		64		41-125	3		50
Dibenzofuran	70		69		40-140	1		50
2-Methylnaphthalene	64		66		40-140	3		50



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1062197-2 WG1062197-3								
1,2,4,5-Tetrachlorobenzene	66		66		40-117	0		50
Acetophenone	64		66		14-144	3		50
2,4,6-Trichlorophenol	63		67		30-130	6		50
p-Chloro-m-cresol	66		71		26-103	7		50
2-Chlorophenol	67		71		25-102	6		50
2,4-Dichlorophenol	66		72		30-130	9		50
2,4-Dimethylphenol	67		74		30-130	10		50
2-Nitrophenol	67		75		30-130	11		50
4-Nitrophenol	58		62		11-114	7		50
2,4-Dinitrophenol	29		35		4-130	19		50
4,6-Dinitro-o-cresol	56		61		10-130	9		50
Pentachlorophenol	53		58		17-109	9		50
Phenol	64		68		26-90	6		50
2-Methylphenol	65		68		30-130	5		50
3-Methylphenol/4-Methylphenol	62		65		30-130	5		50
2,4,5-Trichlorophenol	65		72		30-130	10		50
Carbazole	69		69		54-128	0		50
Atrazine	64		66		40-140	3		50
Benzaldehyde	55		54		40-140	2		50
Caprolactam	62		65		15-130	5		50
2,3,4,6-Tetrachlorophenol	71		71		40-140	0		50

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1062197-2 WG1062197-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	63		64		25-120
Phenol-d6	61		66		10-120
Nitrobenzene-d5	61		64		23-120
2-Fluorobiphenyl	64		65		30-120
2,4,6-Tribromophenol	65		65		10-136
4-Terphenyl-d14	61		62		18-120

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA

**Lab Number:** L1740405

**Project Number:** 2172414

**Report Date:** 11/14/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1062197-4 WG1062197-5 QC Sample: L1740405-01 Client ID: TP-03												
Acenaphthene	ND	1540	1200	78		1200	77		31-137	0		50
Hexachlorobenzene	ND	1540	1400	91		1300	83		40-140	7		50
Bis(2-chloroethyl)ether	ND	1540	1300	84		1400	90		40-140	7		50
2-Chloronaphthalene	ND	1540	1300	84		1300	83		40-140	0		50
3,3'-Dichlorobenzidine	ND	1540	890	58		890	57		40-140	0		50
2,4-Dinitrotoluene	ND	1540	1500	97		1500	96		40-132	0		50
2,6-Dinitrotoluene	ND	1540	1500	97		1400	90		40-140	7		50
Fluoranthene	95.J	1540	1500	97		1600	100		40-140	6		50
4-Chlorophenyl phenyl ether	ND	1540	1300	84		1300	83		40-140	0		50
4-Bromophenyl phenyl ether	ND	1540	1300	84		1300	83		40-140	0		50
Bis(2-chloroisopropyl)ether	ND	1540	1400	91		1400	90		40-140	0		50
Bis(2-chloroethoxy)methane	ND	1540	1300	84		1400	90		40-117	7		50
Hexachlorobutadiene	ND	1540	1300	84		1300	83		40-140	0		50
Hexachlorocyclopentadiene	ND	1540	1100	71		970	62		40-140	13		50
Hexachloroethane	ND	1540	1300	84		1400	90		40-140	7		50
Isophorone	ND	1540	1300	84		1400	90		40-140	7		50
Naphthalene	ND	1540	1300	84		1300	83		40-140	0		50
Nitrobenzene	ND	1540	1400	91		1400	90		40-140	0		50
NDPA/DPA	ND	1540	1300	84		1300	83		36-157	0		50
n-Nitrosodi-n-propylamine	ND	1540	1400	91		1500	96		32-121	7		50
Bis(2-ethylhexyl)phthalate	ND	1540	1600	100		1600	100		40-140	0		50
Butyl benzyl phthalate	ND	1540	1600	100		1600	100		40-140	0		50
Di-n-butylphthalate	ND	1540	1500	97		1400	90		40-140	7		50

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA

**Lab Number:** L1740405

**Project Number:** 2172414

**Report Date:** 11/14/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1062197-4 WG1062197-5 QC Sample: L1740405-01 Client ID: TP-03												
Di-n-octylphthalate	ND	1540	1600	100		1600	100		40-140	0		50
Diethyl phthalate	ND	1540	1400	91		1300	83		40-140	7		50
Dimethyl phthalate	ND	1540	1400	91		1300	83		40-140	7		50
Benzo(a)anthracene	53.J	1540	1400	91		1400	90		40-140	0		50
Benzo(a)pyrene	54.J	1540	1500	97		1500	96		40-140	0		50
Benzo(b)fluoranthene	74.J	1540	1500	97		1500	96		40-140	0		50
Benzo(k)fluoranthene	ND	1540	1400	91		1400	90		40-140	0		50
Chrysene	52.J	1540	1300	84		1400	90		40-140	7		50
Acenaphthylene	ND	1540	1300	84		1300	83		40-140	0		50
Anthracene	ND	1540	1400	91		1300	83		40-140	7		50
Benzo(ghi)perylene	40.J	1540	1400	91		1400	90		40-140	0		50
Fluorene	ND	1540	1300	84		1200	77		40-140	8		50
Phenanthrene	39.J	1540	1300	84		1400	90		40-140	7		50
Dibenzo(a,h)anthracene	ND	1540	1300	84		1300	83		40-140	0		50
Indeno(1,2,3-cd)pyrene	40.J	1540	1400	91		1400	90		40-140	0		50
Pyrene	80.J	1540	1400	91		1500	96		35-142	7		50
Biphenyl	ND	1540	1300	84		1300	83		54-104	0		50
4-Chloroaniline	ND	1540	790	51		790	51		40-140	0		50
2-Nitroaniline	ND	1540	1600	100		1500	96		47-134	6		50
3-Nitroaniline	ND	1540	1200	78		1200	77		26-129	0		50
4-Nitroaniline	ND	1540	1300	84		1300	83		41-125	0		50
Dibenzofuran	ND	1540	1300	84		1300	83		40-140	0		50
2-Methylnaphthalene	ND	1540	1300	84		1300	83		40-140	0		50



## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA

**Lab Number:** L1740405

**Project Number:** 2172414

**Report Date:** 11/14/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1062197-4 WG1062197-5 QC Sample: L1740405-01 Client ID: TP-03												
1,2,4,5-Tetrachlorobenzene	ND	1540	1400	91		1300	83		40-117	7		50
Acetophenone	ND	1540	1400	91		1500	96		14-144	7		50
2,4,6-Trichlorophenol	ND	1540	1500	97		1500	96		30-130	0		50
p-Chloro-m-cresol	ND	1540	1500	97		1400	90		26-103	7		50
2-Chlorophenol	ND	1540	1400	91		1600	100		25-102	13		50
2,4-Dichlorophenol	ND	1540	1500	97		1500	96		30-130	0		50
2,4-Dimethylphenol	ND	1540	1500	97		1500	96		30-130	0		50
2-Nitrophenol	ND	1540	1500	97		1600	100		30-130	6		50
4-Nitrophenol	ND	1540	1500	97		1400	90		11-114	7		50
2,4-Dinitrophenol	ND	1540	620J	40		470J	30		4-130	28		50
4,6-Dinitro-o-cresol	ND	1540	1300	84		1200	77		10-130	8		50
Pentachlorophenol	ND	1540	1500	97		1400	90		17-109	7		50
Phenol	ND	1540	1400	91	Q	1500	96	Q	26-90	7		50
2-Methylphenol	ND	1540	1400	91		1500	96		30-130.	7		50
3-Methylphenol/4-Methylphenol	ND	1540	1400	91		1400	90		30-130	0		50
2,4,5-Trichlorophenol	ND	1540	1600	100		1500	96		30-130	6		50
Carbazole	ND	1540	1400	91		1400	90		54-128	0		50
Atrazine	ND	1540	1400	91		1300	83		40-140	7		50
Benzaldehyde	ND	1540	1200	78		1300	83		40-140	8		50
Caprolactam	ND	1540	1600	100		1500	96		15-130	6		50
2,3,4,6-Tetrachlorophenol	ND	1540	1500	97		1400	90		40-140	7		50

**Matrix Spike Analysis****Batch Quality Control****Project Name:** BULLSHEAD PLAZA**Lab Number:** L1740405**Project Number:** 2172414**Report Date:** 11/14/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1062197-4 WG1062197-5 QC Sample: L1740405-01 Client ID: TP-03

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>	
2,4,6-Tribromophenol	95		86		10-136
2-Fluorobiphenyl	74		71		30-120
2-Fluorophenol	83		86		25-120
4-Terphenyl-d14	70		66		18-120
Nitrobenzene-d5	80		82		23-120
Phenol-d6	84		85		10-120

# PCBS

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

**Lab ID:** L1740405-01  
**Client ID:** TP-03  
**Sample Location:** 835 AB ROCHESTER, NY

**Date Collected:** 10/31/17 13:05  
**Date Received:** 11/03/17  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 11/12/17 19:16  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 11/13/17  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 11/13/17

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 11/13/17 18:43  
**Analyst:** WR  
**Percent Solids:** 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	39.0	4.43	1	A
Aroclor 1221	ND		ug/kg	39.0	5.94	1	A
Aroclor 1232	ND		ug/kg	39.0	3.84	1	A
Aroclor 1242	ND		ug/kg	39.0	4.78	1	A
Aroclor 1248	ND		ug/kg	39.0	4.38	1	A
Aroclor 1254	ND		ug/kg	39.0	3.19	1	A
Aroclor 1260	ND		ug/kg	39.0	4.08	1	A
Aroclor 1262	ND		ug/kg	39.0	3.21	1	A
Aroclor 1268	ND		ug/kg	39.0	2.76	1	A
PCBs, Total	ND		ug/kg	39.0	2.76	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	54		30-150	B



**Project Name:** BULLSHEAD PLAZA**Lab Number:** L1740405**Project Number:** 2172414**Report Date:** 11/14/17**SAMPLE RESULTS**

Lab ID: L1740405-02  
 Client ID: TP-05  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 11/01/17 11:50  
 Date Received: 11/03/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/12/17 19:16  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 11/13/17  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 11/13/17

Matrix: Soil  
 Analytical Method: 1,8082A  
 Analytical Date: 11/14/17 02:28  
 Analyst: WR  
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	36.8	4.17	1	A
Aroclor 1221	ND		ug/kg	36.8	5.60	1	A
Aroclor 1232	ND		ug/kg	36.8	3.62	1	A
Aroclor 1242	ND		ug/kg	36.8	4.50	1	A
Aroclor 1248	ND		ug/kg	36.8	4.13	1	A
Aroclor 1254	ND		ug/kg	36.8	3.00	1	A
Aroclor 1260	ND		ug/kg	36.8	3.84	1	A
Aroclor 1262	ND		ug/kg	36.8	3.02	1	A
Aroclor 1268	ND		ug/kg	36.8	2.60	1	A
PCBs, Total	ND		ug/kg	36.8	2.60	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	A
Decachlorobiphenyl	43		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	46		30-150	B

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

**Lab ID:** L1740405-03  
**Client ID:** BLIND DUPLICATE  
**Sample Location:** 835 AB ROCHESTER, NY

**Date Collected:** 10/31/17 00:00  
**Date Received:** 11/03/17  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 11/12/17 19:16  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 11/13/17  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 11/13/17

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 11/14/17 02:16  
**Analyst:** WR  
**Percent Solids:** 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	37.1	4.20	1	A
Aroclor 1221	ND		ug/kg	37.1	5.64	1	A
Aroclor 1232	ND		ug/kg	37.1	3.65	1	A
Aroclor 1242	ND		ug/kg	37.1	4.54	1	A
Aroclor 1248	ND		ug/kg	37.1	4.16	1	A
Aroclor 1254	ND		ug/kg	37.1	3.02	1	A
Aroclor 1260	ND		ug/kg	37.1	3.87	1	A
Aroclor 1262	ND		ug/kg	37.1	3.05	1	A
Aroclor 1268	ND		ug/kg	37.1	2.62	1	A
PCBs, Total	ND		ug/kg	37.1	2.62	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	36		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	45		30-150	B

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8082A  
**Analytical Date:** 11/13/17 18:57  
**Analyst:** WR

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/12/17 19:16  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 11/13/17  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 11/13/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-03 Batch: WG1062265-1						
Aroclor 1016	ND		ug/kg	31.5	3.57	A
Aroclor 1221	ND		ug/kg	31.5	4.79	A
Aroclor 1232	ND		ug/kg	31.5	3.10	A
Aroclor 1242	ND		ug/kg	31.5	3.85	A
Aroclor 1248	ND		ug/kg	31.5	3.53	A
Aroclor 1254	ND		ug/kg	31.5	2.57	A
Aroclor 1260	ND		ug/kg	31.5	3.29	A
Aroclor 1262	ND		ug/kg	31.5	2.59	A
Aroclor 1268	ND		ug/kg	31.5	2.23	A
PCBs, Total	ND		ug/kg	31.5	2.23	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	73		30-150	B

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1062265-2 WG1062265-3									
Aroclor 1016	72		77		40-140	7		50	A
Aroclor 1260	59		63		40-140	7		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		79		30-150	A
Decachlorobiphenyl	60		64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		79		30-150	B
Decachlorobiphenyl	64		69		30-150	B



## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA

**Lab Number:** L1740405

**Project Number:** 2172414

**Report Date:** 11/14/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1062265-4 WG1062265-5 QC Sample: L1740405-01 Client ID: TP-03													
Aroclor 1016	ND	240	161	67		152	64		40-140	6		50	A
Aroclor 1260	ND	240	128	53		122	51		40-140	5		50	A

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>	<b>Column</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>		
2,4,5,6-Tetrachloro-m-xylene	68		65		30-150	A
Decachlorobiphenyl	55		53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		65		30-150	B
Decachlorobiphenyl	56		56		30-150	B

# PESTICIDES

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-01  
 Client ID: TP-03  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 10/31/17 13:05  
 Date Received: 11/03/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/12/17 17:55  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 11/13/17

Matrix: Soil  
 Analytical Method: 1,8081B  
 Analytical Date: 11/13/17 20:42  
 Analyst: CD  
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/kg	1.79	0.350	1	A
Lindane	ND		ug/kg	0.745	0.333	1	A
Alpha-BHC	ND		ug/kg	0.745	0.211	1	A
Beta-BHC	ND		ug/kg	1.79	0.678	1	A
Heptachlor	ND		ug/kg	0.894	0.401	1	A
Aldrin	ND		ug/kg	1.79	0.629	1	A
Heptachlor epoxide	ND		ug/kg	3.35	1.00	1	A
Endrin	ND		ug/kg	0.745	0.305	1	A
Endrin aldehyde	ND		ug/kg	2.23	0.782	1	A
Endrin ketone	ND		ug/kg	1.79	0.460	1	A
Dieldrin	ND		ug/kg	1.12	0.558	1	A
4,4'-DDE	ND		ug/kg	1.79	0.413	1	A
4,4'-DDD	ND		ug/kg	1.79	0.637	1	A
4,4'-DDT	ND		ug/kg	3.35	1.44	1	A
Endosulfan I	ND		ug/kg	1.79	0.422	1	A
Endosulfan II	ND		ug/kg	1.79	0.597	1	A
Endosulfan sulfate	ND		ug/kg	0.745	0.354	1	A
Methoxychlor	ND		ug/kg	3.35	1.04	1	A
Toxaphene	ND		ug/kg	33.5	9.38	1	A
cis-Chlordane	ND		ug/kg	2.23	0.622	1	A
trans-Chlordane	ND		ug/kg	2.23	0.590	1	A
Chlordane	ND		ug/kg	14.5	5.92	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	68		30-150	B
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	89		30-150	A

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-02  
 Client ID: TP-05  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 11/01/17 11:50  
 Date Received: 11/03/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/12/17 17:55  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 11/13/17

Matrix: Soil  
 Analytical Method: 1,8081B  
 Analytical Date: 11/13/17 21:20  
 Analyst: CD  
 Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/kg	1.73	0.338	1	A
Lindane	ND		ug/kg	0.720	0.322	1	A
Alpha-BHC	ND		ug/kg	0.720	0.204	1	A
Beta-BHC	ND		ug/kg	1.73	0.655	1	A
Heptachlor	ND		ug/kg	0.864	0.387	1	A
Aldrin	ND		ug/kg	1.73	0.608	1	A
Heptachlor epoxide	ND		ug/kg	3.24	0.972	1	A
Endrin	4.44	PI	ug/kg	0.720	0.295	1	B
Endrin aldehyde	ND		ug/kg	2.16	0.756	1	A
Endrin ketone	ND		ug/kg	1.73	0.445	1	A
Dieldrin	ND		ug/kg	1.08	0.540	1	A
4,4'-DDE	ND		ug/kg	1.73	0.400	1	A
4,4'-DDD	ND		ug/kg	1.73	0.616	1	A
4,4'-DDT	6.55	PI	ug/kg	3.24	1.39	1	B
Endosulfan I	ND		ug/kg	1.73	0.408	1	A
Endosulfan II	ND		ug/kg	1.73	0.578	1	A
Endosulfan sulfate	ND		ug/kg	0.720	0.343	1	A
Methoxychlor	ND		ug/kg	3.24	1.01	1	A
Toxaphene	ND		ug/kg	32.4	9.07	1	A
cis-Chlordane	ND		ug/kg	2.16	0.602	1	A
trans-Chlordane	ND		ug/kg	2.16	0.570	1	A
Chlordane	ND		ug/kg	14.0	5.72	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	158	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	138		30-150	A



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-03  
 Client ID: BLIND DUPLICATE  
 Sample Location: 835 AB ROCHESTER, NY

Date Collected: 10/31/17 00:00  
 Date Received: 11/03/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/12/17 17:55  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 11/13/17

Matrix: Soil  
 Analytical Method: 1,8081B  
 Analytical Date: 11/13/17 21:32  
 Analyst: CD  
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/kg	1.81	0.355	1	A
Lindane	ND		ug/kg	0.755	0.338	1	A
Alpha-BHC	ND		ug/kg	0.755	0.214	1	A
Beta-BHC	ND		ug/kg	1.81	0.687	1	A
Heptachlor	ND		ug/kg	0.906	0.406	1	A
Aldrin	ND		ug/kg	1.81	0.638	1	A
Heptachlor epoxide	ND		ug/kg	3.40	1.02	1	A
Endrin	ND		ug/kg	0.755	0.310	1	A
Endrin aldehyde	ND		ug/kg	2.26	0.793	1	A
Endrin ketone	ND		ug/kg	1.81	0.467	1	A
Dieldrin	ND		ug/kg	1.13	0.566	1	A
4,4'-DDE	ND		ug/kg	1.81	0.419	1	A
4,4'-DDD	ND		ug/kg	1.81	0.646	1	A
4,4'-DDT	ND		ug/kg	3.40	1.46	1	A
Endosulfan I	ND		ug/kg	1.81	0.428	1	A
Endosulfan II	ND		ug/kg	1.81	0.606	1	A
Endosulfan sulfate	ND		ug/kg	0.755	0.360	1	A
Methoxychlor	ND		ug/kg	3.40	1.06	1	A
Toxaphene	ND		ug/kg	34.0	9.52	1	A
cis-Chlordane	ND		ug/kg	2.26	0.631	1	A
trans-Chlordane	ND		ug/kg	2.26	0.598	1	A
Chlordane	ND		ug/kg	14.7	6.00	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	71		30-150	B
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	83		30-150	A

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8081B  
**Analytical Date:** 11/13/17 18:11  
**Analyst:** KEG

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/12/17 17:55  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 11/13/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1062255-1						
Delta-BHC	ND		ug/kg	1.58	0.309	A
Lindane	ND		ug/kg	0.657	0.294	A
Alpha-BHC	ND		ug/kg	0.657	0.186	A
Beta-BHC	ND		ug/kg	1.58	0.598	A
Heptachlor	ND		ug/kg	0.788	0.353	A
Aldrin	ND		ug/kg	1.58	0.555	A
Heptachlor epoxide	ND		ug/kg	2.96	0.887	A
Endrin	ND		ug/kg	0.657	0.269	A
Endrin aldehyde	ND		ug/kg	1.97	0.690	A
Endrin ketone	ND		ug/kg	1.58	0.406	A
Dieldrin	ND		ug/kg	0.986	0.493	A
4,4'-DDE	ND		ug/kg	1.58	0.365	A
4,4'-DDD	ND		ug/kg	1.58	0.562	A
4,4'-DDT	ND		ug/kg	2.96	1.27	A
Endosulfan I	ND		ug/kg	1.58	0.372	A
Endosulfan II	ND		ug/kg	1.58	0.527	A
Endosulfan sulfate	ND		ug/kg	0.657	0.313	A
Methoxychlor	ND		ug/kg	2.96	0.920	A
Toxaphene	ND		ug/kg	29.6	8.28	A
cis-Chlordane	ND		ug/kg	1.97	0.549	A
trans-Chlordane	ND		ug/kg	1.97	0.520	A
Chlordane	ND		ug/kg	12.8	5.22	A

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081B  
Analytical Date: 11/13/17 18:11  
Analyst: KEG

Extraction Method: EPA 3546  
Extraction Date: 11/12/17 17:55  
Cleanup Method: EPA 3620B  
Cleanup Date: 11/13/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1062255-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	99		30-150	B
2,4,5,6-Tetrachloro-m-xylene	100		30-150	A
Decachlorobiphenyl	130		30-150	A

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1062255-2 WG1062255-3									
Delta-BHC	100		103		30-150	3		30	A
Lindane	88		90		30-150	2		30	A
Alpha-BHC	96		100		30-150	4		30	A
Beta-BHC	107		117		30-150	9		30	A
Heptachlor	99		104		30-150	5		30	A
Aldrin	90		94		30-150	4		30	A
Heptachlor epoxide	96		99		30-150	3		30	A
Endrin	103		107		30-150	4		30	A
Endrin aldehyde	88		93		30-150	6		30	A
Endrin ketone	104		107		30-150	3		30	A
Dieldrin	104		110		30-150	6		30	A
4,4'-DDE	95		99		30-150	4		30	A
4,4'-DDD	96		100		30-150	4		30	A
4,4'-DDT	103		107		30-150	4		30	A
Endosulfan I	92		97		30-150	5		30	A
Endosulfan II	92		97		30-150	5		30	A
Endosulfan sulfate	105		110		30-150	5		30	A
Methoxychlor	93		97		30-150	4		30	A
cis-Chlordane	84		92		30-150	9		30	A
trans-Chlordane	67		71		30-150	6		30	A



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1062255-2 WG1062255-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	84		87		30-150	B
Decachlorobiphenyl	95		95		30-150	B
2,4,5,6-Tetrachloro-m-xylene	92		93		30-150	A
Decachlorobiphenyl	116		120		30-150	A

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA

**Lab Number:** L1740405

**Project Number:** 2172414

**Report Date:** 11/14/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab ID: TP-03 Associated sample(s): 01-03 QC Batch ID: WG1062255-4 WG1062255-5 QC Sample: L1740405-01 Client													
Delta-BHC	ND	38.2	38.2	100		35.9	94		30-150	6		50	A
Lindane	ND	38.2	33.9	89		32.2	84		30-150	5		50	A
Alpha-BHC	ND	38.2	37.4	98		35.4	93		30-150	5		50	A
Beta-BHC	ND	38.2	45.5	119		36.6	96		30-150	22		50	A
Heptachlor	ND	38.2	38.6	101		36.3	95		30-150	6		50	A
Aldrin	ND	38.2	36.0	94		34.0	89		30-150	6		50	A
Heptachlor epoxide	ND	38.2	36.0	94		34.0	89		30-150	6		50	A
Endrin	ND	38.2	37.1	97		36.0	94		30-150	3		50	A
Endrin aldehyde	ND	38.2	27.9	73		27.6	72		30-150	1		50	A
Endrin ketone	ND	38.2	33.3	87		33.2	87		30-150	0		50	A
Dieldrin	ND	38.2	39.0	102		37.8	99		30-150	3		50	A
4,4'-DDE	ND	38.2	34.0	89		29.4	77		30-150	15		50	A
4,4'-DDD	ND	38.2	36.0	94		33.2	87		30-150	8		50	A
4,4'-DDT	ND	38.2	37.1	97		36.5	95		30-150	2		50	A
Endosulfan I	ND	38.2	34.9	91		33.3	87		30-150	5		50	A
Endosulfan II	ND	38.2	33.6	88		33.1	87		30-150	1		50	A
Endosulfan sulfate	ND	38.2	34.0	89		33.4	87		30-150	2		50	A
Methoxychlor	ND	38.2	30.9	81		29.9	78		30-150	3		50	A
cis-Chlordane	ND	38.2	31.8	83		30.1	79		30-150	5		50	A
trans-Chlordane	ND	38.2	30.5	80		30.6	80		30-150	0		50	A

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA

**Lab Number:** L1740405

**Project Number:** 2172414

**Report Date:** 11/14/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1062255-4 WG1062255-5 QC Sample: L1740405-01 Client ID: TP-03

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>	<b>Column</b>
2,4,5,6-Tetrachloro-m-xylene	91		89		30-150	B
Decachlorobiphenyl	82		79		30-150	B
2,4,5,6-Tetrachloro-m-xylene	96		92		30-150	A
Decachlorobiphenyl	98		91		30-150	A

## METALS



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-01  
 Client ID: TP-03  
 Sample Location: 835 AB ROCHESTER, NY  
 Matrix: Soil  
 Percent Solids: 84%

Date Collected: 10/31/17 13:05  
 Date Received: 11/03/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	7510		mg/kg	9.17	2.48	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.58	0.348	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Arsenic, Total	6.29		mg/kg	0.917	0.191	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Barium, Total	56.3		mg/kg	0.917	0.160	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Beryllium, Total	0.275	J	mg/kg	0.458	0.030	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Cadmium, Total	0.404	J	mg/kg	0.917	0.090	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Calcium, Total	18900		mg/kg	9.17	3.21	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Chromium, Total	8.59		mg/kg	0.917	0.088	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Cobalt, Total	3.47		mg/kg	1.83	0.152	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Copper, Total	13.8		mg/kg	0.917	0.237	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Iron, Total	12400		mg/kg	4.58	0.828	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Lead, Total	74.9		mg/kg	4.58	0.246	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Magnesium, Total	6310		mg/kg	9.17	1.41	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Manganese, Total	223		mg/kg	0.917	0.146	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Mercury, Total	0.30		mg/kg	0.07	0.02	1	11/07/17 06:00	11/07/17 20:47	EPA 7471B	1,7471B	EA
Nickel, Total	8.19		mg/kg	2.29	0.222	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Potassium, Total	471		mg/kg	229	13.2	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Selenium, Total	0.550	J	mg/kg	1.83	0.237	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.917	0.260	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Sodium, Total	880		mg/kg	183	2.89	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.83	0.289	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Vanadium, Total	16.0		mg/kg	0.917	0.186	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB
Zinc, Total	79.8		mg/kg	4.58	0.269	2	11/07/17 22:00	11/11/17 15:37	EPA 3050B	1,6010C	AB



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-02  
 Client ID: TP-05  
 Sample Location: 835 AB ROCHESTER, NY  
 Matrix: Soil  
 Percent Solids: 88%

Date Collected: 11/01/17 11:50  
 Date Received: 11/03/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	5260		mg/kg	8.65	2.34	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.33	0.329	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Arsenic, Total	6.51		mg/kg	0.865	0.180	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Barium, Total	98.4		mg/kg	0.865	0.150	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Beryllium, Total	0.251	J	mg/kg	0.433	0.029	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Cadmium, Total	0.710	J	mg/kg	0.865	0.085	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Calcium, Total	62600		mg/kg	86.5	30.3	20	11/07/17 22:00	11/13/17 14:56	EPA 3050B	1,6010C	AB
Chromium, Total	8.53		mg/kg	0.865	0.083	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Cobalt, Total	3.31		mg/kg	1.73	0.144	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Copper, Total	25.6		mg/kg	0.865	0.223	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Iron, Total	10300		mg/kg	4.33	0.782	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Lead, Total	108		mg/kg	4.33	0.232	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Magnesium, Total	11400		mg/kg	8.65	1.33	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Manganese, Total	367		mg/kg	0.865	0.138	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Mercury, Total	0.36		mg/kg	0.07	0.02	1	11/07/17 06:00	11/07/17 21:04	EPA 7471B	1,7471B	EA
Nickel, Total	7.79		mg/kg	2.16	0.209	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Potassium, Total	693		mg/kg	216	12.5	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Selenium, Total	0.338	J	mg/kg	1.73	0.223	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.865	0.245	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Sodium, Total	1050		mg/kg	173	2.73	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.73	0.273	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Vanadium, Total	18.4		mg/kg	0.865	0.176	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB
Zinc, Total	329		mg/kg	4.33	0.254	2	11/07/17 22:00	11/11/17 16:28	EPA 3050B	1,6010C	AB



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

Lab ID: L1740405-03  
 Client ID: BLIND DUPLICATE  
 Sample Location: 835 AB ROCHESTER, NY  
 Matrix: Soil  
 Percent Solids: 85%

Date Collected: 10/31/17 00:00  
 Date Received: 11/03/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	8450		mg/kg	9.34	2.52	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.67	0.355	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Arsenic, Total	5.35		mg/kg	0.934	0.194	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Barium, Total	44.0		mg/kg	0.934	0.162	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Beryllium, Total	0.271	J	mg/kg	0.467	0.031	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Cadmium, Total	0.392	J	mg/kg	0.934	0.092	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Calcium, Total	13600		mg/kg	9.34	3.27	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Chromium, Total	9.60		mg/kg	0.934	0.090	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Cobalt, Total	3.94		mg/kg	1.87	0.155	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Copper, Total	11.6		mg/kg	0.934	0.241	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Iron, Total	12600		mg/kg	4.67	0.844	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Lead, Total	53.8		mg/kg	4.67	0.250	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Magnesium, Total	4930		mg/kg	9.34	1.44	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Manganese, Total	228		mg/kg	0.934	0.148	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Mercury, Total	0.23		mg/kg	0.08	0.02	1	11/07/17 06:00	11/07/17 21:06	EPA 7471B	1,7471B	EA
Nickel, Total	7.94		mg/kg	2.34	0.226	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Potassium, Total	474		mg/kg	234	13.4	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Selenium, Total	0.327	J	mg/kg	1.87	0.241	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.934	0.264	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Sodium, Total	783		mg/kg	187	2.94	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.87	0.294	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Vanadium, Total	19.0		mg/kg	0.934	0.190	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB
Zinc, Total	64.5		mg/kg	4.67	0.274	2	11/07/17 22:00	11/11/17 16:33	EPA 3050B	1,6010C	AB



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

## 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): 01-03 Batch: WG1060209-1										
Mercury, Total	0.02	J	mg/kg	0.08	0.02	1	11/07/17 06:00	11/07/17 20:43	1,7471B	EA

### 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): 01-03 Batch: WG1060640-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Iron, Total	ND		mg/kg	2.00	0.361	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Manganese, Total	ND		mg/kg	0.400	0.064	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Potassium, Total	ND		mg/kg	100	5.76	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Sodium, Total	ND		mg/kg	80.0	1.26	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	11/07/17 22:00	11/11/17 15:13	1,6010C	AB





**Project Name:** BULLSHEAD PLAZA

**Lab Number:** L1740405

**Project Number:** 2172414

**Report Date:** 11/14/17

## **Method Blank Analysis Batch Quality Control**

### **Prep Information**

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Digestion Method: EPA 3050B

## Lab Control Sample Analysis

Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1060209-2 SRM Lot Number: D098-540								
Mercury, Total	94		-		50-149	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA

Project Number: 2172414

Lab Number: L1740405

Report Date: 11/14/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1060640-2 SRM Lot Number: D098-540					
Aluminum, Total	69	-	47-153	-	
Antimony, Total	113	-	6-194	-	
Arsenic, Total	95	-	83-117	-	
Barium, Total	91	-	82-118	-	
Beryllium, Total	90	-	83-117	-	
Cadmium, Total	89	-	82-117	-	
Calcium, Total	86	-	81-118	-	
Chromium, Total	93	-	83-119	-	
Cobalt, Total	90	-	84-116	-	
Copper, Total	94	-	84-116	-	
Iron, Total	94	-	60-140	-	
Lead, Total	89	-	82-117	-	
Magnesium, Total	82	-	76-124	-	
Manganese, Total	91	-	82-118	-	
Nickel, Total	92	-	82-117	-	
Potassium, Total	81	-	69-131	-	
Selenium, Total	94	-	78-121	-	
Silver, Total	96	-	80-120	-	
Sodium, Total	90	-	74-126	-	
Thallium, Total	93	-	80-119	-	
Vanadium, Total	94	-	79-121	-	

## Lab Control Sample Analysis

Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1060640-2 SRM Lot Number: D098-540					
Zinc, Total	90	-	81-119	-	



**Matrix Spike Analysis**  
Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

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): 01-03 QC Batch ID: WG1060209-3 WG1060209-4 QC Sample: L1740405-01 Client ID: TP-03												
Mercury, Total	0.30	0.149	0.53	154	Q	0.51	141	Q	80-120	4		20

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

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): 01-03 QC Batch ID: WG1060640-3 WG1060640-4 QC Sample: L1740405-01 Client ID: TP-03										
Aluminum, Total	7510	187	8370	460	Q	7720	117	75-125	8	20
Antimony, Total	ND	46.7	28.7	61	Q	35.1	78	75-125	20	20
Arsenic, Total	6.29	11.2	16.4	90		16.3	93	75-125	1	20
Barium, Total	56.3	187	215	85		203	82	75-125	6	20
Beryllium, Total	0.275J	4.67	4.34	93		4.12	92	75-125	5	20
Cadmium, Total	0.404J	4.76	4.72	99		4.46	98	75-125	6	20
Calcium, Total	18900	934	23100	449	Q	41000	2470	Q 75-125	56	Q 20
Chromium, Total	8.59	18.7	25.7	92		25.1	92	75-125	2	20
Cobalt, Total	3.47	46.7	41.8	82		39.5	80	75-125	6	20
Copper, Total	13.8	23.4	33.7	85		33.2	87	75-125	1	20
Iron, Total	12400	93.4	11800	0	Q	11800	0	Q 75-125	0	20
Lead, Total	74.9	47.6	97.6	48	Q	105	66	Q 75-125	7	20
Magnesium, Total	6310	934	8460	230	Q	11100	535	Q 75-125	27	Q 20
Manganese, Total	223.	46.7	261	81		281	130	Q 75-125	7	20
Nickel, Total	8.19	46.7	46.4	82		44.1	80	75-125	5	20
Potassium, Total	471.	934	1390	98		1410	105	75-125	1	20
Selenium, Total	0.550J	11.2	10.8	96		10.0	93	75-125	8	20
Silver, Total	ND	28	26.3	94		25.2	94	75-125	4	20
Sodium, Total	880.	934	1730	91		1670	88	75-125	4	20
Thallium, Total	ND	11.2	8.75	78		8.20	76	75-125	6	20
Vanadium, Total	16.0	46.7	60.1	94		57.6	93	75-125	4	20

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

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): 01-03 QC Batch ID: WG1060640-3 WG1060640-4 QC Sample: L1740405-01 Client ID: TP-03									
Zinc, Total	79.8	46.7	117	80	113	74	Q 75-125	3	20

# **INORGANICS & MISCELLANEOUS**



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

**Lab ID:** L1740405-01  
**Client ID:** TP-03  
**Sample Location:** 835 AB ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 10/31/17 13:05  
**Date Received:** 11/03/17  
**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	84.4		%	0.100	NA	1	-	11/08/17 12:20	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	11/04/17 17:10	11/06/17 12:59	1,9010C/9012B	LH



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

**Lab ID:** L1740405-02  
**Client ID:** TP-05  
**Sample Location:** 835 AB ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/01/17 11:50  
**Date Received:** 11/03/17  
**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	88.0		%	0.100	NA	1	-	11/08/17 12:20	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	11/04/17 17:10	11/06/17 13:56	1,9010C/9012B	LH



**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

**SAMPLE RESULTS**

**Lab ID:** L1740405-03  
**Client ID:** BLIND DUPLICATE  
**Sample Location:** 835 AB ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 10/31/17 00:00  
**Date Received:** 11/03/17  
**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	85.2		%	0.100	NA	1	-	11/08/17 12:20	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	11/04/17 17:10	11/06/17 13:06	1,9010C/9012B	LH



Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

**Method Blank Analysis**  
**Batch Quality Control**

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1059727-1									
Cyanide, Total	ND	mg/kg	0.89	0.19	1	11/04/17 17:10	11/06/17 12:53	1,9010C/9012B	LH



### Lab Control Sample Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1740405  
**Report Date:** 11/14/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1059727-2 WG1059727-3								
Cyanide, Total	90		83		80-120	12		35



**Matrix Spike Analysis**  
Batch Quality Control

Project Name: BULLSHEAD PLAZA

Lab Number: L1740405

Project Number: 2172414

Report Date: 11/14/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1059727-4 WG1059727-5 QC Sample: L1740405-01 Client ID: TP-03												
Cyanide, Total	ND	12	12	100		12	100		75-125	0		35

## Lab Duplicate Analysis

Batch Quality Control

Project Name: BULLSHEAD PLAZA

Project Number: 2172414

Lab Number: L1740405

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Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1060873-1 QC Sample: L1740405-01 Client ID: TP-03						
Solids, Total	84.4	84.0	%	0		20

**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Serial\_No:**11141718:09  
**Lab Number:** L1740405  
**Report Date:** 11/14/17

**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(*)
L1740405-01A	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-01A1	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-01A2	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-01B	Glass 120ml/4oz unpreserved	A	NA		4.1	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)
L1740405-01B1	Glass 120ml/4oz unpreserved	A	NA		4.1	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)
L1740405-01B2	Glass 120ml/4oz unpreserved	A	NA		4.1	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)
L1740405-01C	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8082(14)
L1740405-01C1	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8082(14)
L1740405-01C2	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8082(14)
L1740405-01D	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8081(14)
L1740405-01D1	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8081(14)
L1740405-01D2	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8081(14)
L1740405-01E	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8270(14)
L1740405-01E1	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8270(14)
L1740405-01E2	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8270(14)
L1740405-01F	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		TCN-9010(14),TS(7)

\*Values in parentheses indicate holding time in days





**Project Name:** BULLSHEAD PLAZA  
**Project Number:** 2172414

**Serial\_No:**11141718:09  
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**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1740405-01F1	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		TCN-9010(14),TS(7)
L1740405-01F2	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		TCN-9010(14),TS(7)
L1740405-01X	Vial MeOH preserved split	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-01X1	Vial MeOH preserved split	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-01X2	Vial MeOH preserved split	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-01Y	Vial Water preserved split	A	NA		4.1	Y	Absent	<b>07-NOV-17 10:30</b>	NYTCL-8260-R2(14)
L1740405-01Y1	Vial Water preserved split	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-01Y2	Vial Water preserved split	A	NA		4.1	Y	Absent	<b>13-NOV-17 11:51</b>	NYTCL-8260-R2(14)
L1740405-01Z	Vial Water preserved split	A	NA		4.1	Y	Absent	<b>07-NOV-17 10:30</b>	NYTCL-8260-R2(14)
L1740405-01Z1	Vial Water preserved split	A	NA		4.1	Y	Absent	<b>13-NOV-17 11:51</b>	NYTCL-8260-R2(14)
L1740405-01Z2	Vial Water preserved split	A	NA		4.1	Y	Absent	<b>13-NOV-17 11:51</b>	NYTCL-8260-R2(14)
L1740405-02A	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-02B	Glass 120ml/4oz unpreserved	A	NA		4.1	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)
L1740405-02C	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8082(14)
L1740405-02D	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8081(14)
L1740405-02E	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8270(14)
L1740405-02F	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		TCN-9010(14),TS(7)
L1740405-02X	Vial MeOH preserved split	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-02Y	Vial Water preserved split	A	NA		4.1	Y	Absent	<b>07-NOV-17 10:30</b>	NYTCL-8260-R2(14)
L1740405-02Z	Vial Water preserved split	A	NA		4.1	Y	Absent	<b>07-NOV-17 10:30</b>	NYTCL-8260-R2(14)
L1740405-03A	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-03B	Glass 120ml/4oz unpreserved	A	NA		4.1	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)
L1740405-03C	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8082(14)

**Project Name:** BULLSHEAD PLAZA  
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**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1740405-03D	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8081(14)
L1740405-03E	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		NYTCL-8270(14)
L1740405-03F	Glass 120ml/4oz unpreserved	A	NA		4.1	Y	Absent		TCN-9010(14),TS(7)
L1740405-03X	Vial MeOH preserved split	A	NA		4.1	Y	Absent		NYTCL-8260-R2(14)
L1740405-03Y	Vial Water preserved split	A	NA		4.1	Y	Absent	<b>07-NOV-17 10:30</b>	NYTCL-8260-R2(14)
L1740405-03Z	Vial Water preserved split	A	NA		4.1	Y	Absent	<b>07-NOV-17 10:30</b>	NYTCL-8260-R2(14)

\*Values in parentheses indicate holding time in days



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**Lab Number:** L1740405  
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## 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).
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.
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.

### 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

**Report Format:** DU Report with 'J' Qualifiers



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#### Data Qualifiers

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:** BULLSHEAD PLAZA  
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**Lab Number:** L1740405  
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## 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:** 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 300:** DW: Bromide

**EPA 6860:** NPW and SCM: Perchlorate

**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation

**EPA 9012B:** NPW: Total Cyanide

**EPA 9050A:** NPW: Specific Conductance

**SM3500:** NPW: Ferrous Iron

**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**SM5310C:** DW: Dissolved Organic Carbon

### Mansfield Facility

**SM 2540D:** TSS

**EPA 3005A** NPW

**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:** 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, SM4500CI-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, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 624:** Volatile Halocarbons & Aromatics,

**EPA 608:** 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:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

#### 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, Pb, Mn, Ni, Se, Ag, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab	ALPHA Job #																																																																																																											
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<b>Client Information</b>			<b>Regulatory Requirement</b>																																																																																																												
Client: <u>Carroll Associates</u> Address: <u>300 State Street</u> <u>Rochester, NY 14614</u> Phone: <u>585-451-6116</u> Fax: _____ Email: <u>Abrett@CarrollAssociates.com</u>			<input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge																																																																																																												
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ALPHA Lab ID (Lab Use Only)	Sample ID	Collection			Sample Matrix	Sampler's Initials			ANALYSIS												Sample Specific Comments	Total Bottles																																																																																									
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Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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 Preservative			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)			Relinquished By: <u>S. H. [Signature]</u>			Date/Time <u>11-3-17 15:50</u>			Received By: <u>S. [Signature]</u>			Date/Time <u>11/3/17 15:50</u> <u>11/1/17 00:10</u>																																																																																																			



## ANALYTICAL REPORT

Lab Number:	L1741553
Client:	LaBella Associates, P.C. 300 State Street Suite 201 Rochester, NY 14614
ATTN:	Jennifer Gillen
Phone:	(585) 454-6110
Project Name:	BULLSHEAD PLAZA PHASE II
Project Number:	2172414
Report Date:	11/20/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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





**Project Name:** BULLSHEAD PLAZA PHASE II**Project Number:** 2172414**Lab Number:** L1741553**Report Date:** 11/20/17

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1741553-01	SB-02	SOIL	ROCHESTER, NY	11/06/17 09:25	11/10/17
L1741553-02	SB-04	SOIL	ROCHESTER, NY	11/06/17 10:10	11/10/17
L1741553-03	SB-05	SOIL	ROCHESTER, NY	11/06/17 10:30	11/10/17
L1741553-04	SB-09	SOIL	ROCHESTER, NY	11/06/17 12:45	11/10/17
L1741553-05	SB-10	SOIL	ROCHESTER, NY	11/06/17 13:10	11/10/17
L1741553-06	SB-12	SOIL	ROCHESTER, NY	11/07/17 09:30	11/10/17
L1741553-07	SB-13	SOIL	ROCHESTER, NY	11/07/17 11:35	11/10/17
L1741553-08	SB-16	SOIL	ROCHESTER, NY	11/07/17 16:00	11/10/17
L1741553-09	SB-17	SOIL	ROCHESTER, NY	11/08/17 09:45	11/10/17
L1741553-10	SB-18	SOIL	ROCHESTER, NY	11/08/17 10:30	11/10/17
L1741553-11	SB-19	SOIL	ROCHESTER, NY	11/08/17 12:15	11/10/17
L1741553-12	SB-20	SOIL	ROCHESTER, NY	11/08/17 12:35	11/10/17
L1741553-13	SB-21	SOIL	ROCHESTER, NY	11/08/17 15:50	11/10/17
L1741553-14	SB-22	SOIL	ROCHESTER, NY	11/08/17 16:20	11/10/17

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

### 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:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

### 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

L1741553-01: 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.

#### Pesticides

L1741553-01: The sample has elevated detection limits due to the dilution required by the sample matrix.

#### Total Metals

L1741553-09: 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.

#### Cyanide, Total

The WG1062433-2/-3 LCS/LCSD recoveries (78%/78%), associated with L1741553-09, are outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

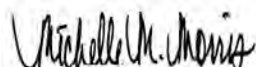
#### Total Organic Carbon

The WG1063900 CCB, associated with L1741553-09 and -13, has a concentration above the reporting limit for total organic carbon. Since the associated sample concentrations are greater than 10x the blank concentration for this analyte, no corrective action is required.

WG1063900: The required batch QC was prepared; however, the native sample required a different reporting method; therefore, the associated QC results could not be reported.

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

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 11/20/17

# ORGANICS



# VOLATILES

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-01  
**Client ID:** SB-02  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/06/17 09:25  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/15/17 11:28  
**Analyst:** JC  
**Percent Solids:** 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	690	110	1
1,1-Dichloroethane	ND		ug/kg	100	18.	1
Chloroform	ND		ug/kg	100	25.	1
Carbon tetrachloride	ND		ug/kg	69	24.	1
1,2-Dichloropropane	ND		ug/kg	240	16.	1
Dibromochloromethane	ND		ug/kg	69	12.	1
1,1,2-Trichloroethane	ND		ug/kg	100	22.	1
Tetrachloroethene	48	J	ug/kg	69	21.	1
Chlorobenzene	ND		ug/kg	69	24.	1
Trichlorofluoromethane	ND		ug/kg	340	29.	1
1,2-Dichloroethane	ND		ug/kg	69	17.	1
1,1,1-Trichloroethane	ND		ug/kg	69	24.	1
Bromodichloromethane	ND		ug/kg	69	21.	1
trans-1,3-Dichloropropene	ND		ug/kg	69	14.	1
cis-1,3-Dichloropropene	ND		ug/kg	69	16.	1
Bromoform	ND		ug/kg	280	16.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	69	20.	1
Benzene	ND		ug/kg	69	13.	1
Toluene	15	J	ug/kg	100	13.	1
Ethylbenzene	ND		ug/kg	69	12.	1
Chloromethane	ND		ug/kg	340	30.	1
Bromomethane	ND		ug/kg	140	23.	1
Vinyl chloride	ND		ug/kg	140	22.	1
Chloroethane	ND		ug/kg	140	22.	1
1,1-Dichloroethene	ND		ug/kg	69	26.	1
trans-1,2-Dichloroethene	ND		ug/kg	100	16.	1
Trichloroethene	ND		ug/kg	69	21.	1
1,2-Dichlorobenzene	ND		ug/kg	340	12.	1
1,3-Dichlorobenzene	ND		ug/kg	340	15.	1
1,4-Dichlorobenzene	20	J	ug/kg	340	12.	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-01  
**Client ID:** SB-02  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/06/17 09:25  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	12	J	ug/kg	140	10.	1
p/m-Xylene	ND		ug/kg	140	24.	1
o-Xylene	ND		ug/kg	140	23.	1
cis-1,2-Dichloroethene	ND		ug/kg	69	24.	1
Styrene	ND		ug/kg	140	28.	1
Dichlorodifluoromethane	ND		ug/kg	690	34.	1
Acetone	ND		ug/kg	690	160	1
Carbon disulfide	ND		ug/kg	690	76.	1
2-Butanone	ND		ug/kg	690	47.	1
4-Methyl-2-pentanone	ND		ug/kg	690	17.	1
2-Hexanone	ND		ug/kg	690	46.	1
1,2-Dibromoethane	ND		ug/kg	280	14.	1
n-Butylbenzene	ND		ug/kg	69	16.	1
sec-Butylbenzene	ND		ug/kg	69	15.	1
tert-Butylbenzene	ND		ug/kg	340	17.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	340	27.	1
Isopropylbenzene	ND		ug/kg	69	13.	1
p-Isopropyltoluene	ND		ug/kg	69	14.	1
Naphthalene	4000		ug/kg	340	9.5	1
n-Propylbenzene	ND		ug/kg	69	15.	1
1,2,4-Trichlorobenzene	ND		ug/kg	340	15.	1
1,3,5-Trimethylbenzene	17	J	ug/kg	340	11.	1
1,2,4-Trimethylbenzene	24	J	ug/kg	340	13.	1
Methyl Acetate	ND		ug/kg	1400	32.	1
Cyclohexane	ND		ug/kg	1400	30.	1
Freon-113	ND		ug/kg	1400	35.	1
Methyl cyclohexane	ND		ug/kg	280	16.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	90		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-02  
**Client ID:** SB-04  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/06/17 10:10  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 08:27  
**Analyst:** JC  
**Percent Solids:** 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.2	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.22	1
Chloroform	ND		ug/kg	1.2	0.30	1
Carbon tetrachloride	ND		ug/kg	0.82	0.28	1
1,2-Dichloropropane	ND		ug/kg	2.9	0.19	1
Dibromochloromethane	ND		ug/kg	0.82	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.26	1
Tetrachloroethene	ND		ug/kg	0.82	0.25	1
Chlorobenzene	ND		ug/kg	0.82	0.28	1
Trichlorofluoromethane	ND		ug/kg	4.1	0.34	1
1,2-Dichloroethane	ND		ug/kg	0.82	0.20	1
1,1,1-Trichloroethane	ND		ug/kg	0.82	0.29	1
Bromodichloromethane	ND		ug/kg	0.82	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	0.82	0.17	1
cis-1,3-Dichloropropene	ND		ug/kg	0.82	0.19	1
Bromoform	ND		ug/kg	3.3	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.82	0.24	1
Benzene	ND		ug/kg	0.82	0.16	1
Toluene	0.52	J	ug/kg	1.2	0.16	1
Ethylbenzene	0.22	J	ug/kg	0.82	0.14	1
Chloromethane	ND		ug/kg	4.1	0.36	1
Bromomethane	ND		ug/kg	1.6	0.28	1
Vinyl chloride	ND		ug/kg	1.6	0.26	1
Chloroethane	ND		ug/kg	1.6	0.26	1
1,1-Dichloroethene	ND		ug/kg	0.82	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
Trichloroethene	ND		ug/kg	0.82	0.25	1
1,2-Dichlorobenzene	ND		ug/kg	4.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	4.1	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.1	0.15	1



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-02  
**Client ID:** SB-04  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/06/17 10:10  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.6	0.12	1
p/m-Xylene	0.44	J	ug/kg	1.6	0.29	1
o-Xylene	ND		ug/kg	1.6	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.82	0.28	1
Styrene	ND		ug/kg	1.6	0.33	1
Dichlorodifluoromethane	ND		ug/kg	8.2	0.41	1
Acetone	2.0	J	ug/kg	8.2	1.9	1
Carbon disulfide	ND		ug/kg	8.2	0.90	1
2-Butanone	ND		ug/kg	8.2	0.56	1
4-Methyl-2-pentanone	ND		ug/kg	8.2	0.20	1
2-Hexanone	ND		ug/kg	8.2	0.54	1
1,2-Dibromoethane	ND		ug/kg	3.3	0.16	1
n-Butylbenzene	ND		ug/kg	0.82	0.19	1
sec-Butylbenzene	ND		ug/kg	0.82	0.18	1
tert-Butylbenzene	ND		ug/kg	4.1	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	0.32	1
Isopropylbenzene	ND		ug/kg	0.82	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.82	0.16	1
Naphthalene	ND		ug/kg	4.1	0.11	1
n-Propylbenzene	ND		ug/kg	0.82	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.1	0.18	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.1	0.13	1
1,2,4-Trimethylbenzene	0.28	J	ug/kg	4.1	0.15	1
Methyl Acetate	ND		ug/kg	16	0.38	1
Cyclohexane	ND		ug/kg	16	0.35	1
Freon-113	ND		ug/kg	16	0.42	1
Methyl cyclohexane	ND		ug/kg	3.3	0.20	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	99		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-03  
**Client ID:** SB-05  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/06/17 10:30  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 08:53  
**Analyst:** JC  
**Percent Solids:** 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.1	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.22	1
Chloroform	ND		ug/kg	1.2	0.30	1
Carbon tetrachloride	ND		ug/kg	0.81	0.28	1
1,2-Dichloropropane	ND		ug/kg	2.8	0.18	1
Dibromochloromethane	ND		ug/kg	0.81	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.25	1
Tetrachloroethene	ND		ug/kg	0.81	0.24	1
Chlorobenzene	ND		ug/kg	0.81	0.28	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.34	1
1,2-Dichloroethane	ND		ug/kg	0.81	0.20	1
1,1,1-Trichloroethane	ND		ug/kg	0.81	0.28	1
Bromodichloromethane	ND		ug/kg	0.81	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	0.81	0.17	1
cis-1,3-Dichloropropene	ND		ug/kg	0.81	0.19	1
Bromoform	ND		ug/kg	3.2	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.81	0.24	1
Benzene	0.44	J	ug/kg	0.81	0.16	1
Toluene	1.9		ug/kg	1.2	0.16	1
Ethylbenzene	0.60	J	ug/kg	0.81	0.14	1
Chloromethane	ND		ug/kg	4.0	0.35	1
Bromomethane	ND		ug/kg	1.6	0.27	1
Vinyl chloride	ND		ug/kg	1.6	0.25	1
Chloroethane	ND		ug/kg	1.6	0.26	1
1,1-Dichloroethene	ND		ug/kg	0.81	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.19	1
Trichloroethene	ND		ug/kg	0.81	0.24	1
1,2-Dichlorobenzene	ND		ug/kg	4.0	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	4.0	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.0	0.15	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-03  
**Client ID:** SB-05  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/06/17 10:30  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.6	0.12	1
p/m-Xylene	1.6		ug/kg	1.6	0.28	1
o-Xylene	0.37	J	ug/kg	1.6	0.27	1
cis-1,2-Dichloroethene	ND		ug/kg	0.81	0.28	1
Styrene	ND		ug/kg	1.6	0.32	1
Dichlorodifluoromethane	ND		ug/kg	8.1	0.40	1
Acetone	5.2	J	ug/kg	8.1	1.8	1
Carbon disulfide	ND		ug/kg	8.1	0.89	1
2-Butanone	ND		ug/kg	8.1	0.56	1
4-Methyl-2-pentanone	ND		ug/kg	8.1	0.20	1
2-Hexanone	ND		ug/kg	8.1	0.54	1
1,2-Dibromoethane	ND		ug/kg	3.2	0.16	1
n-Butylbenzene	ND		ug/kg	0.81	0.18	1
sec-Butylbenzene	ND		ug/kg	0.81	0.18	1
tert-Butylbenzene	ND		ug/kg	4.0	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	0.32	1
Isopropylbenzene	ND		ug/kg	0.81	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.81	0.16	1
Naphthalene	ND		ug/kg	4.0	0.11	1
n-Propylbenzene	0.18	J	ug/kg	0.81	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.0	0.17	1
1,3,5-Trimethylbenzene	0.30	J	ug/kg	4.0	0.13	1
1,2,4-Trimethylbenzene	0.85	J	ug/kg	4.0	0.15	1
Methyl Acetate	ND		ug/kg	16	0.37	1
Cyclohexane	0.37	J	ug/kg	16	0.35	1
Freon-113	ND		ug/kg	16	0.42	1
Methyl cyclohexane	0.72	J	ug/kg	3.2	0.19	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	105		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-04  
**Client ID:** SB-09  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/06/17 12:45  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 09:18  
**Analyst:** JC  
**Percent Solids:** 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.9	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.24	1
Chloroform	ND		ug/kg	1.3	0.33	1
Carbon tetrachloride	ND		ug/kg	0.89	0.31	1
1,2-Dichloropropane	ND		ug/kg	3.1	0.20	1
Dibromochloromethane	ND		ug/kg	0.89	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.28	1
Tetrachloroethene	ND		ug/kg	0.89	0.27	1
Chlorobenzene	ND		ug/kg	0.89	0.31	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.37	1
1,2-Dichloroethane	ND		ug/kg	0.89	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.89	0.31	1
Bromodichloromethane	ND		ug/kg	0.89	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	0.89	0.19	1
cis-1,3-Dichloropropene	ND		ug/kg	0.89	0.21	1
Bromoform	ND		ug/kg	3.6	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.89	0.27	1
Benzene	ND		ug/kg	0.89	0.17	1
Toluene	0.56	J	ug/kg	1.3	0.17	1
Ethylbenzene	ND		ug/kg	0.89	0.15	1
Chloromethane	ND		ug/kg	4.5	0.39	1
Bromomethane	ND		ug/kg	1.8	0.30	1
Vinyl chloride	ND		ug/kg	1.8	0.28	1
Chloroethane	ND		ug/kg	1.8	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.89	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
Trichloroethene	ND		ug/kg	0.89	0.27	1
1,2-Dichlorobenzene	ND		ug/kg	4.5	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.5	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	4.5	0.16	1



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-04  
**Client ID:** SB-09  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/06/17 12:45  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.8	0.14	1
p/m-Xylene	0.32	J	ug/kg	1.8	0.31	1
o-Xylene	ND		ug/kg	1.8	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	0.89	0.30	1
Styrene	ND		ug/kg	1.8	0.36	1
Dichlorodifluoromethane	ND		ug/kg	8.9	0.45	1
Acetone	14		ug/kg	8.9	2.0	1
Carbon disulfide	ND		ug/kg	8.9	0.98	1
2-Butanone	ND		ug/kg	8.9	0.62	1
4-Methyl-2-pentanone	ND		ug/kg	8.9	0.22	1
2-Hexanone	ND		ug/kg	8.9	0.60	1
1,2-Dibromoethane	ND		ug/kg	3.6	0.18	1
n-Butylbenzene	ND		ug/kg	0.89	0.20	1
sec-Butylbenzene	ND		ug/kg	0.89	0.19	1
tert-Butylbenzene	ND		ug/kg	4.5	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	0.35	1
Isopropylbenzene	ND		ug/kg	0.89	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.89	0.18	1
Naphthalene	ND		ug/kg	4.5	0.12	1
n-Propylbenzene	ND		ug/kg	0.89	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.5	0.19	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.5	0.14	1
1,2,4-Trimethylbenzene	0.32	J	ug/kg	4.5	0.17	1
Methyl Acetate	ND		ug/kg	18	0.41	1
Cyclohexane	ND		ug/kg	18	0.39	1
Freon-113	ND		ug/kg	18	0.46	1
Methyl cyclohexane	ND		ug/kg	3.6	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-05  
**Client ID:** SB-10  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/06/17 13:10  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 09:44  
**Analyst:** JC  
**Percent Solids:** 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	9.1	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.24	1
Chloroform	ND		ug/kg	1.4	0.34	1
Carbon tetrachloride	ND		ug/kg	0.91	0.31	1
1,2-Dichloropropane	ND		ug/kg	3.2	0.21	1
Dibromochloromethane	ND		ug/kg	0.91	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.28	1
Tetrachloroethene	ND		ug/kg	0.91	0.27	1
Chlorobenzene	ND		ug/kg	0.91	0.32	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.38	1
1,2-Dichloroethane	ND		ug/kg	0.91	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.91	0.32	1
Bromodichloromethane	ND		ug/kg	0.91	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	0.91	0.19	1
cis-1,3-Dichloropropene	ND		ug/kg	0.91	0.21	1
Bromoform	ND		ug/kg	3.6	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.91	0.27	1
Benzene	0.38	J	ug/kg	0.91	0.18	1
Toluene	1.2	J	ug/kg	1.4	0.18	1
Ethylbenzene	0.28	J	ug/kg	0.91	0.15	1
Chloromethane	ND		ug/kg	4.5	0.40	1
Bromomethane	ND		ug/kg	1.8	0.31	1
Vinyl chloride	ND		ug/kg	1.8	0.29	1
Chloroethane	ND		ug/kg	1.8	0.29	1
1,1-Dichloroethene	ND		ug/kg	0.91	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.22	1
Trichloroethene	ND		ug/kg	0.91	0.27	1
1,2-Dichlorobenzene	ND		ug/kg	4.5	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.5	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	4.5	0.16	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-05  
**Client ID:** SB-10  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/06/17 13:10  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.8	0.14	1
p/m-Xylene	1.1	J	ug/kg	1.8	0.32	1
o-Xylene	0.32	J	ug/kg	1.8	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	0.91	0.31	1
Styrene	ND		ug/kg	1.8	0.36	1
Dichlorodifluoromethane	ND		ug/kg	9.1	0.45	1
Acetone	6.8	J	ug/kg	9.1	2.1	1
Carbon disulfide	ND		ug/kg	9.1	1.0	1
2-Butanone	ND		ug/kg	9.1	0.63	1
4-Methyl-2-pentanone	ND		ug/kg	9.1	0.22	1
2-Hexanone	ND		ug/kg	9.1	0.60	1
1,2-Dibromoethane	ND		ug/kg	3.6	0.18	1
n-Butylbenzene	ND		ug/kg	0.91	0.21	1
sec-Butylbenzene	ND		ug/kg	0.91	0.20	1
tert-Butylbenzene	ND		ug/kg	4.5	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	0.36	1
Isopropylbenzene	ND		ug/kg	0.91	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.91	0.18	1
Naphthalene	0.23	J	ug/kg	4.5	0.12	1
n-Propylbenzene	0.34	J	ug/kg	0.91	0.20	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.5	0.20	1
1,3,5-Trimethylbenzene	0.48	J	ug/kg	4.5	0.15	1
1,2,4-Trimethylbenzene	1.8	J	ug/kg	4.5	0.17	1
Methyl Acetate	ND		ug/kg	18	0.42	1
Cyclohexane	0.56	J	ug/kg	18	0.39	1
Freon-113	ND		ug/kg	18	0.47	1
Methyl cyclohexane	0.95	J	ug/kg	3.6	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	106		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-06  
**Client ID:** SB-12  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/07/17 09:30  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 10:10  
**Analyst:** JC  
**Percent Solids:** 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	9.3	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.25	1
Chloroform	ND		ug/kg	1.4	0.34	1
Carbon tetrachloride	ND		ug/kg	0.93	0.32	1
1,2-Dichloropropane	ND		ug/kg	3.2	0.21	1
Dibromochloromethane	ND		ug/kg	0.93	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.29	1
Tetrachloroethene	ND		ug/kg	0.93	0.28	1
Chlorobenzene	ND		ug/kg	0.93	0.32	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.39	1
1,2-Dichloroethane	ND		ug/kg	0.93	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.93	0.32	1
Bromodichloromethane	ND		ug/kg	0.93	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	0.93	0.19	1
cis-1,3-Dichloropropene	ND		ug/kg	0.93	0.21	1
Bromoform	ND		ug/kg	3.7	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.93	0.28	1
Benzene	ND		ug/kg	0.93	0.18	1
Toluene	ND		ug/kg	1.4	0.18	1
Ethylbenzene	ND		ug/kg	0.93	0.16	1
Chloromethane	ND		ug/kg	4.6	0.40	1
Bromomethane	ND		ug/kg	1.8	0.31	1
Vinyl chloride	ND		ug/kg	1.8	0.29	1
Chloroethane	ND		ug/kg	1.8	0.29	1
1,1-Dichloroethene	ND		ug/kg	0.93	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.22	1
Trichloroethene	ND		ug/kg	0.93	0.28	1
1,2-Dichlorobenzene	ND		ug/kg	4.6	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.6	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	4.6	0.17	1



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-06  
**Client ID:** SB-12  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/07/17 09:30  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.8	0.14	1
p/m-Xylene	ND		ug/kg	1.8	0.32	1
o-Xylene	ND		ug/kg	1.8	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	0.93	0.32	1
Styrene	ND		ug/kg	1.8	0.37	1
Dichlorodifluoromethane	ND		ug/kg	9.3	0.46	1
Acetone	25		ug/kg	9.3	2.1	1
Carbon disulfide	ND		ug/kg	9.3	1.0	1
2-Butanone	ND		ug/kg	9.3	0.64	1
4-Methyl-2-pentanone	ND		ug/kg	9.3	0.23	1
2-Hexanone	ND		ug/kg	9.3	0.62	1
1,2-Dibromoethane	ND		ug/kg	3.7	0.18	1
n-Butylbenzene	ND		ug/kg	0.93	0.21	1
sec-Butylbenzene	ND		ug/kg	0.93	0.20	1
tert-Butylbenzene	ND		ug/kg	4.6	0.23	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.6	0.37	1
Isopropylbenzene	ND		ug/kg	0.93	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.93	0.19	1
Naphthalene	ND		ug/kg	4.6	0.13	1
n-Propylbenzene	ND		ug/kg	0.93	0.20	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.6	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.6	0.15	1
1,2,4-Trimethylbenzene	0.23	J	ug/kg	4.6	0.17	1
Methyl Acetate	ND		ug/kg	18	0.43	1
Cyclohexane	ND		ug/kg	18	0.40	1
Freon-113	ND		ug/kg	18	0.48	1
Methyl cyclohexane	ND		ug/kg	3.7	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	104		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-07  
**Client ID:** SB-13  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/07/17 11:35  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 10:35  
**Analyst:** JC  
**Percent Solids:** 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	9.7	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.26	1
Chloroform	ND		ug/kg	1.4	0.36	1
Carbon tetrachloride	ND		ug/kg	0.97	0.33	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.97	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.30	1
Tetrachloroethene	ND		ug/kg	0.97	0.29	1
Chlorobenzene	ND		ug/kg	0.97	0.34	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.40	1
1,2-Dichloroethane	ND		ug/kg	0.97	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.97	0.34	1
Bromodichloromethane	ND		ug/kg	0.97	0.30	1
trans-1,3-Dichloropropene	ND		ug/kg	0.97	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.97	0.22	1
Bromoform	ND		ug/kg	3.9	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.97	0.29	1
Benzene	0.37	J	ug/kg	0.97	0.19	1
Toluene	1.8		ug/kg	1.4	0.19	1
Ethylbenzene	0.69	J	ug/kg	0.97	0.16	1
Chloromethane	ND		ug/kg	4.8	0.42	1
Bromomethane	ND		ug/kg	1.9	0.33	1
Vinyl chloride	ND		ug/kg	1.9	0.30	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.97	0.36	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.23	1
Trichloroethene	ND		ug/kg	0.97	0.29	1
1,2-Dichlorobenzene	ND		ug/kg	4.8	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	4.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	4.8	0.18	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-07  
**Client ID:** SB-13  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/07/17 11:35  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.9	0.15	1
p/m-Xylene	2.2		ug/kg	1.9	0.34	1
o-Xylene	0.51	J	ug/kg	1.9	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	0.97	0.33	1
Styrene	ND		ug/kg	1.9	0.39	1
Dichlorodifluoromethane	ND		ug/kg	9.7	0.48	1
Acetone	2.9	J	ug/kg	9.7	2.2	1
Carbon disulfide	ND		ug/kg	9.7	1.1	1
2-Butanone	ND		ug/kg	9.7	0.67	1
4-Methyl-2-pentanone	ND		ug/kg	9.7	0.24	1
2-Hexanone	ND		ug/kg	9.7	0.64	1
1,2-Dibromoethane	ND		ug/kg	3.9	0.19	1
n-Butylbenzene	ND		ug/kg	0.97	0.22	1
sec-Butylbenzene	ND		ug/kg	0.97	0.21	1
tert-Butylbenzene	ND		ug/kg	4.8	0.24	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.8	0.38	1
Isopropylbenzene	ND		ug/kg	0.97	0.19	1
p-Isopropyltoluene	ND		ug/kg	0.97	0.20	1
Naphthalene	0.55	J	ug/kg	4.8	0.13	1
n-Propylbenzene	0.51	J	ug/kg	0.97	0.21	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.8	0.21	1
1,3,5-Trimethylbenzene	0.74	J	ug/kg	4.8	0.16	1
1,2,4-Trimethylbenzene	2.8	J	ug/kg	4.8	0.18	1
Methyl Acetate	ND		ug/kg	19	0.45	1
Cyclohexane	0.49	J	ug/kg	19	0.42	1
Freon-113	ND		ug/kg	19	0.50	1
Methyl cyclohexane	0.94	J	ug/kg	3.9	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	104		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-09  
**Client ID:** SB-17  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 09:45  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 11:01  
**Analyst:** JC  
**Percent Solids:** 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	11	1.8	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.30	1
Chloroform	ND		ug/kg	1.6	0.40	1
Carbon tetrachloride	ND		ug/kg	1.1	0.38	1
1,2-Dichloropropane	ND		ug/kg	3.8	0.25	1
Dibromochloromethane	ND		ug/kg	1.1	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.34	1
Tetrachloroethene	0.60	J	ug/kg	1.1	0.33	1
Chlorobenzene	ND		ug/kg	1.1	0.38	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.46	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.38	1
Bromodichloromethane	ND		ug/kg	1.1	0.34	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.23	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.25	1
Bromoform	ND		ug/kg	4.4	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.32	1
Benzene	ND		ug/kg	1.1	0.21	1
Toluene	0.50	J	ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.18	1
Chloromethane	ND		ug/kg	5.5	0.48	1
Bromomethane	ND		ug/kg	2.2	0.37	1
Vinyl chloride	ND		ug/kg	2.2	0.34	1
Chloroethane	ND		ug/kg	2.2	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.41	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.26	1
Trichloroethene	ND		ug/kg	1.1	0.33	1
1,2-Dichlorobenzene	ND		ug/kg	5.5	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	5.5	0.24	1
1,4-Dichlorobenzene	ND		ug/kg	5.5	0.20	1



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-09  
**Client ID:** SB-17  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 09:45  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	2.2	0.17	1
p/m-Xylene	ND		ug/kg	2.2	0.38	1
o-Xylene	ND		ug/kg	2.2	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.37	1
Styrene	ND		ug/kg	2.2	0.44	1
Dichlorodifluoromethane	ND		ug/kg	11	0.55	1
Acetone	9.5	J	ug/kg	11	2.5	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.75	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.27	1
2-Hexanone	ND		ug/kg	11	0.73	1
1,2-Dibromoethane	ND		ug/kg	4.4	0.22	1
n-Butylbenzene	ND		ug/kg	1.1	0.25	1
sec-Butylbenzene	ND		ug/kg	1.1	0.24	1
tert-Butylbenzene	ND		ug/kg	5.5	0.27	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.5	0.43	1
Isopropylbenzene	ND		ug/kg	1.1	0.21	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.22	1
Naphthalene	ND		ug/kg	5.5	0.15	1
n-Propylbenzene	ND		ug/kg	1.1	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.5	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.5	0.18	1
1,2,4-Trimethylbenzene	0.22	J	ug/kg	5.5	0.20	1
Methyl Acetate	ND		ug/kg	22	0.51	1
Cyclohexane	ND		ug/kg	22	0.47	1
Freon-113	ND		ug/kg	22	0.56	1
Methyl cyclohexane	ND		ug/kg	4.4	0.26	1

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

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-10  
**Client ID:** SB-18  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 10:30  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 11:26  
**Analyst:** JC  
**Percent Solids:** 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.9	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.24	1
Chloroform	ND		ug/kg	1.3	0.33	1
Carbon tetrachloride	ND		ug/kg	0.89	0.31	1
1,2-Dichloropropane	ND		ug/kg	3.1	0.20	1
Dibromochloromethane	ND		ug/kg	0.89	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.28	1
Tetrachloroethene	4.0		ug/kg	0.89	0.27	1
Chlorobenzene	ND		ug/kg	0.89	0.31	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.37	1
1,2-Dichloroethane	ND		ug/kg	0.89	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.89	0.31	1
Bromodichloromethane	ND		ug/kg	0.89	0.27	1
trans-1,3-Dichloropropene	ND		ug/kg	0.89	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.89	0.20	1
Bromoform	ND		ug/kg	3.6	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.89	0.26	1
Benzene	ND		ug/kg	0.89	0.17	1
Toluene	0.36	J	ug/kg	1.3	0.17	1
Ethylbenzene	0.17	J	ug/kg	0.89	0.15	1
Chloromethane	ND		ug/kg	4.4	0.39	1
Bromomethane	ND		ug/kg	1.8	0.30	1
Vinyl chloride	ND		ug/kg	1.8	0.28	1
Chloroethane	ND		ug/kg	1.8	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.89	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.21	1
Trichloroethene	ND		ug/kg	0.89	0.27	1
1,2-Dichlorobenzene	ND		ug/kg	4.4	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.4	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	4.4	0.16	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-10  
**Client ID:** SB-18  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 10:30  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.8	0.14	1
p/m-Xylene	0.32	J	ug/kg	1.8	0.31	1
o-Xylene	ND		ug/kg	1.8	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	0.89	0.30	1
Styrene	ND		ug/kg	1.8	0.36	1
Dichlorodifluoromethane	ND		ug/kg	8.9	0.44	1
Acetone	4.4	J	ug/kg	8.9	2.0	1
Carbon disulfide	ND		ug/kg	8.9	0.98	1
2-Butanone	ND		ug/kg	8.9	0.61	1
4-Methyl-2-pentanone	ND		ug/kg	8.9	0.22	1
2-Hexanone	ND		ug/kg	8.9	0.59	1
1,2-Dibromoethane	ND		ug/kg	3.6	0.18	1
n-Butylbenzene	ND		ug/kg	0.89	0.20	1
sec-Butylbenzene	ND		ug/kg	0.89	0.19	1
tert-Butylbenzene	ND		ug/kg	4.4	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.4	0.35	1
Isopropylbenzene	ND		ug/kg	0.89	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.89	0.18	1
Naphthalene	0.12	J	ug/kg	4.4	0.12	1
n-Propylbenzene	ND		ug/kg	0.89	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.4	0.19	1
1,3,5-Trimethylbenzene	0.15	J	ug/kg	4.4	0.14	1
1,2,4-Trimethylbenzene	0.70	J	ug/kg	4.4	0.16	1
Methyl Acetate	ND		ug/kg	18	0.41	1
Cyclohexane	ND		ug/kg	18	0.38	1
Freon-113	ND		ug/kg	18	0.46	1
Methyl cyclohexane	ND		ug/kg	3.6	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	106		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-11  
**Client ID:** SB-19  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 12:15  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 11:51  
**Analyst:** JC  
**Percent Solids:** 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	11	1.9	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.31	1
Chloroform	ND		ug/kg	1.7	0.42	1
Carbon tetrachloride	ND		ug/kg	1.1	0.39	1
1,2-Dichloropropane	ND		ug/kg	4.0	0.26	1
Dibromochloromethane	ND		ug/kg	1.1	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.36	1
Tetrachloroethene	0.37	J	ug/kg	1.1	0.34	1
Chlorobenzene	ND		ug/kg	1.1	0.39	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.47	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.40	1
Bromodichloromethane	ND		ug/kg	1.1	0.35	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.24	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.26	1
Bromoform	ND		ug/kg	4.5	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.34	1
Benzene	ND		ug/kg	1.1	0.22	1
Toluene	1.1	J	ug/kg	1.7	0.22	1
Ethylbenzene	0.44	J	ug/kg	1.1	0.19	1
Chloromethane	ND		ug/kg	5.7	0.49	1
Bromomethane	ND		ug/kg	2.3	0.38	1
Vinyl chloride	ND		ug/kg	2.3	0.36	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.42	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.27	1
Trichloroethene	ND		ug/kg	1.1	0.34	1
1,2-Dichlorobenzene	ND		ug/kg	5.7	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	5.7	0.25	1
1,4-Dichlorobenzene	ND		ug/kg	5.7	0.21	1



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-11  
**Client ID:** SB-19  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 12:15  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	2.3	0.17	1
p/m-Xylene	1.0	J	ug/kg	2.3	0.40	1
o-Xylene	ND		ug/kg	2.3	0.38	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.39	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	11	0.57	1
Acetone	12		ug/kg	11	2.6	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.78	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.28	1
2-Hexanone	ND		ug/kg	11	0.76	1
1,2-Dibromoethane	ND		ug/kg	4.5	0.22	1
n-Butylbenzene	ND		ug/kg	1.1	0.26	1
sec-Butylbenzene	ND		ug/kg	1.1	0.25	1
tert-Butylbenzene	ND		ug/kg	5.7	0.28	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.7	0.45	1
Isopropylbenzene	ND		ug/kg	1.1	0.22	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.23	1
Naphthalene	7.8		ug/kg	5.7	0.16	1
n-Propylbenzene	0.31	J	ug/kg	1.1	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.7	0.24	1
1,3,5-Trimethylbenzene	0.34	J	ug/kg	5.7	0.18	1
1,2,4-Trimethylbenzene	1.5	J	ug/kg	5.7	0.21	1
Methyl Acetate	ND		ug/kg	23	0.52	1
Cyclohexane	ND		ug/kg	23	0.49	1
Freon-113	ND		ug/kg	23	0.58	1
Methyl cyclohexane	ND		ug/kg	4.5	0.27	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-12  
**Client ID:** SB-20  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 12:35  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 12:17  
**Analyst:** JC  
**Percent Solids:** 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	9.5	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.26	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.95	0.33	1
1,2-Dichloropropane	ND		ug/kg	3.3	0.22	1
Dibromochloromethane	ND		ug/kg	0.95	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.30	1
Tetrachloroethene	1.1		ug/kg	0.95	0.29	1
Chlorobenzene	ND		ug/kg	0.95	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.40	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.95	0.33	1
Bromodichloromethane	ND		ug/kg	0.95	0.29	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.95	0.22	1
Bromoform	ND		ug/kg	3.8	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.95	0.28	1
Benzene	ND		ug/kg	0.95	0.18	1
Toluene	0.56	J	ug/kg	1.4	0.18	1
Ethylbenzene	ND		ug/kg	0.95	0.16	1
Chloromethane	ND		ug/kg	4.8	0.42	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.30	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.23	1
Trichloroethene	ND		ug/kg	0.95	0.29	1
1,2-Dichlorobenzene	ND		ug/kg	4.8	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	4.8	0.17	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-12  
**Client ID:** SB-20  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 12:35  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.9	0.14	1
p/m-Xylene	ND		ug/kg	1.9	0.33	1
o-Xylene	ND		ug/kg	1.9	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.32	1
Styrene	ND		ug/kg	1.9	0.38	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.48	1
Acetone	20		ug/kg	9.5	2.2	1
Carbon disulfide	ND		ug/kg	9.5	1.0	1
2-Butanone	ND		ug/kg	9.5	0.66	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	0.23	1
2-Hexanone	ND		ug/kg	9.5	0.63	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.19	1
n-Butylbenzene	ND		ug/kg	0.95	0.22	1
sec-Butylbenzene	ND		ug/kg	0.95	0.21	1
tert-Butylbenzene	ND		ug/kg	4.8	0.24	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.8	0.38	1
Isopropylbenzene	ND		ug/kg	0.95	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.19	1
Naphthalene	1.3	J	ug/kg	4.8	0.13	1
n-Propylbenzene	ND		ug/kg	0.95	0.20	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.8	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.8	0.15	1
1,2,4-Trimethylbenzene	0.18	J	ug/kg	4.8	0.18	1
Methyl Acetate	ND		ug/kg	19	0.44	1
Cyclohexane	ND		ug/kg	19	0.41	1
Freon-113	ND		ug/kg	19	0.49	1
Methyl cyclohexane	ND		ug/kg	3.8	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-13  
**Client ID:** SB-21  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 15:50  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 12:42  
**Analyst:** JC  
**Percent Solids:** 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	10	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.27	1
Chloroform	ND		ug/kg	1.5	0.37	1
Carbon tetrachloride	ND		ug/kg	1.0	0.35	1
1,2-Dichloropropane	ND		ug/kg	3.5	0.23	1
Dibromochloromethane	ND		ug/kg	1.0	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31	1
Tetrachloroethene	41		ug/kg	1.0	0.30	1
Chlorobenzene	ND		ug/kg	1.0	0.35	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.42	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35	1
Bromodichloromethane	ND		ug/kg	1.0	0.31	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23	1
Bromoform	ND		ug/kg	4.0	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30	1
Benzene	ND		ug/kg	1.0	0.19	1
Toluene	ND		ug/kg	1.5	0.20	1
Ethylbenzene	ND		ug/kg	1.0	0.17	1
Chloromethane	ND		ug/kg	5.0	0.44	1
Bromomethane	ND		ug/kg	2.0	0.34	1
Vinyl chloride	ND		ug/kg	2.0	0.32	1
Chloroethane	ND		ug/kg	2.0	0.32	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.37	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24	1
Trichloroethene	ND		ug/kg	1.0	0.30	1
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18	1



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-13  
**Client ID:** SB-21  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 15:50  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	2.0	0.15	1
p/m-Xylene	ND		ug/kg	2.0	0.35	1
o-Xylene	ND		ug/kg	2.0	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34	1
Styrene	ND		ug/kg	2.0	0.40	1
Dichlorodifluoromethane	ND		ug/kg	10	0.50	1
Acetone	6.4	J	ug/kg	10	2.3	1
Carbon disulfide	ND		ug/kg	10	1.1	1
2-Butanone	ND		ug/kg	10	0.69	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.24	1
2-Hexanone	ND		ug/kg	10	0.67	1
1,2-Dibromoethane	ND		ug/kg	4.0	0.20	1
n-Butylbenzene	ND		ug/kg	1.0	0.23	1
sec-Butylbenzene	ND		ug/kg	1.0	0.22	1
tert-Butylbenzene	ND		ug/kg	5.0	0.25	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40	1
Isopropylbenzene	ND		ug/kg	1.0	0.19	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.20	1
Naphthalene	1.1	J	ug/kg	5.0	0.14	1
n-Propylbenzene	ND		ug/kg	1.0	0.22	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16	1
1,2,4-Trimethylbenzene	0.59	J	ug/kg	5.0	0.19	1
Methyl Acetate	ND		ug/kg	20	0.46	1
Cyclohexane	ND		ug/kg	20	0.43	1
Freon-113	ND		ug/kg	20	0.52	1
Methyl cyclohexane	ND		ug/kg	4.0	0.24	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	108		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-14  
**Client ID:** SB-22  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 16:20  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/16/17 13:08  
**Analyst:** JC  
**Percent Solids:** 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	10	1.7	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.28	1
Chloroform	ND		ug/kg	1.5	0.38	1
Carbon tetrachloride	ND		ug/kg	1.0	0.36	1
1,2-Dichloropropane	ND		ug/kg	3.6	0.24	1
Dibromochloromethane	ND		ug/kg	1.0	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.32	1
Tetrachloroethene	280		ug/kg	1.0	0.31	1
Chlorobenzene	ND		ug/kg	1.0	0.36	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.43	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.36	1
Bromodichloromethane	ND		ug/kg	1.0	0.32	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.24	1
Bromoform	ND		ug/kg	4.1	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.31	1
Benzene	ND		ug/kg	1.0	0.20	1
Toluene	ND		ug/kg	1.5	0.20	1
Ethylbenzene	ND		ug/kg	1.0	0.18	1
Chloromethane	ND		ug/kg	5.2	0.45	1
Bromomethane	ND		ug/kg	2.1	0.35	1
Vinyl chloride	ND		ug/kg	2.1	0.32	1
Chloroethane	ND		ug/kg	2.1	0.33	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.38	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.25	1
Trichloroethene	0.57	J	ug/kg	1.0	0.31	1
1,2-Dichlorobenzene	ND		ug/kg	5.2	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	5.2	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	5.2	0.19	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-14  
**Client ID:** SB-22  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/08/17 16:20  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	2.1	0.16	1
p/m-Xylene	ND		ug/kg	2.1	0.36	1
o-Xylene	ND		ug/kg	2.1	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.35	1
Styrene	ND		ug/kg	2.1	0.41	1
Dichlorodifluoromethane	ND		ug/kg	10	0.52	1
Acetone	6.0	J	ug/kg	10	2.4	1
Carbon disulfide	ND		ug/kg	10	1.1	1
2-Butanone	ND		ug/kg	10	0.71	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.25	1
2-Hexanone	ND		ug/kg	10	0.69	1
1,2-Dibromoethane	ND		ug/kg	4.1	0.20	1
n-Butylbenzene	ND		ug/kg	1.0	0.24	1
sec-Butylbenzene	ND		ug/kg	1.0	0.22	1
tert-Butylbenzene	ND		ug/kg	5.2	0.25	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.2	0.41	1
Isopropylbenzene	ND		ug/kg	1.0	0.20	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.21	1
Naphthalene	ND		ug/kg	5.2	0.14	1
n-Propylbenzene	ND		ug/kg	1.0	0.22	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.2	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.2	0.17	1
1,2,4-Trimethylbenzene	0.40	J	ug/kg	5.2	0.19	1
Methyl Acetate	ND		ug/kg	21	0.48	1
Cyclohexane	ND		ug/kg	21	0.45	1
Freon-113	ND		ug/kg	21	0.53	1
Methyl cyclohexane	ND		ug/kg	4.1	0.25	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	105		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/15/17 08:25  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01 Batch: WG1063293-5					
Methylene chloride	ND		ug/kg	500	82.
1,1-Dichloroethane	ND		ug/kg	75	14.
Chloroform	ND		ug/kg	75	18.
Carbon tetrachloride	ND		ug/kg	50	17.
1,2-Dichloropropane	ND		ug/kg	180	11.
Dibromochloromethane	ND		ug/kg	50	8.8
1,1,2-Trichloroethane	ND		ug/kg	75	16.
Tetrachloroethene	ND		ug/kg	50	15.
Chlorobenzene	ND		ug/kg	50	17.
Trichlorofluoromethane	ND		ug/kg	250	21.
1,2-Dichloroethane	ND		ug/kg	50	12.
1,1,1-Trichloroethane	ND		ug/kg	50	18.
Bromodichloromethane	ND		ug/kg	50	15.
trans-1,3-Dichloropropene	ND		ug/kg	50	10.
cis-1,3-Dichloropropene	ND		ug/kg	50	12.
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	15.
Benzene	ND		ug/kg	50	9.6
Toluene	ND		ug/kg	75	9.8
Ethylbenzene	ND		ug/kg	50	8.5
Chloromethane	ND		ug/kg	250	22.
Bromomethane	ND		ug/kg	100	17.
Vinyl chloride	ND		ug/kg	100	16.
Chloroethane	ND		ug/kg	100	16.
1,1-Dichloroethene	ND		ug/kg	50	19.
trans-1,2-Dichloroethene	ND		ug/kg	75	12.
Trichloroethene	ND		ug/kg	50	15.
1,2-Dichlorobenzene	ND		ug/kg	250	9.1
1,3-Dichlorobenzene	ND		ug/kg	250	11.



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/15/17 08:25  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01 Batch: WG1063293-5					
1,4-Dichlorobenzene	ND		ug/kg	250	9.1
Methyl tert butyl ether	ND		ug/kg	100	7.6
p/m-Xylene	ND		ug/kg	100	18.
o-Xylene	ND		ug/kg	100	17.
cis-1,2-Dichloroethene	ND		ug/kg	50	17.
Styrene	ND		ug/kg	100	20.
Dichlorodifluoromethane	ND		ug/kg	500	25.
Acetone	ND		ug/kg	500	110
Carbon disulfide	ND		ug/kg	500	55.
2-Butanone	ND		ug/kg	500	34.
4-Methyl-2-pentanone	ND		ug/kg	500	12.
2-Hexanone	ND		ug/kg	500	33.
1,2-Dibromoethane	ND		ug/kg	200	10.
n-Butylbenzene	ND		ug/kg	50	11.
sec-Butylbenzene	ND		ug/kg	50	11.
tert-Butylbenzene	ND		ug/kg	250	12.
1,2-Dibromo-3-chloropropane	ND		ug/kg	250	20.
Isopropylbenzene	ND		ug/kg	50	9.7
p-Isopropyltoluene	ND		ug/kg	50	10.
Naphthalene	ND		ug/kg	250	6.9
n-Propylbenzene	ND		ug/kg	50	11.
1,2,4-Trichlorobenzene	ND		ug/kg	250	11.
1,3,5-Trimethylbenzene	ND		ug/kg	250	8.0
1,2,4-Trimethylbenzene	ND		ug/kg	250	9.3
Methyl Acetate	ND		ug/kg	1000	23.
Cyclohexane	ND		ug/kg	1000	22.
Freon-113	ND		ug/kg	1000	26.
Methyl cyclohexane	ND		ug/kg	200	12.

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 11/15/17 08:25  
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 01 Batch: WG1063293-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	93		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/16/17 08:01  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-07,09-14 Batch: WG1063723-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/16/17 08:01  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-07,09-14 Batch: WG1063723-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 11/16/17 08:01  
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02-07,09-14 Batch: WG1063723-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01 Batch: WG1063293-3 WG1063293-4								
Methylene chloride	95		96		70-130	1		30
1,1-Dichloroethane	101		102		70-130	1		30
Chloroform	100		100		70-130	0		30
Carbon tetrachloride	102		103		70-130	1		30
1,2-Dichloropropane	99		102		70-130	3		30
Dibromochloromethane	81		82		70-130	1		30
1,1,2-Trichloroethane	95		94		70-130	1		30
Tetrachloroethene	96		96		70-130	0		30
Chlorobenzene	93		94		70-130	1		30
Trichlorofluoromethane	108		109		70-139	1		30
1,2-Dichloroethane	100		101		70-130	1		30
1,1,1-Trichloroethane	104		106		70-130	2		30
Bromodichloromethane	94		97		70-130	3		30
trans-1,3-Dichloropropene	89		89		70-130	0		30
cis-1,3-Dichloropropene	92		93		70-130	1		30
Bromoform	71		71		70-130	0		30
1,1,2,2-Tetrachloroethane	93		92		70-130	1		30
Benzene	99		99		70-130	0		30
Toluene	94		95		70-130	1		30
Ethylbenzene	97		97		70-130	0		30
Chloromethane	100		101		52-130	1		30
Bromomethane	97		103		57-147	6		30
Vinyl chloride	107		109		67-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01 Batch: WG1063293-3 WG1063293-4								
Chloroethane	111		108		50-151	3		30
1,1-Dichloroethene	106		106		65-135	0		30
trans-1,2-Dichloroethene	101		102		70-130	1		30
Trichloroethene	101		101		70-130	0		30
1,2-Dichlorobenzene	91		92		70-130	1		30
1,3-Dichlorobenzene	92		93		70-130	1		30
1,4-Dichlorobenzene	90		91		70-130	1		30
Methyl tert butyl ether	101		100		66-130	1		30
p/m-Xylene	97		98		70-130	1		30
o-Xylene	97		96		70-130	1		30
cis-1,2-Dichloroethene	99		100		70-130	1		30
Styrene	92		92		70-130	0		30
Dichlorodifluoromethane	107		109		30-146	2		30
Acetone	102		94		54-140	8		30
Carbon disulfide	92		94		59-130	2		30
2-Butanone	102		102		70-130	0		30
4-Methyl-2-pentanone	88		86		70-130	2		30
2-Hexanone	86		81		70-130	6		30
1,2-Dibromoethane	94		94		70-130	0		30
n-Butylbenzene	100		102		70-130	2		30
sec-Butylbenzene	98		99		70-130	1		30
tert-Butylbenzene	95		97		70-130	2		30
1,2-Dibromo-3-chloropropane	81		82		68-130	1		30

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 01 Batch: WG1063293-3 WG1063293-4								
Isopropylbenzene	96		97		70-130	1		30
p-Isopropyltoluene	98		99		70-130	1		30
Naphthalene	94		92		70-130	2		30
n-Propylbenzene	96		97		70-130	1		30
1,2,4-Trichlorobenzene	92		93		70-130	1		30
1,3,5-Trimethylbenzene	95		96		70-130	1		30
1,2,4-Trimethylbenzene	96		97		70-130	1		30
Methyl Acetate	96		92		51-146	4		30
Cyclohexane	110		111		59-142	1		30
Freon-113	109		111		50-139	2		30
Methyl cyclohexane	108		109		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		98		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	100		100		70-130



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-07,09-14 Batch: WG1063723-3 WG1063723-4								
Methylene chloride	101		103		70-130	2		30
1,1-Dichloroethane	108		111		70-130	3		30
Chloroform	106		108		70-130	2		30
Carbon tetrachloride	126		125		70-130	1		30
1,2-Dichloropropane	101		106		70-130	5		30
Dibromochloromethane	98		98		70-130	0		30
1,1,2-Trichloroethane	95		99		70-130	4		30
Tetrachloroethene	118		118		70-130	0		30
Chlorobenzene	102		104		70-130	2		30
Trichlorofluoromethane	130		129		70-139	1		30
1,2-Dichloroethane	102		103		70-130	1		30
1,1,1-Trichloroethane	119		122		70-130	2		30
Bromodichloromethane	102		105		70-130	3		30
trans-1,3-Dichloropropene	97		99		70-130	2		30
cis-1,3-Dichloropropene	101		105		70-130	4		30
Bromoform	100		105		70-130	5		30
1,1,2,2-Tetrachloroethane	92		95		70-130	3		30
Benzene	107		110		70-130	3		30
Toluene	102		103		70-130	1		30
Ethylbenzene	105		106		70-130	1		30
Chloromethane	105		108		52-130	3		30
Bromomethane	107		110		57-147	3		30
Vinyl chloride	110		114		67-130	4		30



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-07,09-14 Batch: WG1063723-3 WG1063723-4								
Chloroethane	116		114		50-151	2		30
1,1-Dichloroethene	123		123		65-135	0		30
trans-1,2-Dichloroethene	114		118		70-130	3		30
Trichloroethene	115		119		70-130	3		30
1,2-Dichlorobenzene	97		100		70-130	3		30
1,3-Dichlorobenzene	100		103		70-130	3		30
1,4-Dichlorobenzene	99		102		70-130	3		30
Methyl tert butyl ether	101		104		66-130	3		30
p/m-Xylene	106		106		70-130	0		30
o-Xylene	102		104		70-130	2		30
cis-1,2-Dichloroethene	109		110		70-130	1		30
Styrene	99		101		70-130	2		30
Dichlorodifluoromethane	114		122		30-146	7		30
Acetone	98		101		54-140	3		30
Carbon disulfide	106		109		59-130	3		30
2-Butanone	106		108		70-130	2		30
4-Methyl-2-pentanone	91		92		70-130	1		30
2-Hexanone	86		88		70-130	2		30
1,2-Dibromoethane	97		98		70-130	1		30
n-Butylbenzene	106		109		70-130	3		30
sec-Butylbenzene	107		110		70-130	3		30
tert-Butylbenzene	107		109		70-130	2		30
1,2-Dibromo-3-chloropropane	90		97		68-130	7		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

Parameter	LCS		LCSD		%Recovery		RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02-07,09-14 Batch: WG1063723-3 WG1063723-4								
Isopropylbenzene	106		108		70-130	2		30
p-Isopropyltoluene	106		109		70-130	3		30
Naphthalene	91		95		70-130	4		30
n-Propylbenzene	105		108		70-130	3		30
1,2,4-Trichlorobenzene	98		102		70-130	4		30
1,3,5-Trimethylbenzene	105		107		70-130	2		30
1,2,4-Trimethylbenzene	102		104		70-130	2		30
Methyl Acetate	99		102		51-146	3		30
Cyclohexane	122		124		59-142	2		30
Freon-113	126		130		50-139	3		30
Methyl cyclohexane	124		127		70-130	2		30

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

# SEMIVOLATILES

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

Lab ID: L1741553-08  
 Client ID: SB-16  
 Sample Location: ROCHESTER, NY

Date Collected: 11/07/17 16:00  
 Date Received: 11/10/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/16/17 11:35

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 11/17/17 13:16  
 Analyst: ALS  
 Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	3200		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	33000	E	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	1600		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	21000	E	ug/kg	110	21.	1
Benzo(a)pyrene	17000	E	ug/kg	150	45.	1
Benzo(b)fluoranthene	24000	E	ug/kg	110	31.	1
Benzo(k)fluoranthene	4900		ug/kg	110	30.	1

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

## SAMPLE RESULTS

Lab ID: L1741553-08  
 Client ID: SB-16  
 Sample Location: ROCHESTER, NY

Date Collected: 11/07/17 16:00  
 Date Received: 11/10/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	17000	E	ug/kg	110	19.	1
Acenaphthylene	2400		ug/kg	150	28.	1
Anthracene	10000	E	ug/kg	110	36.	1
Benzo(ghi)perylene	9100	E	ug/kg	150	22.	1
Fluorene	3700		ug/kg	180	18.	1
Phenanthrene	29000	E	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	3100		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	9400	E	ug/kg	150	26.	1
Pyrene	28000	E	ug/kg	110	18.	1
Biphenyl	320	J	ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	2400		ug/kg	180	17.	1
2-Methylnaphthalene	1000		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	26	J	ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	67	J	ug/kg	180	28.	1
2-Methylphenol	36	J	ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	120	J	ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Carbazole	3500		ug/kg	180	18.	1
Atrazine	ND		ug/kg	150	65.	1
Benzaldehyde	ND		ug/kg	240	50.	1
Caprolactam	ND		ug/kg	180	56.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	37.	1



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

Lab ID: L1741553-08

Date Collected: 11/07/17 16:00

Client ID: SB-16

Date Received: 11/10/17

Sample Location: ROCHESTER, NY

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	75		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	99		10-136
4-Terphenyl-d14	79		18-120

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

Lab ID: L1741553-08 D  
 Client ID: SB-16  
 Sample Location: ROCHESTER, NY  
 Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 11/19/17 22:52  
 Analyst: RC  
 Percent Solids: 90%

Date Collected: 11/07/17 16:00  
 Date Received: 11/10/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/16/17 11:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Fluoranthene	35000		ug/kg	1100	210	10
Benzo(a)anthracene	16000		ug/kg	1100	210	10
Benzo(a)pyrene	13000		ug/kg	1500	450	10
Benzo(b)fluoranthene	16000		ug/kg	1100	310	10
Chrysene	14000		ug/kg	1100	190	10
Anthracene	8400		ug/kg	1100	360	10
Benzo(ghi)perylene	7300		ug/kg	1500	220	10
Phenanthrene	30000		ug/kg	1100	220	10
Indeno(1,2,3-cd)pyrene	7500		ug/kg	1500	260	10
Pyrene	30000		ug/kg	1100	180	10

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

Lab ID: L1741553-09  
 Client ID: SB-17  
 Sample Location: ROCHESTER, NY

Date Collected: 11/08/17 09:45  
 Date Received: 11/10/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/16/17 11:35

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 11/17/17 13:03  
 Analyst: SZ  
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
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	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	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	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	110	22.	1
Benzo(a)pyrene	ND		ug/kg	150	47.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	31.	1

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

## SAMPLE RESULTS

Lab ID: L1741553-09  
 Client ID: SB-17  
 Sample Location: ROCHESTER, NY

Date Collected: 11/08/17 09:45  
 Date Received: 11/10/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	30.	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	27.	1
Pyrene	ND		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	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	24.	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	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	ND		ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	67.	1
Benzaldehyde	ND		ug/kg	250	52.	1
Caprolactam	ND		ug/kg	190	58.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

Lab ID: L1741553-09

Date Collected: 11/08/17 09:45

Client ID: SB-17

Date Received: 11/10/17

Sample Location: ROCHESTER, NY

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	94		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	101		10-136
4-Terphenyl-d14	76		18-120



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/17/17 07:50  
**Analyst:** SZ

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/16/17 11:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08-09 Batch: WG1063725-1					
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:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/17/17 07:50  
**Analyst:** SZ

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/16/17 11:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08-09 Batch: WG1063725-1					
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	27.
2,4-Dimethylphenol	ND		ug/kg	160	55.
2-Nitrophenol	ND		ug/kg	360	62.
4-Nitrophenol	ND		ug/kg	230	68.
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:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/17/17 07:50  
**Analyst:** SZ

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/16/17 11:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 08-09 Batch: WG1063725-1					
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.

**Tentatively Identified Compounds**

No Tentatively Identified Compounds      ND      ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	93		25-120
Phenol-d6	94		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	90		30-120
2,4,6-Tribromophenol	102		10-136
4-Terphenyl-d14	93		18-120

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 Batch: WG1063725-2 WG1063725-3								
Acenaphthene	71		72		31-137	1		50
Hexachlorobenzene	79		78		40-140	1		50
Bis(2-chloroethyl)ether	77		82		40-140	6		50
2-Chloronaphthalene	79		79		40-140	0		50
3,3'-Dichlorobenzidine	57		59		40-140	3		50
2,4-Dinitrotoluene	88		86		40-132	2		50
2,6-Dinitrotoluene	85		82		40-140	4		50
Fluoranthene	82		79		40-140	4		50
4-Chlorophenyl phenyl ether	78		77		40-140	1		50
4-Bromophenyl phenyl ether	78		77		40-140	1		50
Bis(2-chloroisopropyl)ether	79		83		40-140	5		50
Bis(2-chloroethoxy)methane	76		79		40-117	4		50
Hexachlorobutadiene	80		82		40-140	2		50
Hexachlorocyclopentadiene	66		65		40-140	2		50
Hexachloroethane	82		88		40-140	7		50
Isophorone	79		80		40-140	1		50
Naphthalene	78		78		40-140	0		50
Nitrobenzene	81		85		40-140	5		50
NDPA/DPA	79		79		36-157	0		50
n-Nitrosodi-n-propylamine	84		84		32-121	0		50
Bis(2-ethylhexyl)phthalate	91		88		40-140	3		50
Butyl benzyl phthalate	97		94		40-140	3		50
Di-n-butylphthalate	90		85		40-140	6		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 Batch: WG1063725-2 WG1063725-3								
Di-n-octylphthalate	90		86		40-140	5		50
Diethyl phthalate	85		84		40-140	1		50
Dimethyl phthalate	81		79		40-140	3		50
Benzo(a)anthracene	79		78		40-140	1		50
Benzo(a)pyrene	87		86		40-140	1		50
Benzo(b)fluoranthene	86		84		40-140	2		50
Benzo(k)fluoranthene	81		78		40-140	4		50
Chrysene	77		74		40-140	4		50
Acenaphthylene	83		81		40-140	2		50
Anthracene	82		78		40-140	5		50
Benzo(ghi)perylene	85		82		40-140	4		50
Fluorene	78		77		40-140	1		50
Phenanthrene	78		76		40-140	3		50
Dibenzo(a,h)anthracene	82		79		40-140	4		50
Indeno(1,2,3-cd)pyrene	85		81		40-140	5		50
Pyrene	79		78		35-142	1		50
Biphenyl	81		80		54-104	1		50
4-Chloroaniline	51		51		40-140	0		50
2-Nitroaniline	89		87		47-134	2		50
3-Nitroaniline	67		70		26-129	4		50
4-Nitroaniline	75		77		41-125	3		50
Dibenzofuran	77		78		40-140	1		50
2-Methylnaphthalene	78		79		40-140	1		50



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 Batch: WG1063725-2 WG1063725-3								
1,2,4,5-Tetrachlorobenzene	80		81		40-117	1		50
Acetophenone	86		89		14-144	3		50
2,4,6-Trichlorophenol	84		82		30-130	2		50
p-Chloro-m-cresol	87		86		26-103	1		50
2-Chlorophenol	84		88		25-102	5		50
2,4-Dichlorophenol	86		86		30-130	0		50
2,4-Dimethylphenol	89		88		30-130	1		50
2-Nitrophenol	88		89		30-130	1		50
4-Nitrophenol	88		87		11-114	1		50
2,4-Dinitrophenol	31		25		4-130	21		50
4,6-Dinitro-o-cresol	70		70		10-130	0		50
Pentachlorophenol	56		52		17-109	7		50
Phenol	84		88		26-90	5		50
2-Methylphenol	83		83		30-130	0		50
3-Methylphenol/4-Methylphenol	86		84		30-130	2		50
2,4,5-Trichlorophenol	89		86		30-130	3		50
Carbazole	83		79		54-128	5		50
Atrazine	90		86		40-140	5		50
Benzaldehyde	82		86		40-140	5		50
Caprolactam	102		96		15-130	6		50
2,3,4,6-Tetrachlorophenol	79		78		40-140	1		50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1741553

**Project Number:** 2172414

**Report Date:** 11/20/17

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 Batch: WG1063725-2 WG1063725-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	90		91		25-120
Phenol-d6	88		87		10-120
Nitrobenzene-d5	84		86		23-120
2-Fluorobiphenyl	84		80		30-120
2,4,6-Tribromophenol	91		90		10-136
4-Terphenyl-d14	82		79		18-120

# PCBS

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-09  
**Client ID:** SB-17  
**Sample Location:** ROCHESTER, NY

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 11/17/17 02:25  
**Analyst:** WR  
**Percent Solids:** 85%

**Date Collected:** 11/08/17 09:45  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 11/16/17 03:26  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 11/16/17  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 11/16/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	37.5	4.26	1	A
Aroclor 1221	ND		ug/kg	37.5	5.71	1	A
Aroclor 1232	ND		ug/kg	37.5	3.69	1	A
Aroclor 1242	ND		ug/kg	37.5	4.59	1	A
Aroclor 1248	ND		ug/kg	37.5	4.21	1	A
Aroclor 1254	ND		ug/kg	37.5	3.06	1	A
Aroclor 1260	ND		ug/kg	37.5	3.92	1	A
Aroclor 1262	ND		ug/kg	37.5	3.08	1	A
Aroclor 1268	ND		ug/kg	37.5	2.66	1	A
PCBs, Total	ND		ug/kg	37.5	2.66	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	60		30-150	B

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8082A  
Analytical Date: 11/16/17 11:45  
Analyst: WR

Extraction Method: EPA 3546  
Extraction Date: 11/16/17 03:26  
Cleanup Method: EPA 3665A  
Cleanup Date: 11/16/17  
Cleanup Method: EPA 3660B  
Cleanup Date: 11/16/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 09 Batch: WG1063545-1						
Aroclor 1016	ND		ug/kg	31.7	3.60	A
Aroclor 1221	ND		ug/kg	31.7	4.83	A
Aroclor 1232	ND		ug/kg	31.7	3.12	A
Aroclor 1242	ND		ug/kg	31.7	3.88	A
Aroclor 1248	ND		ug/kg	31.7	3.56	A
Aroclor 1254	ND		ug/kg	31.7	2.59	A
Aroclor 1260	ND		ug/kg	31.7	3.31	A
Aroclor 1262	ND		ug/kg	31.7	2.61	A
Aroclor 1268	ND		ug/kg	31.7	2.25	A
PCBs, Total	ND		ug/kg	31.7	2.25	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	76		30-150	B



## Lab Control Sample Analysis

Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 09 Batch: WG1063545-2 WG1063545-3									
Aroclor 1016	70		72		40-140	3		50	A
Aroclor 1260	63		66		40-140	5		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		80		30-150	A
Decachlorobiphenyl	73		77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		89		30-150	B
Decachlorobiphenyl	79		83		30-150	B

# PESTICIDES

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

Lab ID: L1741553-01 D  
 Client ID: SB-02  
 Sample Location: ROCHESTER, NY  
 Matrix: Soil  
 Analytical Method: 1,8081B  
 Analytical Date: 11/20/17 17:26  
 Analyst: KEG  
 Percent Solids: 82%

Date Collected: 11/06/17 09:25  
 Date Received: 11/10/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/16/17 19:12  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 11/17/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/kg	9.35	1.83	5	A
Lindane	ND		ug/kg	3.90	1.74	5	A
Alpha-BHC	ND		ug/kg	3.90	1.11	5	A
Beta-BHC	ND		ug/kg	9.35	3.54	5	A
Heptachlor	ND		ug/kg	4.67	2.10	5	A
Aldrin	ND		ug/kg	9.35	3.29	5	A
Heptachlor epoxide	ND		ug/kg	17.5	5.26	5	A
Endrin	ND		ug/kg	3.90	1.60	5	A
Endrin aldehyde	ND		ug/kg	11.7	4.09	5	A
Endrin ketone	ND		ug/kg	9.35	2.41	5	A
Dieldrin	14.8	PI	ug/kg	5.84	2.92	5	A
4,4'-DDE	3.27	J	ug/kg	9.35	2.16	5	A
4,4'-DDD	ND		ug/kg	9.35	3.33	5	A
4,4'-DDT	ND		ug/kg	17.5	7.52	5	A
Endosulfan I	ND		ug/kg	9.35	2.21	5	A
Endosulfan II	11.1	PI	ug/kg	9.35	3.12	5	A
Endosulfan sulfate	ND		ug/kg	3.90	1.85	5	A
Methoxychlor	ND		ug/kg	17.5	5.45	5	A
Toxaphene	ND		ug/kg	175	49.1	5	A
cis-Chlordane	ND		ug/kg	11.7	3.26	5	A
trans-Chlordane	ND		ug/kg	11.7	3.08	5	A
Chlordane	ND		ug/kg	76.0	31.0	5	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	B
Decachlorobiphenyl	255	Q	30-150	B
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	75		30-150	A

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-09  
**Client ID:** SB-17  
**Sample Location:** ROCHESTER, NY  
  
**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 11/19/17 04:15  
**Analyst:** CD  
**Percent Solids:** 85%

**Date Collected:** 11/08/17 09:45  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified  
**Extraction Method:**EPA 3546  
**Extraction Date:** 11/16/17 06:01  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 11/17/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/kg	1.88	0.368	1	A
Lindane	ND		ug/kg	0.784	0.350	1	A
Alpha-BHC	ND		ug/kg	0.784	0.223	1	A
Beta-BHC	ND		ug/kg	1.88	0.713	1	A
Heptachlor	ND		ug/kg	0.941	0.422	1	A
Aldrin	ND		ug/kg	1.88	0.662	1	A
Heptachlor epoxide	ND		ug/kg	3.53	1.06	1	A
Endrin	ND		ug/kg	0.784	0.321	1	A
Endrin aldehyde	ND		ug/kg	2.35	0.823	1	A
Endrin ketone	ND		ug/kg	1.88	0.484	1	A
Dieldrin	ND		ug/kg	1.18	0.588	1	A
4,4'-DDE	ND		ug/kg	1.88	0.435	1	A
4,4'-DDD	ND		ug/kg	1.88	0.671	1	A
4,4'-DDT	3.42	J	ug/kg	3.53	1.51	1	A
Endosulfan I	ND		ug/kg	1.88	0.444	1	A
Endosulfan II	ND		ug/kg	1.88	0.629	1	A
Endosulfan sulfate	ND		ug/kg	0.784	0.373	1	A
Methoxychlor	ND		ug/kg	3.53	1.10	1	A
Toxaphene	ND		ug/kg	35.3	9.88	1	A
cis-Chlordane	ND		ug/kg	2.35	0.655	1	A
trans-Chlordane	ND		ug/kg	2.35	0.621	1	A
Chlordane	ND		ug/kg	15.3	6.23	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	130		30-150	B
2,4,5,6-Tetrachloro-m-xylene	110		30-150	A
Decachlorobiphenyl	140		30-150	A

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8081B  
**Analytical Date:** 11/20/17 13:46  
**Analyst:** CD

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/16/17 06:01  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 11/17/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01,09 Batch: WG1063570-1						
Delta-BHC	ND		ug/kg	1.54	0.302	A
Lindane	ND		ug/kg	0.644	0.288	A
Alpha-BHC	ND		ug/kg	0.644	0.183	A
Beta-BHC	ND		ug/kg	1.54	0.586	A
Aldrin	ND		ug/kg	1.54	0.544	A
Heptachlor epoxide	ND		ug/kg	2.90	0.869	A
Endrin	ND		ug/kg	0.644	0.264	A
Endrin aldehyde	ND		ug/kg	1.93	0.676	A
Endrin ketone	ND		ug/kg	1.54	0.398	A
Dieldrin	ND		ug/kg	0.965	0.483	A
4,4'-DDE	ND		ug/kg	1.54	0.357	A
4,4'-DDD	ND		ug/kg	1.54	0.551	A
4,4'-DDT	ND		ug/kg	2.90	1.24	A
Endosulfan I	ND		ug/kg	1.54	0.365	A
Endosulfan II	ND		ug/kg	1.54	0.516	A
Endosulfan sulfate	ND		ug/kg	0.644	0.306	A
Methoxychlor	ND		ug/kg	2.90	0.901	A
Toxaphene	ND		ug/kg	29.0	8.11	A
cis-Chlordane	ND		ug/kg	1.93	0.538	A
trans-Chlordane	ND		ug/kg	1.93	0.510	A
Chlordane	ND		ug/kg	12.5	5.12	A
Heptachlor	ND		ug/kg	0.772	0.346	B



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081B  
 Analytical Date: 11/20/17 13:46  
 Analyst: CD

Extraction Method: EPA 3546  
 Extraction Date: 11/16/17 06:01  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 11/17/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01,09 Batch: WG1063570-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	107		30-150	B
2,4,5,6-Tetrachloro-m-xylene	106		30-150	A
Decachlorobiphenyl	135		30-150	A

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,09 Batch: WG1063570-2 WG1063570-3									
Delta-BHC	88		96		30-150	9		30	A
Lindane	81		87		30-150	7		30	A
Alpha-BHC	88		94		30-150	7		30	A
Beta-BHC	95		103		30-150	8		30	A
Heptachlor	107		115		30-150	7		30	A
Aldrin	84		92		30-150	9		30	A
Heptachlor epoxide	109		117		30-150	7		30	A
Endrin	97		104		30-150	7		30	A
Endrin aldehyde	70		77		30-150	10		30	A
Endrin ketone	85		95		30-150	11		30	A
Dieldrin	97		105		30-150	8		30	A
4,4'-DDE	85		92		30-150	8		30	A
4,4'-DDD	93		98		30-150	5		30	A
4,4'-DDT	96		106		30-150	10		30	A
Endosulfan I	99		108		30-150	9		30	A
Endosulfan II	89		96		30-150	8		30	A
Endosulfan sulfate	78		86		30-150	10		30	A
Methoxychlor	113		123		30-150	8		30	A
cis-Chlordane	81		88		30-150	8		30	A
trans-Chlordane	60		75		30-150	22		30	A

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,09 Batch: WG1063570-2 WG1063570-3

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria	<i>Column</i>
2,4,5,6-Tetrachloro-m-xylene	81		90		30-150	B
Decachlorobiphenyl	129		145		30-150	B
2,4,5,6-Tetrachloro-m-xylene	106		114		30-150	A
Decachlorobiphenyl	144		141		30-150	A

## METALS

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

Lab ID: L1741553-09  
 Client ID: SB-17  
 Sample Location: ROCHESTER, NY  
 Matrix: Soil  
 Percent Solids: 85%

Date Collected: 11/08/17 09:45  
 Date Received: 11/10/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	6460		mg/kg	9.22	2.49	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Antimony, Total	1.50	J	mg/kg	4.61	0.350	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Arsenic, Total	9.24		mg/kg	0.922	0.192	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Barium, Total	68.5		mg/kg	0.922	0.160	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Beryllium, Total	0.387	J	mg/kg	0.461	0.030	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Cadmium, Total	0.600	J	mg/kg	0.922	0.090	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Calcium, Total	33000		mg/kg	9.22	3.23	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Chromium, Total	9.48		mg/kg	0.922	0.089	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Cobalt, Total	4.73		mg/kg	1.84	0.153	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Copper, Total	42.1		mg/kg	0.922	0.238	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Iron, Total	12800		mg/kg	4.61	0.833	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Lead, Total	151		mg/kg	4.61	0.247	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Magnesium, Total	7840		mg/kg	9.22	1.42	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Manganese, Total	379		mg/kg	0.922	0.147	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Mercury, Total	6.3		mg/kg	0.37	0.08	5	11/15/17 07:00	11/16/17 22:37	EPA 7471B	1,7471B	EA
Nickel, Total	10.4		mg/kg	2.30	0.223	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Potassium, Total	571		mg/kg	230	13.3	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Selenium, Total	0.507	J	mg/kg	1.84	0.238	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.922	0.261	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Sodium, Total	189		mg/kg	184	2.90	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.84	0.290	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Vanadium, Total	17.9		mg/kg	0.922	0.187	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB
Zinc, Total	171		mg/kg	4.61	0.270	2	11/14/17 22:18	11/17/17 02:23	EPA 3050B	1,6010C	AB





**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

## 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): 09 Batch: WG1063004-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Iron, Total	0.400	J	mg/kg	2.00	0.361	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Manganese, Total	ND		mg/kg	0.400	0.064	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Potassium, Total	20.3	J	mg/kg	100	5.76	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Sodium, Total	8.43	J	mg/kg	80.0	1.26	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	11/14/17 22:18	11/16/17 21:39	1,6010C	AB

### Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 09 Batch: WG1063078-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	11/15/17 07:00	11/16/17 18:21	1,7471B	EA



**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1741553

**Project Number:** 2172414

**Report Date:** 11/20/17

## **Method Blank Analysis Batch Quality Control**

### **Prep Information**

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Digestion Method: EPA 7471B

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1741553

**Project Number:** 2172414

**Report Date:** 11/20/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 09 Batch: WG1063004-2 SRM Lot Number: D098-540								
Aluminum, Total	70		-		47-153	-		
Antimony, Total	141		-		6-194	-		
Arsenic, Total	97		-		83-117	-		
Barium, Total	94		-		82-118	-		
Beryllium, Total	92		-		83-117	-		
Cadmium, Total	96		-		82-117	-		
Calcium, Total	90		-		81-118	-		
Chromium, Total	91		-		83-119	-		
Cobalt, Total	96		-		84-116	-		
Copper, Total	94		-		84-116	-		
Iron, Total	90		-		60-140	-		
Lead, Total	94		-		82-117	-		
Magnesium, Total	87		-		76-124	-		
Manganese, Total	94		-		82-118	-		
Nickel, Total	96		-		82-117	-		
Potassium, Total	94		-		69-131	-		
Selenium, Total	96		-		78-121	-		
Silver, Total	97		-		80-120	-		
Sodium, Total	116		-		74-126	-		
Thallium, Total	95		-		80-119	-		
Vanadium, Total	90		-		79-121	-		

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Project Number:** 2172414

**Lab Number:** L1741553

**Report Date:** 11/20/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 09 Batch: WG1063004-2 SRM Lot Number: D098-540					
Zinc, Total	93	-	81-119	-	
Total Metals - Mansfield Lab Associated sample(s): 09 Batch: WG1063078-2 SRM Lot Number: D098-540					
Mercury, Total	86	-	50-149	-	

## Matrix Spike Analysis

### Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 09    QC Batch ID: WG1063004-3    QC Sample: L1740484-22    Client ID: MS Sample												
Aluminum, Total	8300	195	9550	641	Q	-	-		75-125	-		20
Antimony, Total	1.20J	48.8	35.7	73	Q	-	-		75-125	-		20
Arsenic, Total	30.9	11.7	34.1	27	Q	-	-		75-125	-		20
Barium, Total	46.1	195	203	80		-	-		75-125	-		20
Beryllium, Total	0.460	4.88	4.18	76		-	-		75-125	-		20
Cadmium, Total	0.364J	4.98	4.27	86		-	-		75-125	-		20
Calcium, Total	745.	975	1510	78		-	-		75-125	-		20
Chromium, Total	18.0	19.5	33.5	79		-	-		75-125	-		20
Cobalt, Total	4.90	48.8	39.2	70	Q	-	-		75-125	-		20
Copper, Total	10.8	24.4	29.7	77		-	-		75-125	-		20
Iron, Total	14200	97.5	15600	1440	Q	-	-		75-125	-		20
Lead, Total	96.0	49.8	111	30	Q	-	-		75-125	-		20
Magnesium, Total	1280	975	2070	81		-	-		75-125	-		20
Manganese, Total	434.	48.8	490	115		-	-		75-125	-		20
Nickel, Total	7.55	48.8	42.0	71	Q	-	-		75-125	-		20
Potassium, Total	330.	975	1150	84		-	-		75-125	-		20
Selenium, Total	0.254J	11.7	8.63	74	Q	-	-		75-125	-		20
Silver, Total	ND	29.3	23.4	80		-	-		75-125	-		20
Sodium, Total	63.8J	975	852	87		-	-		75-125	-		20
Thallium, Total	0.216J	11.7	8.20	70	Q	-	-		75-125	-		20
Vanadium, Total	36.2	48.8	77.0	84		-	-		75-125	-		20



**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>RPD Limits</b>
Total Metals - Mansfield Lab Associated sample(s): 09    QC Batch ID: WG1063004-3    QC Sample: L1740484-22    Client ID: MS Sample									
Zinc, Total	33.8	48.8	69.6	<b>73</b>	Q	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 09    QC Batch ID: WG1063078-3    QC Sample: L1741534-02    Client ID: MS Sample									
Mercury, Total	0.04J	0.152	0.19	<b>125</b>	Q	-	80-120	-	20

**Lab Duplicate Analysis**  
**Batch Quality Control**

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
<b>Total Metals - Mansfield Lab Associated sample(s): 09 QC Batch ID: WG1063004-4 QC Sample: L1740484-22 Client ID: DUP Sample</b>						
Arsenic, Total	30.9	33.5	mg/kg	8		20
Lead, Total	96.0	102	mg/kg	6		20
<b>Total Metals - Mansfield Lab Associated sample(s): 09 QC Batch ID: WG1063078-4 QC Sample: L1741534-02 Client ID: DUP Sample</b>						
Mercury, Total	0.04J	0.03J	mg/kg	NC		20



# **INORGANICS & MISCELLANEOUS**

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-01  
**Client ID:** SB-02  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/06/17 09:25  
**Date Received:** 11/10/17  
**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	81.8		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-02  
**Client ID:** SB-04  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/06/17 10:10  
**Date Received:** 11/10/17  
**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	83.7		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI





**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-03  
**Client ID:** SB-05  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/06/17 10:30  
**Date Received:** 11/10/17  
**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	88.3		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-04  
**Client ID:** SB-09  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/06/17 12:45  
**Date Received:** 11/10/17  
**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	81.0		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-05  
**Client ID:** SB-10  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/06/17 13:10  
**Date Received:** 11/10/17  
**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	83.3		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-06  
**Client ID:** SB-12  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/07/17 09:30  
**Date Received:** 11/10/17  
**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	83.0		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-07  
**Client ID:** SB-13  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/07/17 11:35  
**Date Received:** 11/10/17  
**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	82.0		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI





**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-08  
**Client ID:** SB-16  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/07/17 16:00  
**Date Received:** 11/10/17  
**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	89.6		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-09  
**Client ID:** SB-17  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/08/17 09:45  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Total Organic Carbon - Mansfield Lab</b>										
Total Organic Carbon (Rep1)	0.935		%	0.010	0.010	1	-	11/16/17 13:32	1,9060A	LC
Total Organic Carbon (Rep2)	0.950		%	0.010	0.010	1	-	11/16/17 13:32	1,9060A	LC
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	84.7		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI
Cyanide, Total	0.44	J	mg/kg	1.1	0.24	1	11/13/17 13:10	11/14/17 10:43	1,9010C/9012B	LH



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-10  
**Client ID:** SB-18  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/08/17 10:30  
**Date Received:** 11/10/17  
**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	82.5		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-11  
**Client ID:** SB-19  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/08/17 12:15  
**Date Received:** 11/10/17  
**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	91.8		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-12  
**Client ID:** SB-20  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/08/17 12:35  
**Date Received:** 11/10/17  
**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	92.1		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI





**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

**SAMPLE RESULTS**

**Lab ID:** L1741553-13  
**Client ID:** SB-21  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/08/17 15:50  
**Date Received:** 11/10/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Total Organic Carbon - Mansfield Lab</b>										
Total Organic Carbon (Rep1)	6.23		%	0.010	0.010	1	-	11/16/17 13:32	1,9060A	LC
Total Organic Carbon (Rep2)	7.50		%	0.010	0.010	1	-	11/16/17 13:32	1,9060A	LC
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	85.9		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**SAMPLE RESULTS**

**Lab ID:** L1741553-14  
**Client ID:** SB-22  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/08/17 16:20  
**Date Received:** 11/10/17  
**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	85.0		%	0.100	NA	1	-	11/15/17 09:50	121,2540G	RI



Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1741553

Project Number: 2172414

Report Date: 11/20/17

**Method Blank Analysis**  
**Batch Quality Control**

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 09 Batch: WG1062433-1									
Cyanide, Total	ND	mg/kg	0.83	0.18	1	11/13/17 10:10	11/14/17 10:28	1,9010C/9012B	LH
Total Organic Carbon - Mansfield Lab for sample(s): 09,13 Batch: WG1063900-1									
Total Organic Carbon (Rep1)	ND	%	0.010	0.010	1	-	11/16/17 13:32	1,9060A	LC
Total Organic Carbon (Rep2)	ND	%	0.010	0.010	1	-	11/16/17 13:32	1,9060A	LC

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1741553

**Project Number:** 2172414

**Report Date:** 11/20/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 09 Batch: WG1062433-2 WG1062433-3								
Cyanide, Total	78	Q	78	Q	80-120	5		35
Total Organic Carbon - Mansfield Lab Associated sample(s): 09,13 Batch: WG1063900-2								
Total Organic Carbon (Rep1)	107		-		75-125	-		25
Total Organic Carbon (Rep2)	84		-		75-125	-		25

### Matrix Spike Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 09 QC Batch ID: WG1062433-4 WG1062433-5 QC Sample: L1700011-79 Client ID: MS Sample												
Cyanide, Total	2.4	9.2	8.2	63	Q	8.6	64	Q	75-125	5		35



## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Project Number:** 2172414

**Lab Number:** L1741553

**Report Date:** 11/20/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-14 QC Batch ID: WG1063169-1 QC Sample: L1741553-01 Client ID: SB-02						
Solids, Total	81.8	83.3	%	2		20

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

Serial\_No:11201718:53  
**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

**Cooler**                      **Custody Seal**  
A                                      Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1741553-01A	Glass 120ml/4oz unpreserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14),TS(7),NYTCL-8081(14)
L1741553-01X	Vial MeOH preserved split	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1741553-01Y	Vial Water preserved split	A	NA		3.1	Y	Absent	13-NOV-17 01:39	NYTCL-8260-R2(14)
L1741553-01Z	Vial Water preserved split	A	NA		3.1	Y	Absent	13-NOV-17 01:39	NYTCL-8260-R2(14)
L1741553-02A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-02B	Vial water preserved	A	NA		3.1	Y	Absent	06-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-02C	Vial water preserved	A	NA		3.1	Y	Absent	06-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-02D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-03A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-03B	Vial water preserved	A	NA		3.1	Y	Absent	06-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-03C	Vial water preserved	A	NA		3.1	Y	Absent	06-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-03D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-04A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-04B	Vial water preserved	A	NA		3.1	Y	Absent	06-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-04C	Vial water preserved	A	NA		3.1	Y	Absent	06-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-04D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-05A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-05B	Vial water preserved	A	NA		3.1	Y	Absent	06-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-05C	Vial water preserved	A	NA		3.1	Y	Absent	06-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-05D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-06A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-06B	Vial water preserved	A	NA		3.1	Y	Absent	07-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-06C	Vial water preserved	A	NA		3.1	Y	Absent	07-NOV-17 17:00	NYTCL-8260HLW-R2(14)

\*Values in parentheses indicate holding time in days



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1741553**Project Number:** 2172414**Report Date:** 11/20/17**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1741553-06D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-07A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-07B	Vial water preserved	A	NA		3.1	Y	Absent	07-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-07C	Vial water preserved	A	NA		3.1	Y	Absent	07-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-07D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-08A	Glass 120ml/4oz unpreserved	A	NA		3.1	Y	Absent		NYTCL-8270(14),TS(7)
L1741553-09A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-09B	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-09C	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-09D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-09E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	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)
L1741553-09F	Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		A2-TOC-9060-2REPS(28)
L1741553-09G	Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1741553-09H	Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1741553-09I	Glass 120ml/4oz unpreserved	A	NA		3.1	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1741553-10A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-10B	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-10C	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-10D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-11A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-11B	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-11C	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-11D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-12A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-12B	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Serial\_No:**11201718:53  
**Lab Number:** L1741553  
**Report Date:** 11/20/17

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1741553-12C	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-12D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-13A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-13B	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-13C	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-13D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)
L1741553-13E	Glass 120ml/4oz unpreserved	A	NA		3.1	Y	Absent		A2-TOC-9060-2REPS(28)
L1741553-14A	Vial MeOH preserved	A	NA		3.1	Y	Absent		NYTCL-8260HLW-R2(14)
L1741553-14B	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-14C	Vial water preserved	A	NA		3.1	Y	Absent	08-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1741553-14D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS(7)

\*Values in parentheses indicate holding time in days



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

## 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).
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.
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.

### 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

**Report Format:** DU Report with 'J' Qualifiers





**Project Name:** BULLSHEAD PLAZA PHASE II  
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#### Data Qualifiers

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:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1741553  
**Report Date:** 11/20/17

## 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:** 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 300:** DW: Bromide

**EPA 6860:** NPW and SCM: Perchlorate

**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation

**EPA 9012B:** NPW: Total Cyanide

**EPA 9050A:** NPW: Specific Conductance

**SM3500:** NPW: Ferrous Iron

**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**SM5310C:** DW: Dissolved Organic Carbon

### Mansfield Facility

**SM 2540D:** TSS

**EPA 3005A** NPW

**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:** 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, SM4500CI-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, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 624:** Volatile Halocarbons & Aromatics,

**EPA 608:** 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:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

#### 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, Pb, Mn, Ni, Se, Ag, TL, Zn.


**EPA 245.1 Hg.**

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	<b>NEW YORK CHAIN OF CUSTODY</b> Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page 1 of 2	Date Rec'd in Lab 11/11/17	ALPHA Job # L1741553							
		<b>Project Information</b> Project Name: <u>Bullishead Plaza phase II</u> Project Location: <u>Rochester, NY</u> Project # <u>2172414</u> (Use Project name as Project #) <input type="checkbox"/>	<b>Deliverables</b> <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQulS (1 File) <input checked="" type="checkbox"/> EQulS (4 File) <input type="checkbox"/> Other	<b>Billing Information</b> <input checked="" type="checkbox"/> Same as Client Info PO #								
<b>Client Information</b> Client: <u>LABELLA ASSOCIATE</u> Address: <u>300 STATE STREET</u> <u>ROCHESTER, NY 14614</u> Phone: <u>585-454-6110</u> Fax: Email: <u>Abrett@labellaPL.com</u>	<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge	<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:										
Turn-Around Time Standard <input type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:	<b>ANALYSIS</b> TLL: CP-51 VOLs 8260 TLL: CP-51 VOLs 8270 Pesticides 8081 TOC TAL Metals 6010 PCBs Cyanide		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below) Sample Specific Comments	Total Bottles								
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: <u>Asp Cat B and Emsy 605</u> Please specify Metals or TAL.												
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date      Time	Sample Matrix	Sampler's Initials	TLL: CP-51 VOLs 8260 TLL: CP-51 VOLs 8270 Pesticides 8081 TOC TAL Metals 6010 PCBs Cyanide	Sample Specific Comments						
41553-01	SB-02	11/6/17 0925	Soil	AG3	X	X				VOL samples	5	
02	SB-04	11/6/17 1010	Soil	AG3	X					frozen on	4	
03	SB-05	11/6/17 1030	Soil	AG3	X					11/6/17 @ 1700	4	
04	SB-09	11/6/17 1245	Soil	AG3	X					↓	4	
05	SB-10	11/6/17 1310	Soil	AG2	X					↓	4	
06	SB-12	11/7/17 0930	Soil	AG3	X					VOL samples	4	
07	SB-13	11/7/17 1135	Soil	AG3	X					frozen on 11/7/17 @ 1700	4	
08	SB-16	11/7/17 1600	Soil	AG3		X				@ 1700	1	
09	SB-17	11/8/17 0945	Soil	AG3	X	X	X	X	X	X	VOL samples frozen	9
10	SB-18	11/8/17 1030	Soil	AG3	X					on 11/8/17 @ 1700	4	
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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 Preservative	V G G G G G G F A A A A A A	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.)							
Relinquished By: <u>S. Kelly A.A.L.</u>		Date/Time: <u>11/10/17 16:30</u>		Received By: <u>S. Kelly A.A.L.</u>		Date/Time: <u>11/10/17 16:30</u>						
Relinquished By: <u>S. Kelly A.A.L.</u>		Date/Time: <u>11/10/17 16:30</u>		Received By: <u>[Signature]</u>		Date/Time: <u>11/11/17 01:00</u>						





**NEW YORK CHAIN OF CUSTODY**

Westborough, MA 01581  
8 Walkup Dr.  
TEL: 508-898-9220  
FAX: 508-898-9193

Mansfield, MA 02048  
320 Forbes Blvd  
TEL: 508-822-9300  
FAX: 508-822-3288

**Service Centers**  
 Mahwah, NJ 07430: 35 Whitney Rd, Suite 5  
 Albany, NY 12205: 14 Walker Way  
 Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page  
2 of 2

Date Rec'd  
In Lab  
11/11/17

ALPHA Job #  
L2741553

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Project Information				Deliverables				Billing Information			
Project Name: <u>Bullishead Plaza Phase II</u>				<input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input checked="" type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other				<input checked="" type="checkbox"/> Same as Client Info PO # _____			
Project Location: <u>Rochester, NY</u>				<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge				<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other: _____			
Project # <u>2142414</u> (Use Project name as Project #) <input type="checkbox"/>											
Client Information				Turn-Around Time							
Client: <u>LABELLA ASSOCIATES</u>				Standard <input type="checkbox"/> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____							
Address: <u>305 STATE STREET ROCHESTER, NY 14614</u>				Project Manager: <u>Jen Gillet</u>				<b>ANALYSIS</b> TLT+P+SI VOLs 8260 TOC			
Phone: <u>585-454-6110</u>				ALPHAQuote #: _____							
Fax: _____				These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: <u>Arg Cut B + Envir Field</u>				<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below) Sample Specific Comments			
Email: <u>AGRETT@LABELLA.COM</u>				Please specify Metals or TAL.							

Preservative Code:  
 A = None  
 B = HCl  
 C = HNO<sub>3</sub>  
 D = H<sub>2</sub>SO<sub>4</sub>  
 E = NaOH  
 F = MeOH  
 G = NaHSO<sub>4</sub>  
 H = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>  
 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 V 6  
 Preservative F A

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.)

Relinquished By:	Date/Time	Received By:	Date/Time
<u>S. T. Harty</u>	<u>11/10/17 16:30</u>	<u>S. T. Harty</u>	<u>11/10/17 16:30</u>
<u>S. T. Harty</u>	<u>11/10/17 16:30</u>	<u>[Signature]</u>	<u>11/11/17 01:00</u>

Form No: 01-25 HC (rev. 30-Sept-2013)





## ANALYTICAL REPORT

Lab Number:	L1742138
Client:	LaBella Associates, P.C. 300 State Street Suite 201 Rochester, NY 14614
ATTN:	Jennifer Gillen
Phone:	(585) 454-6110
Project Name:	BULLSHEAD PLAZA PHASE II
Project Number:	2172414
Report Date:	11/22/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1742138-01	SB-23	SOIL	ROCHESTER, NY	11/13/17 09:15	11/15/17
L1742138-02	SB-24	SOIL	ROCHESTER, NY	11/13/17 10:00	11/15/17
L1742138-03	SB-26	SOIL	ROCHESTER, NY	11/13/17 11:25	11/15/17
L1742138-04	SB-27	SOIL	ROCHESTER, NY	11/13/17 12:15	11/15/17
L1742138-05	DUPLICATE	SOIL	ROCHESTER, NY	11/13/17 00:00	11/15/17

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

### 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.

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**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

### Case Narrative (continued)

#### Report Submission

November 22, 2017: This final report includes the results of all requested analyses.

November 21, 2017: This is a preliminary report.

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

#### Total Metals

L1742138-02 and -05: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

The WG1063990-3 MS recovery, performed on L1742138-02, is outside the acceptance criteria for mercury (45%). A post digestion spike was performed and was within acceptance criteria.

The WG1064334-3/-4 MS/MSD recoveries, performed on L1742138-02, are outside the acceptance criteria for antimony (72%/73%) and lead (12%/42%). A post digestion spike was performed and was within acceptance criteria.

The WG1064334-3/-4 MS/MSD recoveries for aluminum (153%/552%), calcium (603%/552%), iron (0%/955%), magnesium (395%/321%), manganese (0%/0%) and zinc (MS 222%), performed on L1742138-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

#### Cyanide, Total

The WG1063646-3 LCSD recovery (72%), associated with L1742138-02 and -05, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

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

Authorized Signature:

 Melissa Cripps

Title: Technical Director/Representative

Date: 11/22/17

# ORGANICS



# VOLATILES

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-01  
**Client ID:** SB-23  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 09:15  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/19/17 15:57  
**Analyst:** JC  
**Percent Solids:** 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	9.0	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.24	1
Chloroform	ND		ug/kg	1.4	0.34	1
Carbon tetrachloride	ND		ug/kg	0.90	0.31	1
1,2-Dichloropropane	ND		ug/kg	3.2	0.21	1
Dibromochloromethane	ND		ug/kg	0.90	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.28	1
Tetrachloroethene	0.46	J	ug/kg	0.90	0.27	1
Chlorobenzene	ND		ug/kg	0.90	0.32	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.38	1
1,2-Dichloroethane	ND		ug/kg	0.90	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.90	0.32	1
Bromodichloromethane	ND		ug/kg	0.90	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	0.90	0.19	1
cis-1,3-Dichloropropene	ND		ug/kg	0.90	0.21	1
Bromoform	ND		ug/kg	3.6	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.90	0.27	1
Benzene	ND		ug/kg	0.90	0.17	1
Toluene	0.36	J	ug/kg	1.4	0.18	1
Ethylbenzene	ND		ug/kg	0.90	0.15	1
Chloromethane	ND		ug/kg	4.5	0.39	1
Bromomethane	ND		ug/kg	1.8	0.31	1
Vinyl chloride	ND		ug/kg	1.8	0.28	1
Chloroethane	ND		ug/kg	1.8	0.29	1
1,1-Dichloroethene	ND		ug/kg	0.90	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.22	1
Trichloroethene	ND		ug/kg	0.90	0.27	1
1,2-Dichlorobenzene	ND		ug/kg	4.5	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.5	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	4.5	0.16	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-01  
**Client ID:** SB-23  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 09:15  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.8	0.14	1
p/m-Xylene	ND		ug/kg	1.8	0.32	1
o-Xylene	ND		ug/kg	1.8	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	0.90	0.31	1
Styrene	ND		ug/kg	1.8	0.36	1
Dichlorodifluoromethane	ND		ug/kg	9.0	0.45	1
Acetone	6.9	J	ug/kg	9.0	2.1	1
Carbon disulfide	ND		ug/kg	9.0	1.0	1
2-Butanone	ND		ug/kg	9.0	0.62	1
4-Methyl-2-pentanone	ND		ug/kg	9.0	0.22	1
2-Hexanone	ND		ug/kg	9.0	0.60	1
1,2-Dibromoethane	ND		ug/kg	3.6	0.18	1
n-Butylbenzene	ND		ug/kg	0.90	0.21	1
sec-Butylbenzene	ND		ug/kg	0.90	0.20	1
tert-Butylbenzene	ND		ug/kg	4.5	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	0.36	1
Isopropylbenzene	ND		ug/kg	0.90	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.90	0.18	1
Naphthalene	0.18	J	ug/kg	4.5	0.12	1
n-Propylbenzene	0.21	J	ug/kg	0.90	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.5	0.19	1
1,3,5-Trimethylbenzene	0.18	J	ug/kg	4.5	0.14	1
1,2,4-Trimethylbenzene	0.78	J	ug/kg	4.5	0.17	1
Methyl Acetate	ND		ug/kg	18	0.42	1
Cyclohexane	ND		ug/kg	18	0.39	1
Freon-113	ND		ug/kg	18	0.46	1
Methyl cyclohexane	ND		ug/kg	3.6	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	103		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-02  
**Client ID:** SB-24  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 10:00  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/19/17 16:23  
**Analyst:** JC  
**Percent Solids:** 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	9.0	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.24	1
Chloroform	ND		ug/kg	1.3	0.33	1
Carbon tetrachloride	ND		ug/kg	0.90	0.31	1
1,2-Dichloropropane	ND		ug/kg	3.1	0.20	1
Dibromochloromethane	ND		ug/kg	0.90	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.28	1
Tetrachloroethene	2.8		ug/kg	0.90	0.27	1
Chlorobenzene	ND		ug/kg	0.90	0.31	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.37	1
1,2-Dichloroethane	ND		ug/kg	0.90	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.90	0.31	1
Bromodichloromethane	ND		ug/kg	0.90	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	0.90	0.19	1
cis-1,3-Dichloropropene	ND		ug/kg	0.90	0.21	1
Bromoform	ND		ug/kg	3.6	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.90	0.27	1
Benzene	ND		ug/kg	0.90	0.17	1
Toluene	0.56	J	ug/kg	1.3	0.17	1
Ethylbenzene	ND		ug/kg	0.90	0.15	1
Chloromethane	ND		ug/kg	4.5	0.39	1
Bromomethane	ND		ug/kg	1.8	0.30	1
Vinyl chloride	ND		ug/kg	1.8	0.28	1
Chloroethane	ND		ug/kg	1.8	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.90	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
Trichloroethene	ND		ug/kg	0.90	0.27	1
1,2-Dichlorobenzene	ND		ug/kg	4.5	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.5	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	4.5	0.16	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-02  
**Client ID:** SB-24  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 10:00  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.8	0.14	1
p/m-Xylene	ND		ug/kg	1.8	0.31	1
o-Xylene	ND		ug/kg	1.8	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	0.90	0.31	1
Styrene	ND		ug/kg	1.8	0.36	1
Dichlorodifluoromethane	ND		ug/kg	9.0	0.45	1
Acetone	12		ug/kg	9.0	2.0	1
Carbon disulfide	ND		ug/kg	9.0	0.98	1
2-Butanone	ND		ug/kg	9.0	0.62	1
4-Methyl-2-pentanone	ND		ug/kg	9.0	0.22	1
2-Hexanone	ND		ug/kg	9.0	0.60	1
1,2-Dibromoethane	ND		ug/kg	3.6	0.18	1
n-Butylbenzene	ND		ug/kg	0.90	0.20	1
sec-Butylbenzene	ND		ug/kg	0.90	0.19	1
tert-Butylbenzene	ND		ug/kg	4.5	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	0.35	1
Isopropylbenzene	ND		ug/kg	0.90	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.90	0.18	1
Naphthalene	ND		ug/kg	4.5	0.12	1
n-Propylbenzene	ND		ug/kg	0.90	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.5	0.19	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.5	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.5	0.17	1
Methyl Acetate	ND		ug/kg	18	0.41	1
Cyclohexane	ND		ug/kg	18	0.39	1
Freon-113	ND		ug/kg	18	0.46	1
Methyl cyclohexane	ND		ug/kg	3.6	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	103		70-130



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-03  
**Client ID:** SB-26  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 11:25  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/19/17 17:42  
**Analyst:** JC  
**Percent Solids:** 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.5	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.23	1
Chloroform	ND		ug/kg	1.3	0.31	1
Carbon tetrachloride	ND		ug/kg	0.85	0.29	1
1,2-Dichloropropane	ND		ug/kg	3.0	0.19	1
Dibromochloromethane	ND		ug/kg	0.85	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.26	1
Tetrachloroethene	ND		ug/kg	0.85	0.26	1
Chlorobenzene	ND		ug/kg	0.85	0.29	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.35	1
1,2-Dichloroethane	ND		ug/kg	0.85	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.85	0.30	1
Bromodichloromethane	ND		ug/kg	0.85	0.26	1
trans-1,3-Dichloropropene	ND		ug/kg	0.85	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.85	0.20	1
Bromoform	ND		ug/kg	3.4	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.85	0.25	1
Benzene	ND		ug/kg	0.85	0.16	1
Toluene	0.18	J	ug/kg	1.3	0.16	1
Ethylbenzene	ND		ug/kg	0.85	0.14	1
Chloromethane	ND		ug/kg	4.2	0.37	1
Bromomethane	ND		ug/kg	1.7	0.29	1
Vinyl chloride	ND		ug/kg	1.7	0.27	1
Chloroethane	ND		ug/kg	1.7	0.27	1
1,1-Dichloroethene	ND		ug/kg	0.85	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.20	1
Trichloroethene	ND		ug/kg	0.85	0.26	1
1,2-Dichlorobenzene	ND		ug/kg	4.2	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	4.2	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.2	0.15	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-03  
**Client ID:** SB-26  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 11:25  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.7	0.13	1
p/m-Xylene	ND		ug/kg	1.7	0.30	1
o-Xylene	ND		ug/kg	1.7	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	0.85	0.29	1
Styrene	ND		ug/kg	1.7	0.34	1
Dichlorodifluoromethane	ND		ug/kg	8.5	0.42	1
Acetone	3.5	J	ug/kg	8.5	1.9	1
Carbon disulfide	ND		ug/kg	8.5	0.93	1
2-Butanone	ND		ug/kg	8.5	0.58	1
4-Methyl-2-pentanone	ND		ug/kg	8.5	0.21	1
2-Hexanone	ND		ug/kg	8.5	0.56	1
1,2-Dibromoethane	ND		ug/kg	3.4	0.17	1
n-Butylbenzene	ND		ug/kg	0.85	0.19	1
sec-Butylbenzene	ND		ug/kg	0.85	0.18	1
tert-Butylbenzene	ND		ug/kg	4.2	0.21	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.2	0.34	1
Isopropylbenzene	ND		ug/kg	0.85	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.85	0.17	1
Naphthalene	0.56	J	ug/kg	4.2	0.12	1
n-Propylbenzene	ND		ug/kg	0.85	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.2	0.18	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.2	0.14	1
1,2,4-Trimethylbenzene	0.42	J	ug/kg	4.2	0.16	1
Methyl Acetate	ND		ug/kg	17	0.39	1
Cyclohexane	ND		ug/kg	17	0.37	1
Freon-113	ND		ug/kg	17	0.44	1
Methyl cyclohexane	ND		ug/kg	3.4	0.20	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	97		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-04  
**Client ID:** SB-27  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 12:15  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/19/17 18:08  
**Analyst:** JC  
**Percent Solids:** 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.7	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.23	1
Chloroform	ND		ug/kg	1.3	0.32	1
Carbon tetrachloride	ND		ug/kg	0.87	0.30	1
1,2-Dichloropropane	ND		ug/kg	3.0	0.20	1
Dibromochloromethane	ND		ug/kg	0.87	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.27	1
Tetrachloroethene	1.4		ug/kg	0.87	0.26	1
Chlorobenzene	ND		ug/kg	0.87	0.30	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.36	1
1,2-Dichloroethane	ND		ug/kg	0.87	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.87	0.30	1
Bromodichloromethane	ND		ug/kg	0.87	0.27	1
trans-1,3-Dichloropropene	ND		ug/kg	0.87	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.87	0.20	1
Bromoform	ND		ug/kg	3.5	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.87	0.26	1
Benzene	0.20	J	ug/kg	0.87	0.17	1
Toluene	0.37	J	ug/kg	1.3	0.17	1
Ethylbenzene	ND		ug/kg	0.87	0.15	1
Chloromethane	ND		ug/kg	4.3	0.38	1
Bromomethane	ND		ug/kg	1.7	0.29	1
Vinyl chloride	ND		ug/kg	1.7	0.27	1
Chloroethane	ND		ug/kg	1.7	0.27	1
1,1-Dichloroethene	ND		ug/kg	0.87	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.21	1
Trichloroethene	ND		ug/kg	0.87	0.26	1
1,2-Dichlorobenzene	ND		ug/kg	4.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.3	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	4.3	0.16	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-04  
**Client ID:** SB-27  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 12:15  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.7	0.13	1
p/m-Xylene	ND		ug/kg	1.7	0.30	1
o-Xylene	ND		ug/kg	1.7	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	0.87	0.30	1
Styrene	ND		ug/kg	1.7	0.35	1
Dichlorodifluoromethane	ND		ug/kg	8.7	0.43	1
Acetone	7.1	J	ug/kg	8.7	2.0	1
Carbon disulfide	ND		ug/kg	8.7	0.96	1
2-Butanone	ND		ug/kg	8.7	0.60	1
4-Methyl-2-pentanone	ND		ug/kg	8.7	0.21	1
2-Hexanone	ND		ug/kg	8.7	0.58	1
1,2-Dibromoethane	ND		ug/kg	3.5	0.17	1
n-Butylbenzene	ND		ug/kg	0.87	0.20	1
sec-Butylbenzene	ND		ug/kg	0.87	0.19	1
tert-Butylbenzene	ND		ug/kg	4.3	0.21	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	0.34	1
Isopropylbenzene	ND		ug/kg	0.87	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.87	0.18	1
Naphthalene	0.49	J	ug/kg	4.3	0.12	1
n-Propylbenzene	ND		ug/kg	0.87	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.3	0.19	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.3	0.14	1
1,2,4-Trimethylbenzene	0.30	J	ug/kg	4.3	0.16	1
Methyl Acetate	ND		ug/kg	17	0.40	1
Cyclohexane	ND		ug/kg	17	0.38	1
Freon-113	ND		ug/kg	17	0.45	1
Methyl cyclohexane	0.90	J	ug/kg	3.5	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	98		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-05  
**Client ID:** DUPLICATE  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 00:00  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 11/19/17 18:35  
**Analyst:** JC  
**Percent Solids:** 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	9.4	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.25	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.94	0.32	1
1,2-Dichloropropane	ND		ug/kg	3.3	0.21	1
Dibromochloromethane	ND		ug/kg	0.94	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.29	1
Tetrachloroethene	4.3		ug/kg	0.94	0.28	1
Chlorobenzene	ND		ug/kg	0.94	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.39	1
1,2-Dichloroethane	ND		ug/kg	0.94	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.94	0.33	1
Bromodichloromethane	ND		ug/kg	0.94	0.29	1
trans-1,3-Dichloropropene	ND		ug/kg	0.94	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.94	0.22	1
Bromoform	ND		ug/kg	3.8	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.94	0.28	1
Benzene	ND		ug/kg	0.94	0.18	1
Toluene	0.60	J	ug/kg	1.4	0.18	1
Ethylbenzene	ND		ug/kg	0.94	0.16	1
Chloromethane	ND		ug/kg	4.7	0.41	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.30	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.94	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.23	1
Trichloroethene	ND		ug/kg	0.94	0.28	1
1,2-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	4.7	0.17	1



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-05  
**Client ID:** DUPLICATE  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 00:00  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.9	0.14	1
p/m-Xylene	ND		ug/kg	1.9	0.33	1
o-Xylene	ND		ug/kg	1.9	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	0.94	0.32	1
Styrene	ND		ug/kg	1.9	0.38	1
Dichlorodifluoromethane	ND		ug/kg	9.4	0.47	1
Acetone	7.2	J	ug/kg	9.4	2.2	1
Carbon disulfide	ND		ug/kg	9.4	1.0	1
2-Butanone	ND		ug/kg	9.4	0.65	1
4-Methyl-2-pentanone	ND		ug/kg	9.4	0.23	1
2-Hexanone	ND		ug/kg	9.4	0.63	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.19	1
n-Butylbenzene	ND		ug/kg	0.94	0.21	1
sec-Butylbenzene	ND		ug/kg	0.94	0.20	1
tert-Butylbenzene	ND		ug/kg	4.7	0.23	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	0.37	1
Isopropylbenzene	ND		ug/kg	0.94	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.94	0.19	1
Naphthalene	ND		ug/kg	4.7	0.13	1
n-Propylbenzene	ND		ug/kg	0.94	0.20	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.7	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.7	0.15	1
1,2,4-Trimethylbenzene	0.37	J	ug/kg	4.7	0.18	1
Methyl Acetate	ND		ug/kg	19	0.44	1
Cyclohexane	ND		ug/kg	19	0.41	1
Freon-113	ND		ug/kg	19	0.48	1
Methyl cyclohexane	ND		ug/kg	3.8	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	100		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/19/17 09:50  
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1064762-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 11/19/17 09:50  
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1064762-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 11/19/17 09:50  
 Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1064762-5					

Tentatively Identified Compounds

Total TIC Compounds	3.81	J	ug/kg		
Unknown Siloxane	3.81	J	ug/kg		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1742138

Project Number: 2172414

Report Date: 11/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1064762-3 WG1064762-4								
Methylene chloride	100		100		70-130	0		30
1,1-Dichloroethane	120		119		70-130	1		30
Chloroform	110		112		70-130	2		30
Carbon tetrachloride	129		130		70-130	1		30
1,2-Dichloropropane	110		111		70-130	1		30
Dibromochloromethane	95		95		70-130	0		30
1,1,2-Trichloroethane	97		96		70-130	1		30
Tetrachloroethene	107		107		70-130	0		30
Chlorobenzene	104		104		70-130	0		30
Trichlorofluoromethane	124		121		70-139	2		30
1,2-Dichloroethane	109		109		70-130	0		30
1,1,1-Trichloroethane	124		124		70-130	0		30
Bromodichloromethane	106		106		70-130	0		30
trans-1,3-Dichloropropene	102		101		70-130	1		30
cis-1,3-Dichloropropene	104		103		70-130	1		30
Bromoform	92		88		70-130	4		30
1,1,2,2-Tetrachloroethane	97		96		70-130	1		30
Benzene	112		112		70-130	0		30
Toluene	112		110		70-130	2		30
Ethylbenzene	111		112		70-130	1		30
Chloromethane	123		124		52-130	1		30
Bromomethane	98		98		57-147	0		30
Vinyl chloride	119		119		67-130	0		30



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1742138

Project Number: 2172414

Report Date: 11/22/17

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1064762-3 WG1064762-4								
Chloroethane	116		114		50-151	2		30
1,1-Dichloroethene	121		123		65-135	2		30
trans-1,2-Dichloroethene	114		114		70-130	0		30
Trichloroethene	116		117		70-130	1		30
1,2-Dichlorobenzene	98		99		70-130	1		30
1,3-Dichlorobenzene	104		104		70-130	0		30
1,4-Dichlorobenzene	101		102		70-130	1		30
Methyl tert butyl ether	96		96		66-130	0		30
p/m-Xylene	112		109		70-130	3		30
o-Xylene	106		106		70-130	0		30
cis-1,2-Dichloroethene	107		108		70-130	1		30
Styrene	105		106		70-130	1		30
Dichlorodifluoromethane	100		102		30-146	2		30
Acetone	119		119		54-140	0		30
Carbon disulfide	114		116		59-130	2		30
2-Butanone	117		116		70-130	1		30
4-Methyl-2-pentanone	98		97		70-130	1		30
2-Hexanone	110		108		70-130	2		30
1,2-Dibromoethane	93		94		70-130	1		30
n-Butylbenzene	123		124		70-130	1		30
sec-Butylbenzene	121		122		70-130	1		30
tert-Butylbenzene	115		116		70-130	1		30
1,2-Dibromo-3-chloropropane	83		82		68-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1742138

Project Number: 2172414

Report Date: 11/22/17

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1064762-3 WG1064762-4								
Isopropylbenzene	115		116		70-130	1		30
p-Isopropyltoluene	116		117		70-130	1		30
Naphthalene	90		90		70-130	0		30
n-Propylbenzene	118		119		70-130	1		30
1,2,4-Trichlorobenzene	95		95		70-130	0		30
1,3,5-Trimethylbenzene	115		116		70-130	1		30
1,2,4-Trimethylbenzene	112		113		70-130	1		30
Methyl Acetate	115		114		51-146	1		30
Cyclohexane	131		131		59-142	0		30
Freon-113	130		131		50-139	1		30
Methyl cyclohexane	115		116		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103		100		70-130
Toluene-d8	98		99		70-130
4-Bromofluorobenzene	104		103		70-130
Dibromofluoromethane	96		96		70-130

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1064762-6 WG1064762-7 QC Sample: L1742138-02 Client ID: SB-24												
Methylene chloride	ND	92.3	94	102		95	97		70-130	1		30
1,1-Dichloroethane	ND	92.3	110	122		120	118		70-130	3		30
Chloroform	ND	92.3	100	109		100	106		70-130	3		30
Carbon tetrachloride	ND	92.3	120	133	Q	130	133	Q	70-130	6		30
1,2-Dichloropropane	ND	92.3	99	107		100	106		70-130	5		30
Dibromochloromethane	ND	92.3	80	87		84	86		70-130	5		30
1,1,2-Trichloroethane	ND	92.3	85	92		87	88		70-130	2		30
Tetrachloroethene	2.8	92.3	79	82		95	94		70-130	19		30
Chlorobenzene	ND	92.3	68	74		81	83		70-130	17		30
Trichlorofluoromethane	ND	92.3	130	135		130	133		70-139	5		30
1,2-Dichloroethane	ND	92.3	99	107		99	100		70-130	0		30
1,1,1-Trichloroethane	ND	92.3	120	127		120	125		70-130	5		30
Bromodichloromethane	ND	92.3	94	102		97	99		70-130	3		30
trans-1,3-Dichloropropene	ND	92.3	82	89		88	90		70-130	6		30
cis-1,3-Dichloropropene	ND	92.3	87	94		92	94		70-130	6		30
Bromoform	ND	92.3	76	82		80	81		70-130	5		30
1,1,2,2-Tetrachloroethane	ND	92.3	80	87		81	82		70-130	1		30
Benzene	ND	92.3	98	106		100	106		70-130	6		30
Toluene	0.56J	92.3	85	92		96	98		70-130	13		30
Ethylbenzene	ND	92.3	73	80		92	93		70-130	22		30
Chloromethane	ND	92.3	130	141	Q	130	132	Q	52-130	0		30
Bromomethane	ND	92.3	91	98		96	97		57-147	5		30
Vinyl chloride	ND	92.3	120	133	Q	130	131	Q	67-130	5		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1064762-6 WG1064762-7 QC Sample: L1742138-02 Client ID: SB-24												
Chloroethane	ND	92.3	120	128		120	121		50-151	1		30
1,1-Dichloroethene	ND	92.3	120	129		120	126		65-135	4		30
trans-1,2-Dichloroethene	ND	92.3	100	112		110	110		70-130	5		30
Trichloroethene	ND	92.3	96	104		110	108		70-130	10		30
1,2-Dichlorobenzene	ND	92.3	51	55	Q	66	67	Q	70-130	26		30
1,3-Dichlorobenzene	ND	92.3	50	54	Q	68	69	Q	70-130	31	Q	30
1,4-Dichlorobenzene	ND	92.3	47	51	Q	65	66	Q	70-130	32	Q	30
Methyl tert butyl ether	ND	92.3	94	102		93	94		66-130	1		30
p/m-Xylene	ND	184	140	75		180	89		70-130	24		30
o-Xylene	ND	184	140	76		170	89		70-130	21		30
cis-1,2-Dichloroethene	ND	92.3	95	103		99	101		70-130	4		30
Styrene	ND	184	130	72		160	82		70-130	20		30
Dichlorodifluoromethane	ND	92.3	110	119		110	114		30-146	2		30
Acetone	12	92.3	120	117		110	102		54-140	7		30
Carbon disulfide	ND	92.3	110	117		110	116		59-130	5		30
2-Butanone	ND	92.3	110	119		110	107		70-130	5		30
4-Methyl-2-pentanone	ND	92.3	90	98		89	91		70-130	1		30
2-Hexanone	ND	92.3	100	110		100	103		70-130	1		30
1,2-Dibromoethane	ND	92.3	76	83		80	81		70-130	4		30
n-Butylbenzene	ND	92.3	44	47	Q	77	78		70-130	55	Q	30
sec-Butylbenzene	ND	92.3	58	63	Q	89	90		70-130	42	Q	30
tert-Butylbenzene	ND	92.3	65	71		92	94		70-130	34	Q	30
1,2-Dibromo-3-chloropropane	ND	92.3	69	75		70	72		68-130	1		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1064762-6 WG1064762-7 QC Sample: L1742138-02 Client ID: SB-24												
Isopropylbenzene	ND	92.3	71	77		95	97		70-130	29		30
p-Isopropyltoluene	ND	92.3	52	56	Q	82	84		70-130	46	Q	30
Naphthalene	ND	92.3	51	56	Q	62	63	Q	70-130	19		30
n-Propylbenzene	ND	92.3	61	66	Q	89	90		70-130	36	Q	30
1,2,4-Trichlorobenzene	ND	92.3	33	36	Q	51	52	Q	70-130	41	Q	30
1,3,5-Trimethylbenzene	ND	92.3	63	68	Q	87	88		70-130	33	Q	30
1,2,4-Trimethylbenzene	ND	92.3	62	68	Q	84	86		70-130	30		30
Methyl Acetate	ND	92.3	140	156	Q	130	136		51-146	7		30
Cyclohexane	ND	92.3	130	139		140	139		59-142	7		30
Freon-113	ND	92.3	130	145	Q	140	142	Q	50-139	4		30
Methyl cyclohexane	ND	92.3	100	112		110	116		70-130	10		30

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>	
1,2-Dichloroethane-d4	106		101		70-130
4-Bromofluorobenzene	106		107		70-130
Dibromofluoromethane	100		97		70-130
Toluene-d8	99		98		70-130



# SEMIVOLATILES

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

Lab ID: L1742138-02  
 Client ID: SB-24  
 Sample Location: ROCHESTER, NY

Date Collected: 11/13/17 10:00  
 Date Received: 11/15/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 11/19/17 08:05

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 11/21/17 05:17  
 Analyst: SZ  
 Percent Solids: 82%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	33	J	ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	31	J	ug/kg	120	22.	1
Benzo(a)pyrene	62	J	ug/kg	160	48.	1
Benzo(b)fluoranthene	72	J	ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1742138

Project Number: 2172414

Report Date: 11/22/17

## SAMPLE RESULTS

Lab ID: L1742138-02  
 Client ID: SB-24  
 Sample Location: ROCHESTER, NY

Date Collected: 11/13/17 10:00  
 Date Received: 11/15/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	32	J	ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	54	J	ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	56	J	ug/kg	160	28.	1
Pyrene	32	J	ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	430	74.	1
4-Nitrophenol	ND		ug/kg	280	80.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	95.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Carbazole	ND		ug/kg	200	19.	1
Atrazine	ND		ug/kg	160	69.	1
Benzaldehyde	ND		ug/kg	260	53.	1
Caprolactam	ND		ug/kg	200	60.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	200	40.	1

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1742138**Project Number:** 2172414**Report Date:** 11/22/17**SAMPLE RESULTS**

Lab ID: L1742138-02

Date Collected: 11/13/17 10:00

Client ID: SB-24

Date Received: 11/15/17

Sample Location: ROCHESTER, NY

Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	86		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	72		10-136
4-Terphenyl-d14	66		18-120

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-05  
**Client ID:** DUPLICATE  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 00:00  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 11/19/17 08:05

**Matrix:** Soil  
**Analytical Method:** 1,8270D  
**Analytical Date:** 11/21/17 05:43  
**Analyst:** SZ  
**Percent Solids:** 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	50	J	ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1
Benzo(a)anthracene	36	J	ug/kg	120	22.	1
Benzo(a)pyrene	58	J	ug/kg	160	48.	1
Benzo(b)fluoranthene	70	J	ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-05  
**Client ID:** DUPLICATE  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 00:00  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Chrysene	36	J	ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	51	J	ug/kg	160	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	30	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	55	J	ug/kg	160	27.	1
Pyrene	45	J	ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	38.	1
3-Nitroaniline	ND		ug/kg	190	37.	1
4-Nitroaniline	ND		ug/kg	190	81.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	ND		ug/kg	190	19.	1
Atrazine	ND		ug/kg	160	68.	1
Benzaldehyde	ND		ug/kg	260	53.	1
Caprolactam	ND		ug/kg	190	59.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

Lab ID: L1742138-05  
 Client ID: DUPLICATE  
 Sample Location: ROCHESTER, NY

Date Collected: 11/13/17 00:00  
 Date Received: 11/15/17  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	62		18-120

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/20/17 19:02  
**Analyst:** SZ

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/19/17 08:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,05 Batch: WG1064619-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	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	98	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	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
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	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/20/17 19:02  
**Analyst:** SZ

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/19/17 08:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,05 Batch: WG1064619-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	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	15.
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	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/20/17 19:02  
**Analyst:** SZ

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/19/17 08:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02,05 Batch: WG1064619-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

**Tentatively Identified Compounds**

No Tentatively Identified Compounds      ND      ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	78		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	81		30-120
2,4,6-Tribromophenol	95		10-136
4-Terphenyl-d14	96		18-120



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 Batch: WG1064619-2 WG1064619-3								
Acenaphthene	78		81		31-137	4		50
Hexachlorobenzene	87		92		40-140	6		50
Bis(2-chloroethyl)ether	76		79		40-140	4		50
2-Chloronaphthalene	79		83		40-140	5		50
3,3'-Dichlorobenzidine	46		47		40-140	2		50
2,4-Dinitrotoluene	85		91		40-132	7		50
2,6-Dinitrotoluene	85		85		40-140	0		50
Fluoranthene	85		91		40-140	7		50
4-Chlorophenyl phenyl ether	82		85		40-140	4		50
4-Bromophenyl phenyl ether	83		86		40-140	4		50
Bis(2-chloroisopropyl)ether	73		76		40-140	4		50
Bis(2-chloroethoxy)methane	77		79		40-117	3		50
Hexachlorobutadiene	82		82		40-140	0		50
Hexachlorocyclopentadiene	48		47		40-140	2		50
Hexachloroethane	72		75		40-140	4		50
Isophorone	76		79		40-140	4		50
Naphthalene	78		79		40-140	1		50
Nitrobenzene	75		78		40-140	4		50
NDPA/DPA	82		85		36-157	4		50
n-Nitrosodi-n-propylamine	74		78		32-121	5		50
Bis(2-ethylhexyl)phthalate	82		84		40-140	2		50
Butyl benzyl phthalate	85		92		40-140	8		50
Di-n-butylphthalate	83		86		40-140	4		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1742138

Project Number: 2172414

Report Date: 11/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 Batch: WG1064619-2 WG1064619-3								
Di-n-octylphthalate	83		86		40-140	4		50
Diethyl phthalate	82		86		40-140	5		50
Dimethyl phthalate	83		84		40-140	1		50
Benzo(a)anthracene	81		86		40-140	6		50
Benzo(a)pyrene	85		91		40-140	7		50
Benzo(b)fluoranthene	86		92		40-140	7		50
Benzo(k)fluoranthene	82		87		40-140	6		50
Chrysene	82		86		40-140	5		50
Acenaphthylene	81		81		40-140	0		50
Anthracene	82		86		40-140	5		50
Benzo(ghi)perylene	86		91		40-140	6		50
Fluorene	82		84		40-140	2		50
Phenanthrene	80		83		40-140	4		50
Dibenzo(a,h)anthracene	85		91		40-140	7		50
Indeno(1,2,3-cd)pyrene	84		90		40-140	7		50
Pyrene	84		90		35-142	7		50
Biphenyl	82		85		54-104	4		50
4-Chloroaniline	71		76		40-140	7		50
2-Nitroaniline	78		82		47-134	5		50
3-Nitroaniline	51		54		26-129	6		50
4-Nitroaniline	76		82		41-125	8		50
Dibenzofuran	80		83		40-140	4		50
2-Methylnaphthalene	79		80		40-140	1		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1742138

Project Number: 2172414

Report Date: 11/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 Batch: WG1064619-2 WG1064619-3								
1,2,4,5-Tetrachlorobenzene	86		88		40-117	2		50
Acetophenone	78		81		14-144	4		50
2,4,6-Trichlorophenol	88		89		30-130	1		50
p-Chloro-m-cresol	84		85		26-103	1		50
2-Chlorophenol	79		81		25-102	3		50
2,4-Dichlorophenol	81		87		30-130	7		50
2,4-Dimethylphenol	80		84		30-130	5		50
2-Nitrophenol	81		84		30-130	4		50
4-Nitrophenol	90		94		11-114	4		50
2,4-Dinitrophenol	34		42		4-130	21		50
4,6-Dinitro-o-cresol	76		82		10-130	8		50
Pentachlorophenol	88		93		17-109	6		50
Phenol	73		75		26-90	3		50
2-Methylphenol	77		80		30-130	4		50
3-Methylphenol/4-Methylphenol	82		86		30-130	5		50
2,4,5-Trichlorophenol	90		95		30-130	5		50
Carbazole	81		87		54-128	7		50
Atrazine	86		89		40-140	3		50
Benzaldehyde	72		75		40-140	4		50
Caprolactam	80		83		15-130	4		50
2,3,4,6-Tetrachlorophenol	93		100		40-140	7		50

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

Parameter	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> Limits	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 Batch: WG1064619-2 WG1064619-3								

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> Criteria
2-Fluorophenol	82		85		25-120
Phenol-d6	81		82		10-120
Nitrobenzene-d5	76		78		23-120
2-Fluorobiphenyl	81		83		30-120
2,4,6-Tribromophenol	97		102		10-136
4-Terphenyl-d14	89		95		18-120

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 QC Batch ID: WG1064619-4 WG1064619-5 QC Sample: L1742138-02 Client ID: SB-24												
Acenaphthene	ND	1580	1000	63		1100	68		31-137	10		50
Hexachlorobenzene	ND	1580	920	58		980	61		40-140	6		50
Bis(2-chloroethyl)ether	ND	1580	1100	70		1200	75		40-140	9		50
2-Chloronaphthalene	ND	1580	1000	63		1100	68		40-140	10		50
3,3'-Dichlorobenzidine	ND	1580	600	38	Q	630	39	Q	40-140	5		50
2,4-Dinitrotoluene	ND	1580	1100	70		1300	81		40-132	17		50
2,6-Dinitrotoluene	ND	1580	1100	70		1200	75		40-140	9		50
Fluoranthene	33.J	1580	1100	70		1200	75		40-140	9		50
4-Chlorophenyl phenyl ether	ND	1580	970	61		1000	62		40-140	3		50
4-Bromophenyl phenyl ether	ND	1580	920	58		970	60		40-140	5		50
Bis(2-chloroisopropyl)ether	ND	1580	1100	70		1200	75		40-140	9		50
Bis(2-chloroethoxy)methane	ND	1580	1200	76		1200	75		40-117	0		50
Hexachlorobutadiene	ND	1580	940	60		990	62		40-140	5		50
Hexachlorocyclopentadiene	ND	1580	760	48		760	47		40-140	0		50
Hexachloroethane	ND	1580	1000	63		1100	68		40-140	10		50
Isophorone	ND	1580	1200	76		1300	81		40-140	8		50
Naphthalene	ND	1580	1000	63		1100	68		40-140	10		50
Nitrobenzene	ND	1580	1200	76		1300	81		40-140	8		50
NDPA/DPA	ND	1580	1100	70		1100	68		36-157	0		50
n-Nitrosodi-n-propylamine	ND	1580	1300	82		1400	87		32-121	7		50
Bis(2-ethylhexyl)phthalate	ND	1580	1300	82		1400	87		40-140	7		50
Butyl benzyl phthalate	ND	1580	1200	76		1300	81		40-140	8		50
Di-n-butylphthalate	ND	1580	1200	76		1200	75		40-140	0		50



## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 QC Batch ID: WG1064619-4 WG1064619-5 QC Sample: L1742138-02 Client ID: SB-24												
Di-n-octylphthalate	ND	1580	1300	82		1400	87		40-140	7		50
Diethyl phthalate	ND	1580	1100	70		1200	75		40-140	9		50
Dimethyl phthalate	ND	1580	1100	70		1200	75		40-140	9		50
Benzo(a)anthracene	31.J	1580	1100	70		1200	75		40-140	9		50
Benzo(a)pyrene	62.J	1580	1100	70		1200	75		40-140	9		50
Benzo(b)fluoranthene	72.J	1580	1100	70		1200	75		40-140	9		50
Benzo(k)fluoranthene	ND	1580	1100	70		1100	68		40-140	0		50
Chrysene	32.J	1580	1100	70		1100	68		40-140	0		50
Acenaphthylene	ND	1580	1000	63		1100	68		40-140	10		50
Anthracene	ND	1580	1000	63		1100	68		40-140	10		50
Benzo(ghi)perylene	54.J	1580	1000	63		1100	68		40-140	10		50
Fluorene	ND	1580	1000	63		1100	68		40-140	10		50
Phenanthrene	ND	1580	1000	63		1100	68		40-140	10		50
Dibenzo(a,h)anthracene	ND	1580	1000	63		1100	68		40-140	10		50
Indeno(1,2,3-cd)pyrene	56.J	1580	1100	70		1200	75		40-140	9		50
Pyrene	32.J	1580	1000	63		1200	75		35-142	18		50
Biphenyl	ND	1580	1000	63		1100	68		54-104	10		50
4-Chloroaniline	ND	1580	630	40		650	40		40-140	3		50
2-Nitroaniline	ND	1580	1200	76		1300	81		47-134	8		50
3-Nitroaniline	ND	1580	880	56		920	57		26-129	4		50
4-Nitroaniline	ND	1580	1100	70		1200	75		41-125	9		50
Dibenzofuran	ND	1580	1000	63		1100	68		40-140	10		50
2-Methylnaphthalene	ND	1580	1000	63		1100	68		40-140	10		50

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 QC Batch ID: WG1064619-4 WG1064619-5 QC Sample: L1742138-02 Client ID: SB-24												
1,2,4,5-Tetrachlorobenzene	ND	1580	970	61		1000	62		40-117	3		50
Acetophenone	ND	1580	1200	76		1300	81		14-144	8		50
2,4,6-Trichlorophenol	ND	1580	1100	70		1200	75		30-130	9		50
p-Chloro-m-cresol	ND	1580	1200	76		1300	81		26-103	8		50
2-Chlorophenol	ND	1580	1100	70		1200	75		25-102	9		50
2,4-Dichlorophenol	ND	1580	1200	76		1200	75		30-130	0		50
2,4-Dimethylphenol	ND	1580	1100	70		1200	75		30-130	9		50
2-Nitrophenol	ND	1580	1200	76		1200	75		30-130	0		50
4-Nitrophenol	ND	1580	1300	82		1400	87		11-114	7		50
2,4-Dinitrophenol	ND	1580	270J	17		300J	19		4-130	11		50
4,6-Dinitro-o-cresol	ND	1580	680	43		790	49		10-130	15		50
Pentachlorophenol	ND	1580	770	49		840	52		17-109	9		50
Phenol	ND	1580	1200	76		1200	75		26-90	0		50
2-Methylphenol	ND	1580	1100	70		1200	75		30-130.	9		50
3-Methylphenol/4-Methylphenol	ND	1580	1200	76		1200	75		30-130	0		50
2,4,5-Trichlorophenol	ND	1580	1100	70		1200	75		30-130	9		50
Carbazole	ND	1580	1100	70		1200	75		54-128	9		50
Atrazine	ND	1580	1300	82		1400	87		40-140	7		50
Benzaldehyde	ND	1580	1100	70		1200	75		40-140	9		50
Caprolactam	ND	1580	1200	76		1300	81		15-130	8		50
2,3,4,6-Tetrachlorophenol	ND	1580	1000	63		1100	68		40-140	10		50

**Matrix Spike Analysis****Batch Quality Control****Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1742138**Project Number:** 2172414**Report Date:** 11/22/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatiles Organics by GC/MS - Westborough Lab Associated sample(s): 02,05 QC Batch ID: WG1064619-4 WG1064619-5 QC Sample: L1742138-02 Client ID: SB-24

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>	
2,4,6-Tribromophenol	62		68		10-136
2-Fluorobiphenyl	59		65		30-120
2-Fluorophenol	70		72		25-120
4-Terphenyl-d14	55		62		18-120
Nitrobenzene-d5	76		78		23-120
Phenol-d6	74		75		10-120

# PCBS

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-02  
**Client ID:** SB-24  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/13/17 10:00  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 11/21/17 02:31  
**Analyst:** HT  
**Percent Solids:** 82%

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/19/17 12:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 11/20/17  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 11/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	39.8	4.51	1	A
Aroclor 1221	ND		ug/kg	39.8	6.06	1	A
Aroclor 1232	ND		ug/kg	39.8	3.92	1	A
Aroclor 1242	ND		ug/kg	39.8	4.87	1	A
Aroclor 1248	ND		ug/kg	39.8	4.47	1	A
Aroclor 1254	ND		ug/kg	39.8	3.25	1	A
Aroclor 1260	ND		ug/kg	39.8	4.16	1	A
Aroclor 1262	ND		ug/kg	39.8	3.27	1	A
Aroclor 1268	ND		ug/kg	39.8	2.82	1	A
PCBs, Total	ND		ug/kg	39.8	2.82	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	53		30-150	B

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-05  
**Client ID:** DUPLICATE  
**Sample Location:** ROCHESTER, NY

**Matrix:** Soil  
**Analytical Method:** 1,8082A  
**Analytical Date:** 11/21/17 03:08  
**Analyst:** HT  
**Percent Solids:** 83%

**Date Collected:** 11/13/17 00:00  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 11/19/17 12:18  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 11/20/17  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 11/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/kg	39.7	4.50	1	A
Aroclor 1221	ND		ug/kg	39.7	6.04	1	A
Aroclor 1232	ND		ug/kg	39.7	3.91	1	A
Aroclor 1242	ND		ug/kg	39.7	4.86	1	A
Aroclor 1248	4.76	J	ug/kg	39.7	4.46	1	B
Aroclor 1254	ND		ug/kg	39.7	3.24	1	A
Aroclor 1260	ND		ug/kg	39.7	4.14	1	A
Aroclor 1262	ND		ug/kg	39.7	3.26	1	A
Aroclor 1268	ND		ug/kg	39.7	2.81	1	A
PCBs, Total	4.76	J	ug/kg	39.7	2.81	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		30-150	B
Decachlorobiphenyl	72		30-150	B



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8082A  
Analytical Date: 11/20/17 18:36  
Analyst: HT

Extraction Method: EPA 3546  
Extraction Date: 11/18/17 14:05  
Cleanup Method: EPA 3665A  
Cleanup Date: 11/19/17  
Cleanup Method: EPA 3660B  
Cleanup Date: 11/19/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02,05 Batch: WG1064539-1						
Aroclor 1016	ND		ug/kg	32.2	3.65	A
Aroclor 1221	ND		ug/kg	32.2	4.90	A
Aroclor 1232	ND		ug/kg	32.2	3.17	A
Aroclor 1242	ND		ug/kg	32.2	3.94	A
Aroclor 1248	ND		ug/kg	32.2	3.61	A
Aroclor 1254	ND		ug/kg	32.2	2.63	A
Aroclor 1260	ND		ug/kg	32.2	3.36	A
Aroclor 1262	ND		ug/kg	32.2	2.65	A
Aroclor 1268	ND		ug/kg	32.2	2.28	A
PCBs, Total	ND		ug/kg	32.2	2.28	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	72		30-150	B

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02,05 Batch: WG1064539-2 WG1064539-3									
Aroclor 1016	80		83		40-140	4		50	A
Aroclor 1260	57		61		40-140	7		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		87		30-150	A
Decachlorobiphenyl	63		67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		87		30-150	B
Decachlorobiphenyl	66		68		30-150	B

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>	<b>Column</b>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02,05 QC Batch ID: WG1064539-4 WG1064539-5 QC Sample: L1742138-02 Client ID: SB-24													
Aroclor 1016	ND	242	120	50		175	71		40-140	37		50	A
Aroclor 1260	ND	242	105	43		154	63		40-140	38		50	A

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>	<b>Column</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>		
2,4,5,6-Tetrachloro-m-xylene	50		69		30-150	A
Decachlorobiphenyl	42		60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		74		30-150	B
Decachlorobiphenyl	38		59		30-150	B

# PESTICIDES

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-01  
**Client ID:** SB-23  
**Sample Location:** ROCHESTER, NY  
  
**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 11/21/17 08:17  
**Analyst:** KEG  
**Percent Solids:** 82%

**Date Collected:** 11/13/17 09:15  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 11/19/17 10:53  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 11/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/kg	1.89	0.371	1	A
Lindane	ND		ug/kg	0.789	0.353	1	A
Alpha-BHC	ND		ug/kg	0.789	0.224	1	A
Beta-BHC	ND		ug/kg	1.89	0.718	1	A
Heptachlor	ND		ug/kg	0.947	0.424	1	A
Aldrin	ND		ug/kg	1.89	0.667	1	A
Heptachlor epoxide	ND		ug/kg	3.55	1.06	1	A
Endrin	ND		ug/kg	0.789	0.324	1	A
Endrin aldehyde	ND		ug/kg	2.37	0.828	1	A
Endrin ketone	ND		ug/kg	1.89	0.488	1	A
Dieldrin	ND		ug/kg	1.18	0.592	1	A
4,4'-DDE	ND		ug/kg	1.89	0.438	1	A
4,4'-DDD	ND		ug/kg	1.89	0.675	1	A
4,4'-DDT	ND	PI	ug/kg	3.55	1.52	1	B
Endosulfan I	ND		ug/kg	1.89	0.447	1	A
Endosulfan II	ND		ug/kg	1.89	0.633	1	A
Endosulfan sulfate	ND		ug/kg	0.789	0.376	1	A
Methoxychlor	ND		ug/kg	3.55	1.10	1	A
Toxaphene	ND		ug/kg	35.5	9.94	1	A
cis-Chlordane	ND		ug/kg	2.37	0.660	1	A
trans-Chlordane	ND		ug/kg	2.37	0.625	1	A
Chlordane	ND		ug/kg	15.4	6.27	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	95		30-150	B
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	91		30-150	A

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-02  
**Client ID:** SB-24  
**Sample Location:** ROCHESTER, NY  
  
**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 11/21/17 08:56  
**Analyst:** KEG  
**Percent Solids:** 82%

**Date Collected:** 11/13/17 10:00  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 11/19/17 10:53  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 11/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/kg	1.85	0.362	1	A
Lindane	ND		ug/kg	0.770	0.344	1	A
Alpha-BHC	ND		ug/kg	0.770	0.219	1	A
Beta-BHC	ND		ug/kg	1.85	0.701	1	A
Heptachlor	ND		ug/kg	0.924	0.414	1	A
Aldrin	ND		ug/kg	1.85	0.650	1	A
Heptachlor epoxide	ND		ug/kg	3.46	1.04	1	A
Endrin	ND		ug/kg	0.770	0.316	1	A
Endrin aldehyde	ND		ug/kg	2.31	0.808	1	A
Endrin ketone	ND		ug/kg	1.85	0.476	1	A
Dieldrin	ND		ug/kg	1.15	0.577	1	A
4,4'-DDE	ND		ug/kg	1.85	0.427	1	A
4,4'-DDD	ND		ug/kg	1.85	0.659	1	A
4,4'-DDT	ND		ug/kg	3.46	1.48	1	B
Endosulfan I	ND		ug/kg	1.85	0.436	1	A
Endosulfan II	ND		ug/kg	1.85	0.617	1	A
Endosulfan sulfate	ND		ug/kg	0.770	0.366	1	A
Methoxychlor	ND		ug/kg	3.46	1.08	1	A
Toxaphene	ND		ug/kg	34.6	9.70	1	A
cis-Chlordane	ND		ug/kg	2.31	0.644	1	A
trans-Chlordane	ND		ug/kg	2.31	0.610	1	A
Chlordane	ND		ug/kg	15.0	6.12	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	77		30-150	B
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	89		30-150	A



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-05  
**Client ID:** DUPLICATE  
**Sample Location:** ROCHESTER, NY  
  
**Matrix:** Soil  
**Analytical Method:** 1,8081B  
**Analytical Date:** 11/21/17 09:09  
**Analyst:** KEG  
**Percent Solids:** 83%

**Date Collected:** 11/13/17 00:00  
**Date Received:** 11/15/17  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 11/19/17 10:53  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 11/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/kg	1.88	0.369	1	A
Lindane	ND		ug/kg	0.785	0.351	1	A
Alpha-BHC	ND		ug/kg	0.785	0.223	1	A
Beta-BHC	ND		ug/kg	1.88	0.715	1	A
Heptachlor	ND		ug/kg	0.942	0.422	1	A
Aldrin	ND		ug/kg	1.88	0.664	1	A
Heptachlor epoxide	ND		ug/kg	3.53	1.06	1	A
Endrin	ND		ug/kg	0.785	0.322	1	A
Endrin aldehyde	ND		ug/kg	2.36	0.825	1	A
Endrin ketone	ND		ug/kg	1.88	0.485	1	A
Dieldrin	ND		ug/kg	1.18	0.589	1	A
4,4'-DDE	ND		ug/kg	1.88	0.436	1	A
4,4'-DDD	ND		ug/kg	1.88	0.672	1	A
4,4'-DDT	ND		ug/kg	3.53	1.52	1	A
Endosulfan I	ND		ug/kg	1.88	0.445	1	A
Endosulfan II	ND		ug/kg	1.88	0.630	1	A
Endosulfan sulfate	ND		ug/kg	0.785	0.374	1	A
Methoxychlor	ND		ug/kg	3.53	1.10	1	A
Toxaphene	ND		ug/kg	35.3	9.90	1	A
cis-Chlordane	ND		ug/kg	2.36	0.657	1	A
trans-Chlordane	ND		ug/kg	2.36	0.622	1	A
Chlordane	ND		ug/kg	15.3	6.24	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	87		30-150	B
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	95		30-150	A

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081B  
Analytical Date: 11/20/17 23:29  
Analyst: CD

Extraction Method: EPA 3546  
Extraction Date: 11/19/17 10:53  
Cleanup Method: EPA 3620B  
Cleanup Date: 11/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02,05 Batch: WG1064638-1						
Delta-BHC	ND		ug/kg	1.54	0.302	A
Lindane	ND		ug/kg	0.644	0.288	A
Alpha-BHC	ND		ug/kg	0.644	0.183	A
Beta-BHC	ND		ug/kg	1.54	0.586	A
Aldrin	ND		ug/kg	1.54	0.544	A
Heptachlor epoxide	ND		ug/kg	2.90	0.869	A
Endrin	ND		ug/kg	0.644	0.264	A
Endrin aldehyde	ND		ug/kg	1.93	0.676	A
Endrin ketone	ND		ug/kg	1.54	0.398	A
Dieldrin	ND		ug/kg	0.965	0.483	A
4,4'-DDE	ND		ug/kg	1.54	0.357	A
4,4'-DDD	ND		ug/kg	1.54	0.551	A
4,4'-DDT	ND		ug/kg	2.90	1.24	A
Endosulfan I	ND		ug/kg	1.54	0.365	A
Endosulfan II	ND		ug/kg	1.54	0.516	A
Endosulfan sulfate	ND		ug/kg	0.644	0.306	A
Methoxychlor	ND		ug/kg	2.90	0.901	A
Toxaphene	ND		ug/kg	29.0	8.11	A
cis-Chlordane	ND		ug/kg	1.93	0.538	A
trans-Chlordane	ND		ug/kg	1.93	0.510	A
Chlordane	ND		ug/kg	12.5	5.12	A
Heptachlor	ND		ug/kg	0.772	0.346	B

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081B  
Analytical Date: 11/20/17 23:29  
Analyst: CD

Extraction Method: EPA 3546  
Extraction Date: 11/19/17 10:53  
Cleanup Method: EPA 3620B  
Cleanup Date: 11/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02,05 Batch: WG1064638-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	75		30-150	B
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	75		30-150	A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02,05 Batch: WG1064638-2 WG1064638-3									
Delta-BHC	58		65		30-150	11		30	A
Lindane	66		71		30-150	7		30	A
Alpha-BHC	66		75		30-150	13		30	A
Beta-BHC	55		61		30-150	10		30	A
Heptachlor	83		97		30-150	16		30	A
Aldrin	73		80		30-150	9		30	A
Heptachlor epoxide	69		77		30-150	11		30	A
Endrin	76		84		30-150	10		30	A
Endrin aldehyde	36		55		30-150	42	Q	30	A
Endrin ketone	51		68		30-150	29		30	A
Dieldrin	73		81		30-150	10		30	A
4,4'-DDE	72		78		30-150	8		30	A
4,4'-DDD	66		75		30-150	13		30	A
4,4'-DDT	83		93		30-150	11		30	A
Endosulfan I	64		72		30-150	12		30	A
Endosulfan II	61		70		30-150	14		30	A
Endosulfan sulfate	32		52		30-150	48	Q	30	A
Methoxychlor	63		73		30-150	15		30	A
cis-Chlordane	59		66		30-150	11		30	A
trans-Chlordane	51		55		30-150	8		30	A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02,05 Batch: WG1064638-2 WG1064638-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		75		30-150	B
Decachlorobiphenyl	79		88		30-150	B
2,4,5,6-Tetrachloro-m-xylene	64		71		30-150	A
Decachlorobiphenyl	74		83		30-150	A

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02,05 QC Batch ID: WG1064638-4 WG1064638-5 QC Sample: L1742138-02 Client ID: SB-24													
Delta-BHC	ND	38.7	27.8	72		26.2	69		30-150	6		50	A
Lindane	ND	38.7	25.8	67		24.1	63		30-150	7		50	A
Alpha-BHC	ND	38.7	27.9	72		26.1	68		30-150	7		50	A
Beta-BHC	ND	38.7	29.5	76		27.9	73		30-150	6		50	A
Heptachlor	ND	38.7	35.5	92		33.1	87		30-150	7		50	A
Aldrin	ND	38.7	26.5	69		24.7	65		30-150	7		50	A
Heptachlor epoxide	ND	38.7	33.7	87		31.8	83		30-150	6		50	A
Endrin	ND	38.7	29.2	76		26.8	70		30-150	9		50	A
Endrin aldehyde	ND	38.7	18.0	47		18.2	48		30-150	1		50	A
Endrin ketone	ND	38.7	23.2	60		23.0	60		30-150	1		50	A
Dieldrin	ND	38.7	29.7	77		27.3	71		30-150	8		50	A
4,4'-DDE	ND	38.7	23.8	62		22.9	60		30-150	4		50	A
4,4'-DDD	ND	38.7	26.8	69		25.3	66		30-150	6		50	A
4,4'-DDT	ND	38.7	27.4	71		28.6	75		30-150	4		50	B
Endosulfan I	ND	38.7	32.0	83		29.4	77		30-150	8		50	A
Endosulfan II	ND	38.7	26.3	68		25.3	66		30-150	4		50	A
Endosulfan sulfate	ND	38.7	20.1	52		20.5	54		30-150	2		50	A
Methoxychlor	ND	38.7	33.8	87		32.6	85		30-150	4		50	A
cis-Chlordane	ND	38.7	25.6	66		24.4	64		30-150	5		50	A
trans-Chlordane	ND	38.7	18.6	48		21.9	57		30-150	16		50	A



**Matrix Spike Analysis****Batch Quality Control****Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1742138**Project Number:** 2172414**Report Date:** 11/22/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>MS Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>MSD Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>RPD Qual</b>	<b>RPD Limits</b>
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02,05 QC Batch ID: WG1064638-4 WG1064638-5 QC Sample: L1742138-02  
Client ID: SB-24

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>	<b>Column</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>		
2,4,5,6-Tetrachloro-m-xylene	61		61		30-150	B
Decachlorobiphenyl	94		89		30-150	B
2,4,5,6-Tetrachloro-m-xylene	80		77		30-150	A
Decachlorobiphenyl	104		90		30-150	A

## METALS

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

Lab ID: L1742138-02  
 Client ID: SB-24  
 Sample Location: ROCHESTER, NY  
 Matrix: Soil  
 Percent Solids: 82%

Date Collected: 11/13/17 10:00  
 Date Received: 11/15/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	7310		mg/kg	9.58	2.59	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Antimony, Total	0.814	J	mg/kg	4.79	0.364	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Arsenic, Total	4.52		mg/kg	0.958	0.199	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Barium, Total	64.5		mg/kg	0.958	0.167	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Beryllium, Total	0.297	J	mg/kg	0.479	0.032	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Cadmium, Total	0.680	J	mg/kg	0.958	0.094	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Calcium, Total	18400		mg/kg	9.58	3.35	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Chromium, Total	9.31		mg/kg	0.958	0.092	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Cobalt, Total	4.41		mg/kg	1.92	0.159	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Copper, Total	13.3		mg/kg	0.958	0.247	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Iron, Total	11600		mg/kg	4.79	0.865	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Lead, Total	130		mg/kg	4.79	0.257	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Magnesium, Total	9170		mg/kg	9.58	1.48	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Manganese, Total	474		mg/kg	0.958	0.152	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Mercury, Total	0.57		mg/kg	0.08	0.02	1	11/17/17 06:00	11/20/17 21:03	EPA 7471B	1,7471B	EA
Nickel, Total	7.43		mg/kg	2.40	0.232	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Potassium, Total	458		mg/kg	240	13.8	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.92	0.247	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.958	0.271	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Sodium, Total	105	J	mg/kg	192	3.02	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.92	0.302	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Vanadium, Total	16.2		mg/kg	0.958	0.194	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB
Zinc, Total	215		mg/kg	4.79	0.281	2	11/17/17 19:10	11/21/17 00:44	EPA 3050B	1,6010C	AB



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

Lab ID: L1742138-05  
 Client ID: DUPLICATE  
 Sample Location: ROCHESTER, NY  
 Matrix: Soil  
 Percent Solids: 83%

Date Collected: 11/13/17 00:00  
 Date Received: 11/15/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	6910		mg/kg	9.28	2.51	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Antimony, Total	0.826	J	mg/kg	4.64	0.353	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Arsenic, Total	3.53		mg/kg	0.928	0.193	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Barium, Total	43.4		mg/kg	0.928	0.162	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Beryllium, Total	0.260	J	mg/kg	0.464	0.031	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Cadmium, Total	0.501	J	mg/kg	0.928	0.091	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Calcium, Total	11900		mg/kg	9.28	3.25	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Chromium, Total	8.79		mg/kg	0.928	0.089	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Cobalt, Total	3.47		mg/kg	1.86	0.154	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Copper, Total	8.88		mg/kg	0.928	0.239	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Iron, Total	10400		mg/kg	4.64	0.838	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Lead, Total	83.8		mg/kg	4.64	0.249	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Magnesium, Total	6720		mg/kg	9.28	1.43	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Manganese, Total	242		mg/kg	0.928	0.148	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Mercury, Total	0.39		mg/kg	0.08	0.02	1	11/17/17 06:00	11/20/17 21:43	EPA 7471B	1,7471B	EA
Nickel, Total	7.16		mg/kg	2.32	0.225	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Potassium, Total	409		mg/kg	232	13.4	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.86	0.239	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.928	0.263	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Sodium, Total	104	J	mg/kg	186	2.92	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.86	0.292	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Vanadium, Total	15.1		mg/kg	0.928	0.188	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB
Zinc, Total	133		mg/kg	4.64	0.272	2	11/17/17 19:10	11/21/17 01:01	EPA 3050B	1,6010C	AB



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

## 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): 02,05 Batch: WG1063990-1									
Mercury, Total	ND	mg/kg	0.08	0.02	1	11/17/17 06:00	11/20/17 20:59	1,7471B	EA

### 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): 02,05 Batch: WG1064334-1										
Aluminum, Total	ND	mg/kg	4.00	1.08	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Antimony, Total	ND	mg/kg	2.00	0.152	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Arsenic, Total	ND	mg/kg	0.400	0.083	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Barium, Total	ND	mg/kg	0.400	0.070	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Beryllium, Total	ND	mg/kg	0.200	0.013	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Cadmium, Total	ND	mg/kg	0.400	0.039	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Calcium, Total	ND	mg/kg	4.00	1.40	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Chromium, Total	0.212	J	mg/kg	0.400	0.038	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB
Cobalt, Total	ND	mg/kg	0.800	0.066	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Copper, Total	ND	mg/kg	0.400	0.103	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Iron, Total	0.980	J	mg/kg	2.00	0.361	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB
Lead, Total	ND	mg/kg	2.00	0.107	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Magnesium, Total	ND	mg/kg	4.00	0.616	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Manganese, Total	ND	mg/kg	0.400	0.064	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Nickel, Total	ND	mg/kg	1.00	0.097	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Potassium, Total	ND	mg/kg	100	5.76	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Selenium, Total	ND	mg/kg	0.800	0.103	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Silver, Total	ND	mg/kg	0.400	0.113	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Sodium, Total	ND	mg/kg	80.0	1.26	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Thallium, Total	ND	mg/kg	0.800	0.126	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Vanadium, Total	ND	mg/kg	0.400	0.081	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	
Zinc, Total	ND	mg/kg	2.00	0.117	1	11/17/17 19:10	11/21/17 00:35	1,6010C	AB	



**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

## Method Blank Analysis Batch Quality Control

### Prep Information

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Digestion Method: EPA 3050B



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02,05 Batch: WG1063990-2 SRM Lot Number: D098-540								
Mercury, Total	109		-		50-149	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02,05 Batch: WG1064334-2 SRM Lot Number: D098-540					
Aluminum, Total	67	-	47-153	-	
Antimony, Total	116	-	6-194	-	
Arsenic, Total	87	-	83-117	-	
Barium, Total	99	-	82-118	-	
Beryllium, Total	101	-	83-117	-	
Cadmium, Total	83	-	82-117	-	
Calcium, Total	96	-	81-118	-	
Chromium, Total	85	-	83-119	-	
Cobalt, Total	86	-	84-116	-	
Copper, Total	85	-	84-116	-	
Iron, Total	84	-	60-140	-	
Lead, Total	84	-	82-117	-	
Magnesium, Total	85	-	76-124	-	
Manganese, Total	82	-	82-118	-	
Nickel, Total	84	-	82-117	-	
Potassium, Total	74	-	69-131	-	
Selenium, Total	84	-	78-121	-	
Silver, Total	87	-	80-120	-	
Sodium, Total	80	-	74-126	-	
Thallium, Total	84	-	80-119	-	
Vanadium, Total	85	-	79-121	-	

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02,05 Batch: WG1064334-2 SRM Lot Number: D098-540					
Zinc, Total	85	-	81-119	-	

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Total Metals - Mansfield Lab Associated sample(s): 02,05 QC Batch ID: WG1063990-3 WG1063990-4 QC Sample: L1742138-02 Client ID: SB-24												
Mercury, Total	0.57	0.155	0.64	45	Q	0.72	98		80-120	12		20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

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): 02,05 QC Batch ID: WG1064334-3 WG1064334-4 QC Sample: L1742138-02 Client ID: SB-24											
Aluminum, Total	7310	189	7600	153	Q	8350	552	Q	75-125	9	20
Antimony, Total	0.814J	47.2	33.8	72	Q	34.6	73	Q	75-125	2	20
Arsenic, Total	4.52	11.3	14.7	90		15.3	95		75-125	4	20
Barium, Total	64.5	189	220	82		234	90		75-125	6	20
Beryllium, Total	0.297J	4.72	4.48	95		4.68	99		75-125	4	20
Cadmium, Total	0.680J	4.82	5.14	107		5.26	109		75-125	2	20
Calcium, Total	18400	945	24100	603	Q	23600	552	Q	75-125	2	20
Chromium, Total	9.31	18.9	26.4	90		27.0	94		75-125	2	20
Cobalt, Total	4.41	47.2	42.9	81		44.4	85		75-125	3	20
Copper, Total	13.3	23.6	32.7	82		34.0	88		75-125	4	20
Iron, Total	11600	94.5	11400	0	Q	12500	955	Q	75-125	9	20
Lead, Total	130.	48.2	136	12	Q	150	42	Q	75-125	10	20
Magnesium, Total	9170	945	12900	395	Q	12200	321	Q	75-125	6	20
Manganese, Total	474.	47.2	351	0	Q	352	0	Q	75-125	0	20
Nickel, Total	7.43	47.2	47.0	84		48.4	87		75-125	3	20
Potassium, Total	458.	945	1410	101		1500	110		75-125	6	20
Selenium, Total	ND	11.3	10.4	92		10.8	95		75-125	4	20
Silver, Total	ND	28.3	27.2	96		27.5	97		75-125	1	20
Sodium, Total	105.J	945	1030	109		1080	114		75-125	5	20
Thallium, Total	ND	11.3	9.03	80		9.42	83		75-125	4	20
Vanadium, Total	16.2	47.2	59.6	92		60.7	94		75-125	2	20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

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): 02,05 QC Batch ID: WG1064334-3 WG1064334-4 QC Sample: L1742138-02 Client ID: SB-24									
Zinc, Total	215.	47.2	320	222	Q	262	100	75-125	20



# **INORGANICS & MISCELLANEOUS**

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1742138**Project Number:** 2172414**Report Date:** 11/22/17**SAMPLE RESULTS**

**Lab ID:** L1742138-01  
**Client ID:** SB-23  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/13/17 09:15  
**Date Received:** 11/15/17  
**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	82.4		%	0.100	NA	1	-	11/17/17 11:36	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

**SAMPLE RESULTS**

**Lab ID:** L1742138-02  
**Client ID:** SB-24  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/13/17 10:00  
**Date Received:** 11/15/17  
**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	82.1		%	0.100	NA	1	-	11/17/17 11:36	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	11/16/17 10:35	11/16/17 13:36	1,9010C/9012B	LH



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1742138**Project Number:** 2172414**Report Date:** 11/22/17**SAMPLE RESULTS**

**Lab ID:** L1742138-03  
**Client ID:** SB-26  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/13/17 11:25  
**Date Received:** 11/15/17  
**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	85.5		%	0.100	NA	1	-	11/17/17 11:36	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1742138**Project Number:** 2172414**Report Date:** 11/22/17**SAMPLE RESULTS**

**Lab ID:** L1742138-04  
**Client ID:** SB-27  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/13/17 12:15  
**Date Received:** 11/15/17  
**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	88.5		%	0.100	NA	1	-	11/17/17 11:36	121,2540G	RI



Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1742138

Project Number: 2172414

Report Date: 11/22/17

## SAMPLE RESULTS

Lab ID: L1742138-05  
 Client ID: DUPLICATE  
 Sample Location: ROCHESTER, NY  
 Matrix: Soil

Date Collected: 11/13/17 00:00  
 Date Received: 11/15/17  
 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	83.0		%	0.100	NA	1	-	11/17/17 11:36	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.2	0.25	1	11/16/17 10:35	11/16/17 13:39	1,9010C/9012B	LH





Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1742138

Project Number: 2172414

Report Date: 11/22/17

**Method Blank Analysis**  
Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02,05 Batch: WG1063646-1									
Cyanide, Total	ND	mg/kg	0.85	0.18	1	11/16/17 10:35	11/16/17 13:22	1,9010C/9012B	LH

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1742138

**Project Number:** 2172414

**Report Date:** 11/22/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02,05 Batch: WG1063646-2 WG1063646-3								
Cyanide, Total	80		72	Q	80-120	8		35

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
General Chemistry - Westborough Lab Associated sample(s): 02,05 QC Batch ID: WG1063646-4 WG1063646-5 QC Sample: L1742138-02 Client ID: SB-24												
Cyanide, Total	ND	12	10	84		11	90		75-125	10		35

**Lab Duplicate Analysis**  
Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Project Number: 2172414

Lab Number: L1742138

Report Date: 11/22/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1064126-1 QC Sample: L1742138-02 Client ID: SB-24						
Solids, Total	82.1	82.4	%	0		20

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

Serial\_No:11221711:49  
**Lab Number:** L1742138  
**Report Date:** 11/22/17

**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(*)
L1742138-01A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1742138-01B	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-01C	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-01D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1742138-01E	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8081(14)
L1742138-02A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1742138-02A1	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1742138-02A2	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1742138-02B	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-02B1	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-02B2	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-02C	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-02C1	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-02C2	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-02D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1742138-02D1	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1742138-02D2	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1742138-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.6	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)

\*Values in parentheses indicate holding time in days



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Serial\_No:**11221711:49  
**Lab Number:** L1742138  
**Report Date:** 11/22/17

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1742138-02E1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.6	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)
L1742138-02E2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.6	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)
L1742138-02F	Glass 60mL/2oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-02F1	Glass 60mL/2oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-02G	Glass 60mL/2oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-02G1	Glass 60mL/2oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-02G2	Glass 60mL/2oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-02H	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-02H1	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-02H2	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-02I	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-03A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1742138-03B	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-03C	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-03D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1742138-04A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYTCL-8260HLW-R2(14)
L1742138-04B	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-04C	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-04D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1742138-05A	Vial MeOH preserved	A	NA		2.6	Y	Absent		NYTCL-8260HLW-R2(14)



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

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**Report Date:** 11/22/17

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1742138-05B	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-05C	Vial water preserved	A	NA		2.6	Y	Absent	13-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1742138-05D	Plastic 2oz unpreserved for TS	A	NA		2.6	Y	Absent		TS(7)
L1742138-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.6	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)
L1742138-05F	Glass 60mL/2oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-05G	Glass 60mL/2oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L1742138-05H	Glass 120ml/4oz unpreserved	A	NA		2.6	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)

\*Values in parentheses indicate holding time in days



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

## 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).
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.
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.

### 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

**Report Format:** DU Report with 'J' Qualifiers



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#### Data Qualifiers

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:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1742138  
**Report Date:** 11/22/17

## 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:** 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 300:** DW: Bromide

**EPA 6860:** NPW and SCM: Perchlorate

**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation

**EPA 9012B:** NPW: Total Cyanide

**EPA 9050A:** NPW: Specific Conductance

**SM3500:** NPW: Ferrous Iron

**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**SM5310C:** DW: Dissolved Organic Carbon

### Mansfield Facility

**SM 2540D:** TSS

**EPA 3005A** NPW

**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:** 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, SM4500CI-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, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 624:** Volatile Halocarbons & Aromatics,

**EPA 608:** 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:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

#### 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, Pb, Mn, Ni, Se, Ag, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



 <b>NEW YORK CHAIN OF CUSTODY</b>	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab														
		1 of 1	11/16/17	ALPHA Job # L1742138													
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: 508-822-3268	Project Information		Deliverables	Billing Information												
Project Name: <b>Bullhead Plaza Phase II</b> Project Location: <b>Rochester, NY</b> Project # <del>2172463</del> <b>2172414</b> (Use Project name as Project #) <input type="checkbox"/>		Project Manager: <b>Jan Gillen</b> ALPHAQuote #:		<input type="checkbox"/> ASP-A <input type="checkbox"/> EQUS (1 File) <input type="checkbox"/> Other	<input checked="" type="checkbox"/> ASP-B <input checked="" type="checkbox"/> EQUS (4 File)												
Client: <b>LABELLA ASSOCIATES</b> Address: <b>300 STATE Street</b> <b>Rochester NY</b> Phone: <b>585-454-6110</b> Fax: Email: <b>albert@labelpla.com</b>		Turn-Around Time Standard <input type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		Same as Client Info <input checked="" type="checkbox"/> PO #													
These samples have been previously analyzed by Alpha <input type="checkbox"/>		Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:													
Other project specific requirements/comments: <div style="text-align: center; font-size: 1.2em; margin-top: 10px;">                     ASP Cat B + Basis BOD                 </div>		ANALYSIS TLL CP-51 VOCs 8260 TLL CP-51 SVOCs 8270 TLL HLLs 2470/2471 PCBs 8087 Pesticides 8081 Cyanide 9012 TLL VOCs 8261		Sample Filtration <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)													
Please specify Metals or TAL.		Sample Specific Comments		T O T A L B O T T L E													
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TLL CP-51 VOCs 8260	TLL CP-51 SVOCs 8270	TLL HLLs 2470/2471	PCBs 8087	Pesticides 8081	Cyanide 9012	TLL VOCs 8261	Sample Specific Comments	Total Bottle			
42134-01	SB-23	11/13/17	0915	Soil	A63								VOL 144	5			
-02	SB-24	11/13/17	1000	Soil	A63	X	X	X	X	X	X		MS/MSD FOR 27	24			
.03	SB-26	11/13/17	1125	Soil	A60						X		2700 03	4			
04	SB-27	11/13/17	1215	Soil	A63						X		11/13/17	4			
105	Duplicate	11/13/17	-	Soil	A63	X	X	X	X	X	X			8			
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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 Preservative		Relinquished By: Date/Time		Received By: Date/Time		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.)					
						V G G G G G V		F A A A A A F		[Signature] AAC 11-15-17 18:20 [Signature] AAC 11/15/17 18:20		[Signature] AAC 11/15/17 18:20 [Signature] AAC 11/16/17 1:05					





## ANALYTICAL REPORT

Lab Number:	L1744242
Client:	LaBella Associates, P.C. 300 State Street Suite 201 Rochester, NY 14614
ATTN:	Jennifer Gillen
Phone:	(585) 454-6110
Project Name:	BULLSHEAD PLAZA PHASE II
Project Number:	2172414
Report Date:	12/07/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1744242-01	BWB-01	SOIL	ROCHESTER, NY	11/27/17 09:38	12/01/17
L1744242-02	BWB-02	SOIL	ROCHESTER, NY	11/27/17 11:19	12/01/17
L1744242-03	BWB-04 (0.7-1.5)	SOIL	ROCHESTER, NY	11/27/17 13:46	12/01/17
L1744242-04	BWB-04 (5-5.7)	SOIL	ROCHESTER, NY	11/27/17 14:00	12/01/17
L1744242-05	BWB-05	SOIL	ROCHESTER, NY	11/27/17 15:20	12/01/17

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

### 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.

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**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

### 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

L1744242-03: The internal standard (IS) response(s) for 1,4-dichlorobenzene-d4 (34%) and the surrogate recovery for 4-bromofluorobenzene (158%) were outside the acceptance criteria; however, re-analysis achieved similar results: 1,4-dichlorobenzene-d4 (43%) and 4-bromofluorobenzene (152%). The results of both analyses are reported; however, since the IS response was below method criteria, all associated compounds and surrogate recoveries are considered to have a potentially high bias.

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:

 Amita Naik

Title: Technical Director/Representative

Date: 12/07/17

# ORGANICS

# VOLATILES



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

**Lab ID:** L1744242-01  
**Client ID:** BWB-01  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/27/17 09:38  
**Date Received:** 12/01/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 12/06/17 15:45  
**Analyst:** BD  
**Percent Solids:** 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.2	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.22	1
Chloroform	ND		ug/kg	1.2	0.30	1
Carbon tetrachloride	ND		ug/kg	0.82	0.28	1
1,2-Dichloropropane	ND		ug/kg	2.9	0.19	1
Dibromochloromethane	ND		ug/kg	0.82	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.26	1
Tetrachloroethene	ND		ug/kg	0.82	0.25	1
Chlorobenzene	ND		ug/kg	0.82	0.28	1
Trichlorofluoromethane	ND		ug/kg	4.1	0.34	1
1,2-Dichloroethane	ND		ug/kg	0.82	0.20	1
1,1,1-Trichloroethane	ND		ug/kg	0.82	0.29	1
Bromodichloromethane	ND		ug/kg	0.82	0.25	1
trans-1,3-Dichloropropene	ND		ug/kg	0.82	0.17	1
cis-1,3-Dichloropropene	ND		ug/kg	0.82	0.19	1
Bromoform	ND		ug/kg	3.3	0.19	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.82	0.24	1
Benzene	ND		ug/kg	0.82	0.16	1
Toluene	0.67	J	ug/kg	1.2	0.16	1
Ethylbenzene	0.21	J	ug/kg	0.82	0.14	1
Chloromethane	ND		ug/kg	4.1	0.36	1
Bromomethane	ND		ug/kg	1.6	0.28	1
Vinyl chloride	ND		ug/kg	1.6	0.26	1
Chloroethane	ND		ug/kg	1.6	0.26	1
1,1-Dichloroethene	ND		ug/kg	0.82	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
Trichloroethene	ND		ug/kg	0.82	0.25	1
1,2-Dichlorobenzene	ND		ug/kg	4.1	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	4.1	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.1	0.15	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

**Lab ID:** L1744242-01  
**Client ID:** BWB-01  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/27/17 09:38  
**Date Received:** 12/01/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.6	0.12	1
p/m-Xylene	0.80	J	ug/kg	1.6	0.29	1
o-Xylene	ND		ug/kg	1.6	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.82	0.28	1
Styrene	ND		ug/kg	1.6	0.33	1
Dichlorodifluoromethane	ND		ug/kg	8.2	0.41	1
Acetone	2.8	J	ug/kg	8.2	1.9	1
Carbon disulfide	ND		ug/kg	8.2	0.90	1
2-Butanone	ND		ug/kg	8.2	0.57	1
4-Methyl-2-pentanone	ND		ug/kg	8.2	0.20	1
2-Hexanone	ND		ug/kg	8.2	0.55	1
Bromochloromethane	ND		ug/kg	4.1	0.29	1
1,2-Dibromoethane	ND		ug/kg	3.3	0.16	1
n-Butylbenzene	ND		ug/kg	0.82	0.19	1
sec-Butylbenzene	ND		ug/kg	0.82	0.18	1
tert-Butylbenzene	ND		ug/kg	4.1	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	0.32	1
Isopropylbenzene	ND		ug/kg	0.82	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.82	0.16	1
Naphthalene	ND		ug/kg	4.1	0.11	1
n-Propylbenzene	ND		ug/kg	0.82	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.1	0.18	1
Methyl Acetate	ND		ug/kg	16	0.38	1
Cyclohexane	ND		ug/kg	16	0.36	1
1,4-Dioxane	ND		ug/kg	33	12.	1
Freon-113	ND		ug/kg	16	0.42	1
Methyl cyclohexane	ND		ug/kg	3.3	0.20	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

**Lab ID:** L1744242-02  
**Client ID:** BWB-02  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/27/17 11:19  
**Date Received:** 12/01/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 12/06/17 17:29  
**Analyst:** BD  
**Percent Solids:** 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	600	99.	1
1,1-Dichloroethane	ND		ug/kg	90	16.	1
Chloroform	ND		ug/kg	90	22.	1
Carbon tetrachloride	ND		ug/kg	60	21.	1
1,2-Dichloropropane	ND		ug/kg	210	14.	1
Dibromochloromethane	ND		ug/kg	60	10.	1
1,1,2-Trichloroethane	ND		ug/kg	90	19.	1
Tetrachloroethene	32	J	ug/kg	60	18.	1
Chlorobenzene	ND		ug/kg	60	21.	1
Trichlorofluoromethane	ND		ug/kg	300	25.	1
1,2-Dichloroethane	ND		ug/kg	60	15.	1
1,1,1-Trichloroethane	ND		ug/kg	60	21.	1
Bromodichloromethane	ND		ug/kg	60	18.	1
trans-1,3-Dichloropropene	ND		ug/kg	60	12.	1
cis-1,3-Dichloropropene	ND		ug/kg	60	14.	1
Bromoform	ND		ug/kg	240	14.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	60	18.	1
Benzene	ND		ug/kg	60	12.	1
Toluene	14	J	ug/kg	90	12.	1
Ethylbenzene	ND		ug/kg	60	10.	1
Chloromethane	ND		ug/kg	300	26.	1
Bromomethane	ND		ug/kg	120	20.	1
Vinyl chloride	ND		ug/kg	120	19.	1
Chloroethane	ND		ug/kg	120	19.	1
1,1-Dichloroethene	ND		ug/kg	60	22.	1
trans-1,2-Dichloroethene	ND		ug/kg	90	14.	1
Trichloroethene	ND		ug/kg	60	18.	1
1,2-Dichlorobenzene	ND		ug/kg	300	11.	1
1,3-Dichlorobenzene	ND		ug/kg	300	13.	1
1,4-Dichlorobenzene	ND		ug/kg	300	11.	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

**Lab ID:** L1744242-02  
**Client ID:** BWB-02  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/27/17 11:19  
**Date Received:** 12/01/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	12	J	ug/kg	120	9.2	1
p/m-Xylene	ND		ug/kg	120	21.	1
o-Xylene	ND		ug/kg	120	20.	1
cis-1,2-Dichloroethene	ND		ug/kg	60	20.	1
Styrene	ND		ug/kg	120	24.	1
Dichlorodifluoromethane	ND		ug/kg	600	30.	1
Acetone	ND		ug/kg	600	140	1
Carbon disulfide	ND		ug/kg	600	66.	1
2-Butanone	ND		ug/kg	600	41.	1
4-Methyl-2-pentanone	ND		ug/kg	600	15.	1
2-Hexanone	ND		ug/kg	600	40.	1
Bromochloromethane	ND		ug/kg	300	21.	1
1,2-Dibromoethane	ND		ug/kg	240	12.	1
n-Butylbenzene	ND		ug/kg	60	14.	1
sec-Butylbenzene	ND		ug/kg	60	13.	1
tert-Butylbenzene	ND		ug/kg	300	15.	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	300	24.	1
Isopropylbenzene	ND		ug/kg	60	12.	1
p-Isopropyltoluene	ND		ug/kg	60	12.	1
Naphthalene	2600		ug/kg	300	8.3	1
n-Propylbenzene	ND		ug/kg	60	13.	1
1,2,4-Trichlorobenzene	ND		ug/kg	300	13.	1
Methyl Acetate	ND		ug/kg	1200	28.	1
Cyclohexane	ND		ug/kg	1200	26.	1
1,4-Dioxane	ND		ug/kg	2400	860	1
Freon-113	ND		ug/kg	1200	31.	1
Methyl cyclohexane	ND		ug/kg	240	14.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	101		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

**Lab ID:** L1744242-03  
**Client ID:** BWB-04 (0.7-1.5)  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/27/17 13:46  
**Date Received:** 12/01/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 12/06/17 16:11  
**Analyst:** BD  
**Percent Solids:** 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.9	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.24	1
Chloroform	ND		ug/kg	1.3	0.33	1
Carbon tetrachloride	ND		ug/kg	0.89	0.31	1
1,2-Dichloropropane	ND		ug/kg	3.1	0.20	1
Dibromochloromethane	ND		ug/kg	0.89	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.28	1
Tetrachloroethene	ND		ug/kg	0.89	0.27	1
Chlorobenzene	ND		ug/kg	0.89	0.31	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.37	1
1,2-Dichloroethane	ND		ug/kg	0.89	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.89	0.31	1
Bromodichloromethane	ND		ug/kg	0.89	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	0.89	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.89	0.21	1
Bromoform	ND		ug/kg	3.6	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.89	0.27	1
Benzene	0.59	J	ug/kg	0.89	0.17	1
Toluene	4.8		ug/kg	1.3	0.17	1
Ethylbenzene	1.6		ug/kg	0.89	0.15	1
Chloromethane	ND		ug/kg	4.5	0.39	1
Bromomethane	ND		ug/kg	1.8	0.30	1
Vinyl chloride	ND		ug/kg	1.8	0.28	1
Chloroethane	ND		ug/kg	1.8	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.89	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
Trichloroethene	ND		ug/kg	0.89	0.27	1
1,2-Dichlorobenzene	ND		ug/kg	4.5	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.5	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	4.5	0.16	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

**Lab ID:** L1744242-03  
**Client ID:** BWB-04 (0.7-1.5)  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/27/17 13:46  
**Date Received:** 12/01/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.8	0.14	1
p/m-Xylene	5.3		ug/kg	1.8	0.31	1
o-Xylene	1.7	J	ug/kg	1.8	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	0.89	0.30	1
Styrene	ND		ug/kg	1.8	0.36	1
Dichlorodifluoromethane	ND		ug/kg	8.9	0.45	1
Acetone	35		ug/kg	8.9	2.0	1
Carbon disulfide	1.6	J	ug/kg	8.9	0.98	1
2-Butanone	ND		ug/kg	8.9	0.62	1
4-Methyl-2-pentanone	ND		ug/kg	8.9	0.22	1
2-Hexanone	ND		ug/kg	8.9	0.59	1
Bromochloromethane	ND		ug/kg	4.5	0.32	1
1,2-Dibromoethane	ND		ug/kg	3.6	0.18	1
n-Butylbenzene	ND		ug/kg	0.89	0.20	1
sec-Butylbenzene	0.64	J	ug/kg	0.89	0.19	1
tert-Butylbenzene	ND		ug/kg	4.5	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	0.35	1
Isopropylbenzene	0.46	J	ug/kg	0.89	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.89	0.18	1
Naphthalene	1.0	J	ug/kg	4.5	0.12	1
n-Propylbenzene	0.68	J	ug/kg	0.89	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.5	0.19	1
Methyl Acetate	ND		ug/kg	18	0.41	1
Cyclohexane	1.2	J	ug/kg	18	0.39	1
1,4-Dioxane	ND		ug/kg	36	13.	1
Freon-113	ND		ug/kg	18	0.46	1
Methyl cyclohexane	3.9		ug/kg	3.6	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	158	Q	70-130
Dibromofluoromethane	108		70-130



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

Lab ID: L1744242-03 R  
 Client ID: BWB-04 (0.7-1.5)  
 Sample Location: ROCHESTER, NY

Date Collected: 11/27/17 13:46  
 Date Received: 12/01/17  
 Field Prep: Not Specified

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 12/07/17 10:30  
 Analyst: JC  
 Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	9.6	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.26	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.96	0.33	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.96	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.30	1
Tetrachloroethene	ND		ug/kg	0.96	0.29	1
Chlorobenzene	ND		ug/kg	0.96	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.40	1
1,2-Dichloroethane	ND		ug/kg	0.96	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.96	0.34	1
Bromodichloromethane	ND		ug/kg	0.96	0.30	1
trans-1,3-Dichloropropene	ND		ug/kg	0.96	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.96	0.22	1
Bromoform	ND		ug/kg	3.8	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.96	0.28	1
Benzene	0.50	J	ug/kg	0.96	0.18	1
Toluene	3.5		ug/kg	1.4	0.19	1
Ethylbenzene	1.2		ug/kg	0.96	0.16	1
Chloromethane	ND		ug/kg	4.8	0.42	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.30	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.96	0.36	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.23	1
Trichloroethene	ND		ug/kg	0.96	0.29	1
1,2-Dichlorobenzene	ND		ug/kg	4.8	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	4.8	0.17	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

Lab ID: L1744242-03 R  
 Client ID: BWB-04 (0.7-1.5)  
 Sample Location: ROCHESTER, NY

Date Collected: 11/27/17 13:46  
 Date Received: 12/01/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.9	0.15	1
p/m-Xylene	4.2		ug/kg	1.9	0.34	1
o-Xylene	1.4	J	ug/kg	1.9	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	0.96	0.33	1
Styrene	ND		ug/kg	1.9	0.38	1
Dichlorodifluoromethane	ND		ug/kg	9.6	0.48	1
Acetone	31		ug/kg	9.6	2.2	1
Carbon disulfide	ND		ug/kg	9.6	1.0	1
2-Butanone	ND		ug/kg	9.6	0.66	1
4-Methyl-2-pentanone	ND		ug/kg	9.6	0.23	1
2-Hexanone	ND		ug/kg	9.6	0.64	1
Bromochloromethane	ND		ug/kg	4.8	0.34	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.19	1
n-Butylbenzene	ND		ug/kg	0.96	0.22	1
sec-Butylbenzene	0.39	J	ug/kg	0.96	0.21	1
tert-Butylbenzene	ND		ug/kg	4.8	0.24	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.8	0.38	1
Isopropylbenzene	0.32	J	ug/kg	0.96	0.18	1
p-Isopropyltoluene	0.44	J	ug/kg	0.96	0.19	1
Naphthalene	0.85	J	ug/kg	4.8	0.13	1
n-Propylbenzene	0.51	J	ug/kg	0.96	0.20	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.8	0.20	1
Methyl Acetate	ND		ug/kg	19	0.44	1
Cyclohexane	1.0	J	ug/kg	19	0.41	1
1,4-Dioxane	ND		ug/kg	38	14.	1
Freon-113	ND		ug/kg	19	0.49	1
Methyl cyclohexane	3.3	J	ug/kg	3.8	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	152	Q	70-130
Dibromofluoromethane	106		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

Lab ID: L1744242-04  
 Client ID: BWB-04 (5-5.7)  
 Sample Location: ROCHESTER, NY

Date Collected: 11/27/17 14:00  
 Date Received: 12/01/17  
 Field Prep: Not Specified

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 12/06/17 16:37  
 Analyst: BD  
 Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.9	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.24	1
Chloroform	ND		ug/kg	1.3	0.33	1
Carbon tetrachloride	ND		ug/kg	0.89	0.31	1
1,2-Dichloropropane	ND		ug/kg	3.1	0.20	1
Dibromochloromethane	ND		ug/kg	0.89	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.28	1
Tetrachloroethene	ND		ug/kg	0.89	0.27	1
Chlorobenzene	ND		ug/kg	0.89	0.31	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.37	1
1,2-Dichloroethane	ND		ug/kg	0.89	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.89	0.31	1
Bromodichloromethane	ND		ug/kg	0.89	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	0.89	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.89	0.21	1
Bromoform	ND		ug/kg	3.6	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.89	0.27	1
Benzene	ND		ug/kg	0.89	0.17	1
Toluene	1.3		ug/kg	1.3	0.17	1
Ethylbenzene	0.39	J	ug/kg	0.89	0.15	1
Chloromethane	ND		ug/kg	4.5	0.39	1
Bromomethane	ND		ug/kg	1.8	0.30	1
Vinyl chloride	ND		ug/kg	1.8	0.28	1
Chloroethane	ND		ug/kg	1.8	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.89	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.22	1
Trichloroethene	ND		ug/kg	0.89	0.27	1
1,2-Dichlorobenzene	ND		ug/kg	4.5	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.5	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	4.5	0.16	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

**Lab ID:** L1744242-04  
**Client ID:** BWB-04 (5-5.7)  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/27/17 14:00  
**Date Received:** 12/01/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.8	0.14	1
p/m-Xylene	1.5	J	ug/kg	1.8	0.31	1
o-Xylene	0.43	J	ug/kg	1.8	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	0.89	0.30	1
Styrene	ND		ug/kg	1.8	0.36	1
Dichlorodifluoromethane	ND		ug/kg	8.9	0.45	1
Acetone	18		ug/kg	8.9	2.0	1
Carbon disulfide	ND		ug/kg	8.9	0.98	1
2-Butanone	ND		ug/kg	8.9	0.62	1
4-Methyl-2-pentanone	ND		ug/kg	8.9	0.22	1
2-Hexanone	ND		ug/kg	8.9	0.59	1
Bromochloromethane	ND		ug/kg	4.5	0.32	1
1,2-Dibromoethane	ND		ug/kg	3.6	0.18	1
n-Butylbenzene	ND		ug/kg	0.89	0.20	1
sec-Butylbenzene	ND		ug/kg	0.89	0.19	1
tert-Butylbenzene	ND		ug/kg	4.5	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.5	0.35	1
Isopropylbenzene	ND		ug/kg	0.89	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.89	0.18	1
Naphthalene	0.34	J	ug/kg	4.5	0.12	1
n-Propylbenzene	ND		ug/kg	0.89	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.5	0.19	1
Methyl Acetate	ND		ug/kg	18	0.41	1
Cyclohexane	ND		ug/kg	18	0.39	1
1,4-Dioxane	ND		ug/kg	36	13.	1
Freon-113	ND		ug/kg	18	0.46	1
Methyl cyclohexane	ND		ug/kg	3.6	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

Lab ID: L1744242-05  
 Client ID: BWB-05  
 Sample Location: ROCHESTER, NY

Date Collected: 11/27/17 15:20  
 Date Received: 12/01/17  
 Field Prep: Not Specified

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 12/06/17 17:03  
 Analyst: BD  
 Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.8	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.24	1
Chloroform	ND		ug/kg	1.3	0.32	1
Carbon tetrachloride	ND		ug/kg	0.88	0.30	1
1,2-Dichloropropane	ND		ug/kg	3.1	0.20	1
Dibromochloromethane	ND		ug/kg	0.88	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.28	1
Tetrachloroethene	ND		ug/kg	0.88	0.26	1
Chlorobenzene	ND		ug/kg	0.88	0.31	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.37	1
1,2-Dichloroethane	ND		ug/kg	0.88	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.88	0.31	1
Bromodichloromethane	ND		ug/kg	0.88	0.27	1
trans-1,3-Dichloropropene	ND		ug/kg	0.88	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.88	0.20	1
Bromoform	ND		ug/kg	3.5	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.88	0.26	1
Benzene	0.20	J	ug/kg	0.88	0.17	1
Toluene	1.6		ug/kg	1.3	0.17	1
Ethylbenzene	0.42	J	ug/kg	0.88	0.15	1
Chloromethane	ND		ug/kg	4.4	0.38	1
Bromomethane	ND		ug/kg	1.8	0.30	1
Vinyl chloride	ND		ug/kg	1.8	0.28	1
Chloroethane	ND		ug/kg	1.8	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.88	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.21	1
Trichloroethene	ND		ug/kg	0.88	0.26	1
1,2-Dichlorobenzene	ND		ug/kg	4.4	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.4	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	4.4	0.16	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

**Lab ID:** L1744242-05  
**Client ID:** BWB-05  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/27/17 15:20  
**Date Received:** 12/01/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.8	0.13	1
p/m-Xylene	1.5	J	ug/kg	1.8	0.31	1
o-Xylene	0.40	J	ug/kg	1.8	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	0.88	0.30	1
Styrene	ND		ug/kg	1.8	0.35	1
Dichlorodifluoromethane	ND		ug/kg	8.8	0.44	1
Acetone	12		ug/kg	8.8	2.0	1
Carbon disulfide	ND		ug/kg	8.8	0.97	1
2-Butanone	ND		ug/kg	8.8	0.61	1
4-Methyl-2-pentanone	ND		ug/kg	8.8	0.21	1
2-Hexanone	ND		ug/kg	8.8	0.58	1
Bromochloromethane	ND		ug/kg	4.4	0.31	1
1,2-Dibromoethane	ND		ug/kg	3.5	0.18	1
n-Butylbenzene	ND		ug/kg	0.88	0.20	1
sec-Butylbenzene	ND		ug/kg	0.88	0.19	1
tert-Butylbenzene	ND		ug/kg	4.4	0.22	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.4	0.35	1
Isopropylbenzene	ND		ug/kg	0.88	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.88	0.18	1
Naphthalene	ND		ug/kg	4.4	0.12	1
n-Propylbenzene	ND		ug/kg	0.88	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.4	0.19	1
Methyl Acetate	ND		ug/kg	18	0.41	1
Cyclohexane	ND		ug/kg	18	0.38	1
1,4-Dioxane	ND		ug/kg	35	13.	1
Freon-113	ND		ug/kg	18	0.45	1
Methyl cyclohexane	ND		ug/kg	3.5	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	104		70-130



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/07/17 09:12  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1069734-10					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/07/17 09:12  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1069734-10					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744242

Project Number: 2172414

Report Date: 12/07/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 12/07/17 09:12  
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 03 Batch: WG1069734-10					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	101		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/06/17 09:12  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-05 Batch: WG1069734-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/06/17 09:12  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-05 Batch: WG1069734-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744242**Project Number:** 2172414**Report Date:** 12/07/17

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 12/06/17 09:12  
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03-05 Batch: WG1069734-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	103		70-130



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/06/17 09:12  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02 Batch: WG1069828-5					
Methylene chloride	ND		ug/kg	500	82.
1,1-Dichloroethane	ND		ug/kg	75	14.
Chloroform	ND		ug/kg	75	18.
Carbon tetrachloride	ND		ug/kg	50	17.
1,2-Dichloropropane	ND		ug/kg	180	11.
Dibromochloromethane	ND		ug/kg	50	8.8
1,1,2-Trichloroethane	ND		ug/kg	75	16.
Tetrachloroethene	ND		ug/kg	50	15.
Chlorobenzene	ND		ug/kg	50	17.
Trichlorofluoromethane	ND		ug/kg	250	21.
1,2-Dichloroethane	ND		ug/kg	50	12.
1,1,1-Trichloroethane	ND		ug/kg	50	18.
Bromodichloromethane	ND		ug/kg	50	15.
trans-1,3-Dichloropropene	ND		ug/kg	50	10.
cis-1,3-Dichloropropene	ND		ug/kg	50	12.
Bromoform	ND		ug/kg	200	12.
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	15.
Benzene	ND		ug/kg	50	9.6
Toluene	ND		ug/kg	75	9.8
Ethylbenzene	ND		ug/kg	50	8.5
Chloromethane	ND		ug/kg	250	22.
Bromomethane	ND		ug/kg	100	17.
Vinyl chloride	ND		ug/kg	100	16.
Chloroethane	ND		ug/kg	100	16.
1,1-Dichloroethene	ND		ug/kg	50	19.
trans-1,2-Dichloroethene	ND		ug/kg	75	12.
Trichloroethene	ND		ug/kg	50	15.
1,2-Dichlorobenzene	ND		ug/kg	250	9.1
1,3-Dichlorobenzene	ND		ug/kg	250	11.

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/06/17 09:12  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02 Batch: WG1069828-5					
1,4-Dichlorobenzene	ND		ug/kg	250	9.1
Methyl tert butyl ether	ND		ug/kg	100	7.6
p/m-Xylene	ND		ug/kg	100	18.
o-Xylene	ND		ug/kg	100	17.
cis-1,2-Dichloroethene	ND		ug/kg	50	17.
Styrene	ND		ug/kg	100	20.
Dichlorodifluoromethane	ND		ug/kg	500	25.
Acetone	ND		ug/kg	500	110
Carbon disulfide	ND		ug/kg	500	55.
2-Butanone	ND		ug/kg	500	34.
4-Methyl-2-pentanone	ND		ug/kg	500	12.
2-Hexanone	ND		ug/kg	500	33.
Bromochloromethane	ND		ug/kg	250	18.
1,2-Dibromoethane	ND		ug/kg	200	10.
n-Butylbenzene	ND		ug/kg	50	11.
sec-Butylbenzene	ND		ug/kg	50	11.
tert-Butylbenzene	ND		ug/kg	250	12.
1,2-Dibromo-3-chloropropane	ND		ug/kg	250	20.
Isopropylbenzene	ND		ug/kg	50	9.7
p-Isopropyltoluene	ND		ug/kg	50	10.
Naphthalene	ND		ug/kg	250	6.9
n-Propylbenzene	ND		ug/kg	50	11.
1,2,4-Trichlorobenzene	ND		ug/kg	250	11.
Methyl Acetate	ND		ug/kg	1000	23.
Cyclohexane	ND		ug/kg	1000	22.
1,4-Dioxane	ND		ug/kg	2000	720
Freon-113	ND		ug/kg	1000	26.
Methyl cyclohexane	ND		ug/kg	200	12.

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744242**Project Number:** 2172414**Report Date:** 12/07/17

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 12/06/17 09:12  
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02 Batch: WG1069828-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	102		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744242

Project Number: 2172414

Report Date: 12/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-05 Batch: WG1069734-3 WG1069734-4								
Methylene chloride	82		82		70-130	0		30
1,1-Dichloroethane	114		114		70-130	0		30
Chloroform	102		102		70-130	0		30
Carbon tetrachloride	110		108		70-130	2		30
1,2-Dichloropropane	114		115		70-130	1		30
Dibromochloromethane	99		98		70-130	1		30
1,1,2-Trichloroethane	94		96		70-130	2		30
Tetrachloroethene	101		102		70-130	1		30
Chlorobenzene	95		96		70-130	1		30
Trichlorofluoromethane	99		96		70-139	3		30
1,2-Dichloroethane	113		112		70-130	1		30
1,1,1-Trichloroethane	107		107		70-130	0		30
Bromodichloromethane	101		102		70-130	1		30
trans-1,3-Dichloropropene	102		101		70-130	1		30
cis-1,3-Dichloropropene	106		107		70-130	1		30
Bromoform	96		97		70-130	1		30
1,1,2,2-Tetrachloroethane	85		86		70-130	1		30
Benzene	98		98		70-130	0		30
Toluene	90		90		70-130	0		30
Ethylbenzene	93		94		70-130	1		30
Chloromethane	117		113		52-130	3		30
Bromomethane	98		99		57-147	1		30
Vinyl chloride	97		93		67-130	4		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744242

Project Number: 2172414

Report Date: 12/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-05 Batch: WG1069734-3 WG1069734-4								
Chloroethane	101		100		50-151	1		30
1,1-Dichloroethene	99		100		65-135	1		30
trans-1,2-Dichloroethene	100		100		70-130	0		30
Trichloroethene	102		103		70-130	1		30
1,2-Dichlorobenzene	89		91		70-130	2		30
1,3-Dichlorobenzene	90		91		70-130	1		30
1,4-Dichlorobenzene	90		91		70-130	1		30
Methyl tert butyl ether	104		104		66-130	0		30
p/m-Xylene	96		97		70-130	1		30
o-Xylene	99		100		70-130	1		30
cis-1,2-Dichloroethene	100		101		70-130	1		30
Styrene	93		95		70-130	2		30
Dichlorodifluoromethane	85		84		30-146	1		30
Acetone	117		113		54-140	3		30
Carbon disulfide	99		98		59-130	1		30
2-Butanone	109		107		70-130	2		30
4-Methyl-2-pentanone	104		101		70-130	3		30
2-Hexanone	102		103		70-130	1		30
Bromochloromethane	108		108		70-130	0		30
1,2-Dibromoethane	94		94		70-130	0		30
n-Butylbenzene	89		91		70-130	2		30
sec-Butylbenzene	90		91		70-130	1		30
tert-Butylbenzene	89		90		70-130	1		30

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03-05 Batch: WG1069734-3 WG1069734-4								
1,2-Dibromo-3-chloropropane	87		88		68-130	1		30
Isopropylbenzene	89		90		70-130	1		30
p-Isopropyltoluene	89		92		70-130	3		30
Naphthalene	89		91		70-130	2		30
n-Propylbenzene	88		90		70-130	2		30
1,2,4-Trichlorobenzene	96		97		70-130	1		30
Methyl Acetate	123		118		51-146	4		30
Cyclohexane	128		128		59-142	0		30
1,4-Dioxane	104		104		65-136	0		30
Freon-113	104		102		50-139	2		30
Methyl cyclohexane	104		104		70-130	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		108		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	99		98		70-130
Dibromofluoromethane	106		106		70-130





## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744242

Project Number: 2172414

Report Date: 12/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1069734-8 WG1069734-9								
Methylene chloride	74		77		70-130	4		30
1,1-Dichloroethane	107		106		70-130	1		30
Chloroform	95		91		70-130	4		30
Carbon tetrachloride	101		100		70-130	1		30
1,2-Dichloropropane	108		110		70-130	2		30
Dibromochloromethane	90		96		70-130	6		30
1,1,2-Trichloroethane	89		95		70-130	7		30
Tetrachloroethene	97		94		70-130	3		30
Chlorobenzene	90		91		70-130	1		30
Trichlorofluoromethane	90		88		70-139	2		30
1,2-Dichloroethane	104		108		70-130	4		30
1,1,1-Trichloroethane	99		98		70-130	1		30
Bromodichloromethane	93		97		70-130	4		30
trans-1,3-Dichloropropene	95		101		70-130	6		30
cis-1,3-Dichloropropene	100		103		70-130	3		30
Bromoform	89		96		70-130	8		30
1,1,2,2-Tetrachloroethane	80		88		70-130	10		30
Benzene	93		93		70-130	0		30
Toluene	86		84		70-130	2		30
Ethylbenzene	89		88		70-130	1		30
Chloromethane	104		102		52-130	2		30
Bromomethane	92		91		57-147	1		30
Vinyl chloride	89		86		67-130	3		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744242

Project Number: 2172414

Report Date: 12/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1069734-8 WG1069734-9								
Chloroethane	96		93		50-151	3		30
1,1-Dichloroethene	93		92		65-135	1		30
trans-1,2-Dichloroethene	96		94		70-130	2		30
Trichloroethene	97		96		70-130	1		30
1,2-Dichlorobenzene	84		86		70-130	2		30
1,3-Dichlorobenzene	86		86		70-130	0		30
1,4-Dichlorobenzene	85		85		70-130	0		30
Methyl tert butyl ether	97		106		66-130	9		30
p/m-Xylene	91		90		70-130	1		30
o-Xylene	93		93		70-130	0		30
cis-1,2-Dichloroethene	96		96		70-130	0		30
Styrene	88		90		70-130	2		30
Dichlorodifluoromethane	78		76		30-146	3		30
Acetone	107		124		54-140	15		30
Carbon disulfide	89		88		59-130	1		30
2-Butanone	96		121		70-130	23		30
4-Methyl-2-pentanone	93		109		70-130	16		30
2-Hexanone	89		107		70-130	18		30
Bromochloromethane	102		105		70-130	3		30
1,2-Dibromoethane	87		95		70-130	9		30
n-Butylbenzene	84		82		70-130	2		30
sec-Butylbenzene	85		83		70-130	2		30
tert-Butylbenzene	84		82		70-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744242

Project Number: 2172414

Report Date: 12/07/17

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03 Batch: WG1069734-8 WG1069734-9								
1,2-Dibromo-3-chloropropane	76		91		68-130	18		30
Isopropylbenzene	85		83		70-130	2		30
p-Isopropyltoluene	86		83		70-130	4		30
Naphthalene	84		94		70-130	11		30
n-Propylbenzene	84		82		70-130	2		30
1,2,4-Trichlorobenzene	90		93		70-130	3		30
Methyl Acetate	111		129		51-146	15		30
Cyclohexane	119		116		59-142	3		30
1,4-Dioxane	103		132		65-136	25		30
Freon-113	97		94		50-139	3		30
Methyl cyclohexane	97		95		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		108		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	100		99		70-130
Dibromofluoromethane	104		106		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744242

Project Number: 2172414

Report Date: 12/07/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG1069828-3 WG1069828-4								
Methylene chloride	82		82		70-130	0		30
1,1-Dichloroethane	114		114		70-130	0		30
Chloroform	102		102		70-130	0		30
Carbon tetrachloride	110		108		70-130	2		30
1,2-Dichloropropane	114		115		70-130	1		30
Dibromochloromethane	99		98		70-130	1		30
1,1,2-Trichloroethane	94		96		70-130	2		30
Tetrachloroethene	101		102		70-130	1		30
Chlorobenzene	95		96		70-130	1		30
Trichlorofluoromethane	99		96		70-139	3		30
1,2-Dichloroethane	113		112		70-130	1		30
1,1,1-Trichloroethane	107		107		70-130	0		30
Bromodichloromethane	101		102		70-130	1		30
trans-1,3-Dichloropropene	102		101		70-130	1		30
cis-1,3-Dichloropropene	106		107		70-130	1		30
Bromoform	96		97		70-130	1		30
1,1,2,2-Tetrachloroethane	85		86		70-130	1		30
Benzene	98		98		70-130	0		30
Toluene	90		90		70-130	0		30
Ethylbenzene	93		94		70-130	1		30
Chloromethane	117		113		52-130	3		30
Bromomethane	98		99		57-147	1		30
Vinyl chloride	97		93		67-130	4		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744242

Project Number: 2172414

Report Date: 12/07/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG1069828-3 WG1069828-4								
Chloroethane	101		100		50-151	1		30
1,1-Dichloroethene	99		100		65-135	1		30
trans-1,2-Dichloroethene	100		100		70-130	0		30
Trichloroethene	102		103		70-130	1		30
1,2-Dichlorobenzene	89		91		70-130	2		30
1,3-Dichlorobenzene	90		91		70-130	1		30
1,4-Dichlorobenzene	90		91		70-130	1		30
Methyl tert butyl ether	104		104		66-130	0		30
p/m-Xylene	96		97		70-130	1		30
o-Xylene	99		100		70-130	1		30
cis-1,2-Dichloroethene	100		101		70-130	1		30
Styrene	93		95		70-130	2		30
Dichlorodifluoromethane	85		84		30-146	1		30
Acetone	117		113		54-140	3		30
Carbon disulfide	99		98		59-130	1		30
2-Butanone	109		107		70-130	2		30
4-Methyl-2-pentanone	104		101		70-130	3		30
2-Hexanone	102		103		70-130	1		30
Bromochloromethane	108		108		70-130	0		30
1,2-Dibromoethane	94		94		70-130	0		30
n-Butylbenzene	89		91		70-130	2		30
sec-Butylbenzene	90		91		70-130	1		30
tert-Butylbenzene	89		90		70-130	1		30

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG1069828-3 WG1069828-4								
1,2-Dibromo-3-chloropropane	87		88		68-130	1		30
Isopropylbenzene	89		90		70-130	1		30
p-Isopropyltoluene	89		92		70-130	3		30
Naphthalene	89		91		70-130	2		30
n-Propylbenzene	88		90		70-130	2		30
1,2,4-Trichlorobenzene	96		97		70-130	1		30
Methyl Acetate	123		118		51-146	4		30
Cyclohexane	128		128		59-142	0		30
1,4-Dioxane	104		104		65-136	0		30
Freon-113	104		102		50-139	2		30
Methyl cyclohexane	104		104		70-130	0		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	108		108		70-130
Toluene-d8	100		100		70-130
4-Bromofluorobenzene	99		98		70-130
Dibromofluoromethane	106		106		70-130





# **INORGANICS & MISCELLANEOUS**

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

**SAMPLE RESULTS**

**Lab ID:** L1744242-01  
**Client ID:** BWB-01  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/27/17 09:38  
**Date Received:** 12/01/17  
**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	85.7		%	0.100	NA	1	-	12/06/17 13:21	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744242**Project Number:** 2172414**Report Date:** 12/07/17**SAMPLE RESULTS**

**Lab ID:** L1744242-02  
**Client ID:** BWB-02  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/27/17 11:19  
**Date Received:** 12/01/17  
**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	86.8		%	0.100	NA	1	-	12/06/17 13:21	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744242**Project Number:** 2172414**Report Date:** 12/07/17**SAMPLE RESULTS**

**Lab ID:** L1744242-03  
**Client ID:** BWB-04 (0.7-1.5)  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/27/17 13:46  
**Date Received:** 12/01/17  
**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	94.9		%	0.100	NA	1	-	12/06/17 13:21	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744242**Project Number:** 2172414**Report Date:** 12/07/17**SAMPLE RESULTS**

**Lab ID:** L1744242-04  
**Client ID:** BWB-04 (5-5.7)  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/27/17 14:00  
**Date Received:** 12/01/17  
**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	84.8		%	0.100	NA	1	-	12/06/17 13:21	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744242**Project Number:** 2172414**Report Date:** 12/07/17**SAMPLE RESULTS**

**Lab ID:** L1744242-05  
**Client ID:** BWB-05  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/27/17 15:20  
**Date Received:** 12/01/17  
**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	83.6		%	0.100	NA	1	-	12/06/17 13:21	121,2540G	RI





## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Project Number:** 2172414

**Lab Number:** L1744242

**Report Date:** 12/07/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-05 QC Batch ID: WG1069688-1 QC Sample: L1744242-01 Client ID: BWB-01						
Solids, Total	85.7	85.3	%	0		20

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744242**Project Number:** 2172414**Report Date:** 12/07/17**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1744242-01A	Vial MeOH preserved	A	NA		3.3	Y	Absent		NYTCL-8260HLW-R2(14)
L1744242-01B	Vial water preserved	A	NA		3.3	Y	Absent	27-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744242-01C	Vial water preserved	A	NA		3.3	Y	Absent	27-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744242-01D	Plastic 2oz unpreserved for TS	A	NA		3.3	Y	Absent		TS(7)
L1744242-02A	Vial MeOH preserved	A	NA		3.3	Y	Absent		NYTCL-8260HLW-R2(14)
L1744242-02B	Vial water preserved	A	NA		3.3	Y	Absent	27-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744242-02C	Vial water preserved	A	NA		3.3	Y	Absent	27-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744242-02D	Plastic 2oz unpreserved for TS	A	NA		3.3	Y	Absent		TS(7)
L1744242-03A	Vial MeOH preserved	A	NA		3.3	Y	Absent		NYTCL-8260HLW-R2(14)
L1744242-03B	Vial water preserved	A	NA		3.3	Y	Absent	27-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744242-03C	Vial water preserved	A	NA		3.3	Y	Absent	27-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744242-03D	Plastic 2oz unpreserved for TS	A	NA		3.3	Y	Absent		TS(7)
L1744242-04A	Vial MeOH preserved	A	NA		3.3	Y	Absent		NYTCL-8260HLW-R2(14)
L1744242-04B	Vial water preserved	A	NA		3.3	Y	Absent	27-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744242-04C	Vial water preserved	A	NA		3.3	Y	Absent	27-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744242-04D	Plastic 2oz unpreserved for TS	A	NA		3.3	Y	Absent		TS(7)
L1744242-05A	Vial MeOH preserved	A	NA		3.3	Y	Absent		NYTCL-8260HLW-R2(14)
L1744242-05B	Vial water preserved	A	NA		3.3	Y	Absent	27-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744242-05C	Vial water preserved	A	NA		3.3	Y	Absent	27-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744242-05D	Plastic 2oz unpreserved for TS	A	NA		3.3	Y	Absent		TS(7)

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

## 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).
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.
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.

### 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

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

#### Data Qualifiers

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:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744242  
**Report Date:** 12/07/17

## 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:** 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 300:** DW: Bromide

**EPA 6860:** NPW and SCM: Perchlorate

**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation

**EPA 9012B:** NPW: Total Cyanide

**EPA 9050A:** NPW: Specific Conductance

**SM3500:** NPW: Ferrous Iron

**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**SM5310C:** DW: Dissolved Organic Carbon

### Mansfield Facility

**SM 2540D:** TSS

**EPA 3005A** NPW

**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:** 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, SM4500CI-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, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 624:** Volatile Halocarbons & Aromatics,

**EPA 608:** 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:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

#### 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, Pb, Mn, Ni, Se, Ag, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



	<b>NEW YORK CHAIN OF CUSTODY</b>	<b>Service Centers</b> 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 12/1/17	ALPHA Job # L1744242
		Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-8220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		

<b>Client Information</b>	<b>Project Information</b> Project Name: <u>Bullishead Plaza Phase II</u> Project Location: <u>Rochester, NY</u> Project # <u>2172414</u> (Use Project name as Project #) <input type="checkbox"/>	<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> Other	<b>Billing Information</b> <input checked="" type="checkbox"/> Same as Client Info PO #
---------------------------	--	--	---

Client: <u>LABELLA ASSOCIATES</u> Address: <u>300 State Street</u> <u>Rochester, NY 14614</u> Phone: <u>585-454-6440</u> Fax: _____ Email: <u>ALPHA@labella.com</u>	Project Manager: <u>Den Gillen</u> ALPHAQuote #: _____ <b>Turn-Around Time</b> Standard <input type="checkbox"/> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____	<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge	<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other: _____
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These samples have been previously analyzed by Alpha

Other project specific requirements/comments:  
ASP Cat B and Reuse Edd

Please specify Metals or TAL.

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	TCL+P-5+VOCs	ANALYSIS										Sample Filtration	Sample Specific Comments	TOTAL BOTTLES		
		Date	Time																		
44242-01	BWB-01	11/27/17	0938	Soil	AG3	X													<input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do	Frozen 11/27/17 @ 1700	4
-02	BWB-02	11/27/17	1119		AG3	X															4
-03	BWB-04 (0.7-1.5)	11/27/17	1346		AG3	X															4
-04	BWB-04 (5-5.7)	11/27/17	1400		AG3	X															4
-05	BWB-05	11/27/17	1520	↓	AG3	X															A

Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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 Preservative	Relinquished By: _____ Date/Time: 12.1.2017/1725 Received By: _____ Date/Time: 12/1/17 17:30 _____ Date/Time: 12/1/17 18:46 _____ Date/Time: 12/1/17 20:10 _____ Date/Time: 12/1/17 23:45 _____ Date/Time: 12/1/17 0230	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.)
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## ANALYTICAL REPORT

Lab Number:	L1744600
Client:	LaBella Associates, P.C. 300 State Street Suite 201 Rochester, NY 14614
ATTN:	Jennifer Gillen
Phone:	(585) 454-6110
Project Name:	BULLSHEAD PLAZA PHASE II
Project Number:	2172414
Report Date:	12/12/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1744600-01	BWB-07	SOIL	ROCHESTER, NY	11/28/17 11:54	12/05/17
L1744600-02	BWB-09	SOIL	ROCHESTER, NY	11/30/17 14:12	12/05/17

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

### 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:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

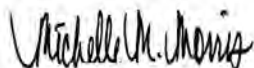
**Case Narrative (continued)**

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:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 12/12/17

# ORGANICS



# VOLATILES

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

**SAMPLE RESULTS**

**Lab ID:** L1744600-01  
**Client ID:** BWB-07  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/28/17 11:54  
**Date Received:** 12/05/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 12/11/17 12:31  
**Analyst:** MV  
**Percent Solids:** 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.6	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.23	1
Chloroform	ND		ug/kg	1.3	0.32	1
Carbon tetrachloride	ND		ug/kg	0.86	0.30	1
1,2-Dichloropropane	ND		ug/kg	3.0	0.20	1
Dibromochloromethane	ND		ug/kg	0.86	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.27	1
Tetrachloroethene	ND		ug/kg	0.86	0.26	1
Chlorobenzene	ND		ug/kg	0.86	0.30	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.36	1
1,2-Dichloroethane	ND		ug/kg	0.86	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.86	0.30	1
Bromodichloromethane	ND		ug/kg	0.86	0.26	1
trans-1,3-Dichloropropene	ND		ug/kg	0.86	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.86	0.20	1
Bromoform	ND		ug/kg	3.4	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.86	0.26	1
Benzene	ND		ug/kg	0.86	0.17	1
Toluene	0.89	J	ug/kg	1.3	0.17	1
Ethylbenzene	0.20	J	ug/kg	0.86	0.15	1
Chloromethane	ND		ug/kg	4.3	0.38	1
Bromomethane	ND		ug/kg	1.7	0.29	1
Vinyl chloride	ND		ug/kg	1.7	0.27	1
Chloroethane	ND		ug/kg	1.7	0.27	1
1,1-Dichloroethene	ND		ug/kg	0.86	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.21	1
Trichloroethene	ND		ug/kg	0.86	0.26	1
1,2-Dichlorobenzene	ND		ug/kg	4.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.3	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	4.3	0.16	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

**SAMPLE RESULTS**

**Lab ID:** L1744600-01  
**Client ID:** BWB-07  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/28/17 11:54  
**Date Received:** 12/05/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.7	0.13	1
p/m-Xylene	0.77	J	ug/kg	1.7	0.30	1
o-Xylene	ND		ug/kg	1.7	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	0.86	0.30	1
Styrene	ND		ug/kg	1.7	0.35	1
Dichlorodifluoromethane	ND		ug/kg	8.6	0.43	1
Acetone	25		ug/kg	8.6	2.0	1
Carbon disulfide	1.2	J	ug/kg	8.6	0.95	1
2-Butanone	ND		ug/kg	8.6	0.60	1
4-Methyl-2-pentanone	ND		ug/kg	8.6	0.21	1
2-Hexanone	ND		ug/kg	8.6	0.57	1
Bromochloromethane	ND		ug/kg	4.3	0.31	1
1,2-Dibromoethane	ND		ug/kg	3.4	0.17	1
n-Butylbenzene	ND		ug/kg	0.86	0.20	1
sec-Butylbenzene	ND		ug/kg	0.86	0.19	1
tert-Butylbenzene	ND		ug/kg	4.3	0.21	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	0.34	1
Isopropylbenzene	ND		ug/kg	0.86	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.86	0.17	1
Naphthalene	ND		ug/kg	4.3	0.12	1
n-Propylbenzene	ND		ug/kg	0.86	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.3	0.18	1
Methyl Acetate	ND		ug/kg	17	0.40	1
Cyclohexane	ND		ug/kg	17	0.37	1
1,4-Dioxane	ND		ug/kg	34	12.	1
Freon-113	ND		ug/kg	17	0.44	1
Methyl cyclohexane	0.21	J	ug/kg	3.4	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	95		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

**SAMPLE RESULTS**

**Lab ID:** L1744600-02  
**Client ID:** BWB-09  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/30/17 14:12  
**Date Received:** 12/05/17  
**Field Prep:** Not Specified

**Matrix:** Soil  
**Analytical Method:** 1,8260C  
**Analytical Date:** 12/10/17 18:26  
**Analyst:** MV  
**Percent Solids:** 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	8.6	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.23	1
Chloroform	ND		ug/kg	1.3	0.32	1
Carbon tetrachloride	ND		ug/kg	0.86	0.30	1
1,2-Dichloropropane	ND		ug/kg	3.0	0.20	1
Dibromochloromethane	ND		ug/kg	0.86	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.27	1
Tetrachloroethene	ND		ug/kg	0.86	0.26	1
Chlorobenzene	ND		ug/kg	0.86	0.30	1
Trichlorofluoromethane	ND		ug/kg	4.3	0.36	1
1,2-Dichloroethane	ND		ug/kg	0.86	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.86	0.30	1
Bromodichloromethane	ND		ug/kg	0.86	0.26	1
trans-1,3-Dichloropropene	ND		ug/kg	0.86	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.86	0.20	1
Bromoform	ND		ug/kg	3.4	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.86	0.26	1
Benzene	1.7		ug/kg	0.86	0.17	1
Toluene	6.4		ug/kg	1.3	0.17	1
Ethylbenzene	1.2		ug/kg	0.86	0.15	1
Chloromethane	ND		ug/kg	4.3	0.38	1
Bromomethane	ND		ug/kg	1.7	0.29	1
Vinyl chloride	ND		ug/kg	1.7	0.27	1
Chloroethane	ND		ug/kg	1.7	0.27	1
1,1-Dichloroethene	ND		ug/kg	0.86	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.21	1
Trichloroethene	ND		ug/kg	0.86	0.26	1
1,2-Dichlorobenzene	ND		ug/kg	4.3	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.3	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	4.3	0.16	1

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

**SAMPLE RESULTS**

**Lab ID:** L1744600-02  
**Client ID:** BWB-09  
**Sample Location:** ROCHESTER, NY

**Date Collected:** 11/30/17 14:12  
**Date Received:** 12/05/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	1.7	0.13	1
p/m-Xylene	6.6		ug/kg	1.7	0.30	1
o-Xylene	1.9		ug/kg	1.7	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	0.86	0.30	1
Styrene	ND		ug/kg	1.7	0.35	1
Dichlorodifluoromethane	ND		ug/kg	8.6	0.43	1
Acetone	8.3	J	ug/kg	8.6	2.0	1
Carbon disulfide	ND		ug/kg	8.6	0.95	1
2-Butanone	4.4	J	ug/kg	8.6	0.60	1
4-Methyl-2-pentanone	ND		ug/kg	8.6	0.21	1
2-Hexanone	ND		ug/kg	8.6	0.58	1
Bromochloromethane	ND		ug/kg	4.3	0.31	1
1,2-Dibromoethane	ND		ug/kg	3.4	0.17	1
n-Butylbenzene	ND		ug/kg	0.86	0.20	1
sec-Butylbenzene	ND		ug/kg	0.86	0.19	1
tert-Butylbenzene	ND		ug/kg	4.3	0.21	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.3	0.34	1
Isopropylbenzene	ND		ug/kg	0.86	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.86	0.17	1
Naphthalene	0.20	J	ug/kg	4.3	0.12	1
n-Propylbenzene	0.39	J	ug/kg	0.86	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.3	0.18	1
Methyl Acetate	ND		ug/kg	17	0.40	1
Cyclohexane	3.3	J	ug/kg	17	0.37	1
1,4-Dioxane	ND		ug/kg	34	12.	1
Freon-113	ND		ug/kg	17	0.44	1
Methyl cyclohexane	5.9		ug/kg	3.4	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	117		70-130
Dibromofluoromethane	98		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/10/17 10:40  
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02 Batch: WG1071122-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/10/17 10:40  
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02 Batch: WG1071122-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744600**Project Number:** 2172414**Report Date:** 12/12/17

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 12/10/17 10:40  
 Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02 Batch: WG1071122-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	98		70-130

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/11/17 08:36  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01 Batch: WG1071283-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/11/17 08:36  
Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01 Batch: WG1071283-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
tert-Butylbenzene	ND		ug/kg	5.0	0.25
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744600**Project Number:** 2172414**Report Date:** 12/12/17

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 08:36  
 Analyst: JC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01 Batch: WG1071283-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	102		70-130

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Lab Number:** L1744600

**Project Number:** 2172414

**Report Date:** 12/12/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG1071122-3 WG1071122-4								
Methylene chloride	95		94		70-130	1		30
1,1-Dichloroethane	106		104		70-130	2		30
Chloroform	96		94		70-130	2		30
Carbon tetrachloride	95		95		70-130	0		30
1,2-Dichloropropane	104		103		70-130	1		30
Dibromochloromethane	84		85		70-130	1		30
1,1,2-Trichloroethane	97		97		70-130	0		30
Tetrachloroethene	92		91		70-130	1		30
Chlorobenzene	96		93		70-130	3		30
Trichlorofluoromethane	92		89		70-139	3		30
1,2-Dichloroethane	95		94		70-130	1		30
1,1,1-Trichloroethane	99		97		70-130	2		30
Bromodichloromethane	95		97		70-130	2		30
trans-1,3-Dichloropropene	96		97		70-130	1		30
cis-1,3-Dichloropropene	96		97		70-130	1		30
Bromoform	84		87		70-130	4		30
1,1,2,2-Tetrachloroethane	102		102		70-130	0		30
Benzene	99		98		70-130	1		30
Toluene	102		99		70-130	3		30
Ethylbenzene	102		101		70-130	1		30
Chloromethane	110		107		52-130	3		30
Bromomethane	86		84		57-147	2		30
Vinyl chloride	109		105		67-130	4		30



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744600

Project Number: 2172414

Report Date: 12/12/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG1071122-3 WG1071122-4								
Chloroethane	93		88		50-151	6		30
1,1-Dichloroethene	94		91		65-135	3		30
trans-1,2-Dichloroethene	97		94		70-130	3		30
Trichloroethene	95		93		70-130	2		30
1,2-Dichlorobenzene	92		91		70-130	1		30
1,3-Dichlorobenzene	96		94		70-130	2		30
1,4-Dichlorobenzene	94		94		70-130	0		30
Methyl tert butyl ether	90		90		66-130	0		30
p/m-Xylene	95		93		70-130	2		30
o-Xylene	91		90		70-130	1		30
cis-1,2-Dichloroethene	93		91		70-130	2		30
Styrene	90		89		70-130	1		30
Dichlorodifluoromethane	85		82		30-146	4		30
Acetone	100		88		54-140	13		30
Carbon disulfide	92		91		59-130	1		30
2-Butanone	94		95		70-130	1		30
4-Methyl-2-pentanone	99		99		70-130	0		30
2-Hexanone	92		92		70-130	0		30
Bromochloromethane	83		82		70-130	1		30
1,2-Dibromoethane	89		91		70-130	2		30
n-Butylbenzene	108		103		70-130	5		30
sec-Butylbenzene	105		102		70-130	3		30
tert-Butylbenzene	101		98		70-130	3		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744600

Project Number: 2172414

Report Date: 12/12/17

Parameter	LCS		LCSD		%Recovery		RPD	RPD	
	%Recovery	Qual	%Recovery	Qual	Limits	Qual		Limits	
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG1071122-3 WG1071122-4									
1,2-Dibromo-3-chloropropane	82		86		68-130	5		30	
Isopropylbenzene	103		100		70-130	3		30	
p-Isopropyltoluene	100		98		70-130	2		30	
Naphthalene	82		84		70-130	2		30	
n-Propylbenzene	107		104		70-130	3		30	
1,2,4-Trichlorobenzene	85		84		70-130	1		30	
Methyl Acetate	102		103		51-146	1		30	
Cyclohexane	116		112		59-142	4		30	
1,4-Dioxane	95		99		65-136	4		30	
Freon-113	93		91		50-139	2		30	
Methyl cyclohexane	102		99		70-130	3		30	

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	105		104		70-130
Toluene-d8	108		107		70-130
4-Bromofluorobenzene	112		112		70-130
Dibromofluoromethane	96		97		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744600

Project Number: 2172414

Report Date: 12/12/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01 Batch: WG1071283-3 WG1071283-4								
Methylene chloride	79		77		70-130	3		30
1,1-Dichloroethane	109		107		70-130	2		30
Chloroform	98		97		70-130	1		30
Carbon tetrachloride	105		101		70-130	4		30
1,2-Dichloropropane	110		109		70-130	1		30
Dibromochloromethane	93		92		70-130	1		30
1,1,2-Trichloroethane	91		89		70-130	2		30
Tetrachloroethene	95		94		70-130	1		30
Chlorobenzene	91		89		70-130	2		30
Trichlorofluoromethane	93		90		70-139	3		30
1,2-Dichloroethane	108		107		70-130	1		30
1,1,1-Trichloroethane	102		100		70-130	2		30
Bromodichloromethane	97		96		70-130	1		30
trans-1,3-Dichloropropene	98		96		70-130	2		30
cis-1,3-Dichloropropene	103		102		70-130	1		30
Bromoform	93		92		70-130	1		30
1,1,2,2-Tetrachloroethane	84		82		70-130	2		30
Benzene	95		93		70-130	2		30
Toluene	85		84		70-130	1		30
Ethylbenzene	89		88		70-130	1		30
Chloromethane	104		102		52-130	2		30
Bromomethane	100		95		57-147	5		30
Vinyl chloride	89		85		67-130	5		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744600

Project Number: 2172414

Report Date: 12/12/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01 Batch: WG1071283-3 WG1071283-4								
Chloroethane	97		93		50-151	4		30
1,1-Dichloroethene	96		92		65-135	4		30
trans-1,2-Dichloroethene	97		94		70-130	3		30
Trichloroethene	98		97		70-130	1		30
1,2-Dichlorobenzene	86		84		70-130	2		30
1,3-Dichlorobenzene	87		85		70-130	2		30
1,4-Dichlorobenzene	86		86		70-130	0		30
Methyl tert butyl ether	102		100		66-130	2		30
p/m-Xylene	91		90		70-130	1		30
o-Xylene	94		92		70-130	2		30
cis-1,2-Dichloroethene	98		96		70-130	2		30
Styrene	89		88		70-130	1		30
Dichlorodifluoromethane	77		72		30-146	7		30
Acetone	113		97		54-140	15		30
Carbon disulfide	94		90		59-130	4		30
2-Butanone	108		103		70-130	5		30
4-Methyl-2-pentanone	99		97		70-130	2		30
2-Hexanone	97		94		70-130	3		30
Bromochloromethane	107		103		70-130	4		30
1,2-Dibromoethane	90		89		70-130	1		30
n-Butylbenzene	85		84		70-130	1		30
sec-Butylbenzene	85		84		70-130	1		30
tert-Butylbenzene	86		83		70-130	4		30

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01 Batch: WG1071283-3 WG1071283-4								
1,2-Dibromo-3-chloropropane	84		82		68-130	2		30
Isopropylbenzene	86		83		70-130	4		30
p-Isopropyltoluene	86		84		70-130	2		30
Naphthalene	87		86		70-130	1		30
n-Propylbenzene	85		83		70-130	2		30
1,2,4-Trichlorobenzene	91		91		70-130	0		30
Methyl Acetate	116		118		51-146	2		30
Cyclohexane	121		119		59-142	2		30
1,4-Dioxane	111		110		65-136	1		30
Freon-113	99		96		50-139	3		30
Methyl cyclohexane	98		97		70-130	1		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	107		105		70-130
Toluene-d8	98		99		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	106		106		70-130



# **INORGANICS & MISCELLANEOUS**



Project Name: BULLSHEAD PLAZA PHASE II

Lab Number: L1744600

Project Number: 2172414

Report Date: 12/12/17

## SAMPLE RESULTS

Lab ID: L1744600-01  
 Client ID: BWB-07  
 Sample Location: ROCHESTER, NY  
 Matrix: Soil

Date Collected: 11/28/17 11:54  
 Date Received: 12/05/17  
 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	85.2		%	0.100	NA	1	-	12/08/17 09:46	121,2540G	RI



**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744600**Project Number:** 2172414**Report Date:** 12/12/17**SAMPLE RESULTS**

**Lab ID:** L1744600-02  
**Client ID:** BWB-09  
**Sample Location:** ROCHESTER, NY  
**Matrix:** Soil

**Date Collected:** 11/30/17 14:12  
**Date Received:** 12/05/17  
**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	93.4		%	0.100	NA	1	-	12/08/17 09:46	121,2540G	RI



## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** BULLSHEAD PLAZA PHASE II

**Project Number:** 2172414

**Lab Number:** L1744600

**Report Date:** 12/12/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1070485-1 QC Sample: L1744611-22 Client ID: DUP Sample						
Solids, Total	90.0	89.0	%	1		20

**Project Name:** BULLSHEAD PLAZA PHASE II**Lab Number:** L1744600**Project Number:** 2172414**Report Date:** 12/12/17**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1744600-01A	Vial MeOH preserved	A	NA		2.8	Y	Absent		NYTCL-8260HLW-R2(14)
L1744600-01B	Vial water preserved	A	NA		2.8	Y	Absent	28-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744600-01C	Vial water preserved	A	NA		2.8	Y	Absent	28-NOV-17 17:00	NYTCL-8260HLW-R2(14)
L1744600-01D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L1744600-02A	Vial MeOH preserved	A	NA		2.8	Y	Absent		NYTCL-8260HLW-R2(14)
L1744600-02B	Vial water preserved	A	NA		2.8	Y	Absent	30-NOV-17 16:00	NYTCL-8260HLW-R2(14)
L1744600-02C	Vial water preserved	A	NA		2.8	Y	Absent	30-NOV-17 16:00	NYTCL-8260HLW-R2(14)
L1744600-02D	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)

**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

## 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).
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.
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.

### 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

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

#### Data Qualifiers

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:** BULLSHEAD PLAZA PHASE II  
**Project Number:** 2172414

**Lab Number:** L1744600  
**Report Date:** 12/12/17

## 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:** 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 300:** DW: Bromide

**EPA 6860:** NPW and SCM: Perchlorate

**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation

**EPA 9012B:** NPW: Total Cyanide

**EPA 9050A:** NPW: Specific Conductance

**SM3500:** NPW: Ferrous Iron

**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**SM5310C:** DW: Dissolved Organic Carbon

### Mansfield Facility

**SM 2540D:** TSS

**EPA 3005A** NPW

**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:** 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, SM4500CI-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, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 624:** Volatile Halocarbons & Aromatics,

**EPA 608:** 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:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

#### 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, Pb, Mn, Ni, Se, Ag, TL, Zn.

**EPA 245.1 Hg.**

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <b>NEW YORK CHAIN OF CUSTODY</b>	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd In Lab	ALPHA Job #									
		1 of 1	12/6/17	L1749600									
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	<b>Project Information</b>		<b>Deliverables:</b>	<b>Billing Information</b>								
<b>Client Information</b>		Project Name: <u>Bullhead Plaza Phase II</u>		<input type="checkbox"/> ASP-A	<input checked="" type="checkbox"/> ASP-B								
Client: <u>LABELLA ASSOCIATES</u>		Project Location: <u>ROCHESTER NY</u>		<input type="checkbox"/> EQUIS (1 File)	<input checked="" type="checkbox"/> EQUIS (4 File)								
Address: <u>300 STATE STREET</u>		Project # <u>2172414</u>		<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Same as Client Info								
Phone: <u>585-454-6110</u>		(Use Project name as Project #) <input type="checkbox"/>		PO #									
Fax:		Project Manager: <u>JEN GILLEN</u>		<b>Regulatory Requirement</b>									
Email: <u>agbsehg@labela.com</u>		ALPHAQuote #:		<input type="checkbox"/> NY TOGS									
Turn-Around Time		Standard <input type="checkbox"/>		<input type="checkbox"/> NY Part 375									
Due Date:		Rush (only if pre approved) <input type="checkbox"/>		<input type="checkbox"/> AWQ Standards									
# of Days:		Due Date:		<input type="checkbox"/> NY Restricted Use									
				<input type="checkbox"/> Other									
				<input type="checkbox"/> NY Unrestricted Use									
				<input type="checkbox"/> NYC Sewer Discharge									
				<input type="checkbox"/> Other:									
These samples have been previously analyzed by Alpha <input type="checkbox"/>		<b>ANALYSIS</b>		<b>Disposal Site Information</b>									
Other project specific requirements/comments:		TOLL-CF51VOLS 4/24/00		Please identify below location of applicable disposal facilities.									
<u>ASP CAT B + EQUIS EDO</u>				Disposal Facility:									
Please specify Metals or TAL.				<input type="checkbox"/> NJ <input type="checkbox"/> NY									
				<input type="checkbox"/> Other:									
				<b>Sample Filtration</b>									
				<input type="checkbox"/> Done									
				<input type="checkbox"/> Lab to do									
				<b>Preservation</b>									
				<input type="checkbox"/> Lab to do									
				<b>(Please Specify below)</b>									
				<b>Sample Specific Comments</b>									
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	T	O	T	A	B	O	T	L
Date	Time	Date	Time	Matrix	Initials	X	X	X	X	X	X	X	X
<u>4/1600-01</u>	<u>BW1B-07</u>	<u>11/23/17</u>	<u>1154</u>	<u>Soil</u>	<u>AGB</u>	<u>X</u>							<u>4</u>
<u>02</u>	<u>BW3-09</u>	<u>11/23/17</u>	<u>1412</u>	<u>Soil</u>	<u>AGS</u>	<u>X</u>							<u>4</u>
Preservative Code:		Container Code		Westboro: Certification No: MA935		Container Type		Preservative		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.)			
A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Mansfield: Certification No: MA015		V		F					
Relinquished By:		Date/Time		Received By:		Date/Time							
<u>[Signature]</u>		<u>12.5.17 17:00</u>		<u>[Signature]</u>		<u>12/5/17 17:00</u>							
						<u>12/6/17 0315</u>							



## ANALYTICAL REPORT

Lab Number:	L1744944
Client:	LaBella Associates, P.C. 300 State Street Suite 201 Rochester, NY 14614
ATTN:	Jennifer Gillen
Phone:	(585) 454-6110
Project Name:	BULLS HEAD PLAZA
Project Number:	2172414
Report Date:	12/13/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1744944-01	BWB-01	WATER	Not Specified	12/06/17 16:55	12/06/17
L1744944-02	BWB-02	WATER	Not Specified	12/06/17 14:20	12/06/17
L1744944-03	DUPE	WATER	Not Specified	12/06/17 00:00	12/06/17
L1744944-04	BWB-03	WATER	Not Specified	12/04/17 12:45	12/06/17
L1744944-05	BWB-04	WATER	Not Specified	12/04/17 14:50	12/06/17
L1744944-06	BWB-05	WATER	Not Specified	12/04/17 17:05	12/06/17
L1744944-07	BWB-07	WATER	Not Specified	12/06/17 11:15	12/06/17
L1744944-08	BWB-06	WATER	Not Specified	12/05/17 14:50	12/06/17
L1744944-09	BWB-06	WATER	Not Specified	12/06/17 09:00	12/06/17
L1744944-10	BWB-08	WATER	Not Specified	12/05/17 13:30	12/06/17
L1744944-11	BWB-09	WATER	Not Specified	12/05/17 10:10	12/06/17
L1744944-12	TRIP BLANK	WATER	Not Specified	12/06/17 08:00	12/06/17

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

### 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.

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**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

### 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.

#### Total Metals

L1744944-02 and -03: The samples have elevated detection limits for lead and thallium due to the dilution required by the high concentrations of target and non-target elements.

The WG1070931-3/-4 MS/MSD recoveries for calcium (630%/670%) and sodium (0%/0%), performed on L1744944-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1070931-3/-4 MS/MSD recoveries, performed on L1744944-02, are outside the acceptance criteria for magnesium (211%/211%) and potassium (199%/210%). A post digestion spike was performed and was within acceptance criteria.

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

Authorized Signature:

 Melissa Cripps

Title: Technical Director/Representative

Date: 12/13/17

# ORGANICS

# VOLATILES

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-01 D  
 Client ID: BWB-01  
 Sample Location: Not Specified

Date Collected: 12/06/17 16:55  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 22:27  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	100	28.	40
1,1-Dichloroethane	ND		ug/l	100	28.	40
Chloroform	ND		ug/l	100	28.	40
Carbon tetrachloride	ND		ug/l	20	5.4	40
1,2-Dichloropropane	ND		ug/l	40	5.5	40
Dibromochloromethane	ND		ug/l	20	6.0	40
1,1,2-Trichloroethane	ND		ug/l	60	20.	40
Tetrachloroethene	5000		ug/l	20	7.2	40
Chlorobenzene	ND		ug/l	100	28.	40
Trichlorofluoromethane	ND		ug/l	100	28.	40
1,2-Dichloroethane	ND		ug/l	20	5.3	40
1,1,1-Trichloroethane	ND		ug/l	100	28.	40
Bromodichloromethane	ND		ug/l	20	7.7	40
trans-1,3-Dichloropropene	ND		ug/l	20	6.6	40
cis-1,3-Dichloropropene	ND		ug/l	20	5.8	40
Bromoform	ND		ug/l	80	26.	40
1,1,2,2-Tetrachloroethane	ND		ug/l	20	6.7	40
Benzene	ND		ug/l	20	6.4	40
Toluene	ND		ug/l	100	28.	40
Ethylbenzene	ND		ug/l	100	28.	40
Chloromethane	ND		ug/l	100	28.	40
Bromomethane	ND		ug/l	100	28.	40
Vinyl chloride	ND		ug/l	40	2.8	40
Chloroethane	ND		ug/l	100	28.	40
1,1-Dichloroethene	ND		ug/l	20	6.8	40
trans-1,2-Dichloroethene	ND		ug/l	100	28.	40
Trichloroethene	64		ug/l	20	7.0	40
1,2-Dichlorobenzene	ND		ug/l	100	28.	40
1,3-Dichlorobenzene	ND		ug/l	100	28.	40
1,4-Dichlorobenzene	ND		ug/l	100	28.	40

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-01 D  
 Client ID: BWB-01  
 Sample Location: Not Specified

Date Collected: 12/06/17 16:55  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/l	100	28.	40
p/m-Xylene	ND		ug/l	100	28.	40
o-Xylene	ND		ug/l	100	28.	40
cis-1,2-Dichloroethene	86	J	ug/l	100	28.	40
Styrene	ND		ug/l	100	28.	40
Dichlorodifluoromethane	ND		ug/l	200	40.	40
Acetone	ND		ug/l	200	58.	40
Carbon disulfide	ND		ug/l	200	40.	40
2-Butanone	ND		ug/l	200	78.	40
4-Methyl-2-pentanone	ND		ug/l	200	40.	40
2-Hexanone	ND		ug/l	200	40.	40
1,2-Dibromoethane	ND		ug/l	80	26.	40
n-Butylbenzene	ND		ug/l	100	28.	40
sec-Butylbenzene	ND		ug/l	100	28.	40
tert-Butylbenzene	ND		ug/l	100	28.	40
1,2-Dibromo-3-chloropropane	ND		ug/l	100	28.	40
Isopropylbenzene	ND		ug/l	100	28.	40
p-Isopropyltoluene	ND		ug/l	100	28.	40
Naphthalene	ND		ug/l	100	28.	40
n-Propylbenzene	ND		ug/l	100	28.	40
1,2,4-Trichlorobenzene	ND		ug/l	100	28.	40
1,3,5-Trimethylbenzene	ND		ug/l	100	28.	40
1,2,4-Trimethylbenzene	ND		ug/l	100	28.	40
Methyl Acetate	ND		ug/l	80	9.4	40
Cyclohexane	ND		ug/l	400	11.	40
Freon-113	ND		ug/l	100	28.	40
Methyl cyclohexane	ND		ug/l	400	16.	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	90		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-02  
 Client ID: BWB-02  
 Sample Location: Not Specified

Date Collected: 12/06/17 14:20  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 11:41  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	0.37	J	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
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-02  
**Client ID:** BWB-02  
**Sample Location:** Not Specified

**Date Collected:** 12/06/17 14:20  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	118		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	105		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-03  
 Client ID: DUPE  
 Sample Location: Not Specified

Date Collected: 12/06/17 00:00  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 12:10  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	0.25	J	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
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-03  
**Client ID:** DUPE  
**Sample Location:** Not Specified

**Date Collected:** 12/06/17 00:00  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	119		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	106		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-04  
 Client ID: BWB-03  
 Sample Location: Not Specified

Date Collected: 12/04/17 12:45  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 12:38  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	0.90		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
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-04  
**Client ID:** BWB-03  
**Sample Location:** Not Specified

**Date Collected:** 12/04/17 12:45  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	170		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	120		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	88		70-130
Dibromofluoromethane	107		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-05  
 Client ID: BWB-04  
 Sample Location: Not Specified

Date Collected: 12/04/17 14:50  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 13:06  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	0.68		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	0.21	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-05  
**Client ID:** BWB-04  
**Sample Location:** Not Specified

**Date Collected:** 12/04/17 14:50  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	72		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	121		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	107		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-06  
 Client ID: BWB-05  
 Sample Location: Not Specified

Date Collected: 12/04/17 17:05  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 13:35  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	2.6		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	0.30	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-06  
**Client ID:** BWB-05  
**Sample Location:** Not Specified

**Date Collected:** 12/04/17 17:05  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	22		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	121		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	106		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-07  
 Client ID: BWB-07  
 Sample Location: Not Specified

Date Collected: 12/06/17 11:15  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 14:03  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	0.68		ug/l	0.50	0.16	1
Toluene	1.2	J	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	0.29	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-07  
**Client ID:** BWB-07  
**Sample Location:** Not Specified

**Date Collected:** 12/06/17 11:15  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	1.0	J	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	370	E	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	0.50	J	ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	0.56	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	106		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-07 D  
 Client ID: BWB-07  
 Sample Location: Not Specified

Date Collected: 12/06/17 11:15  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 23:22  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
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Acetone	410		ug/l	25	7.3	5
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	90		70-130



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-08  
 Client ID: BWB-06  
 Sample Location: Not Specified

Date Collected: 12/05/17 14:50  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 14:32  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	36		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	0.82		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-08  
**Client ID:** BWB-06  
**Sample Location:** Not Specified

**Date Collected:** 12/05/17 14:50  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	0.74	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	31		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	118		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	105		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-10 D  
 Client ID: BWB-08  
 Sample Location: Not Specified

Date Collected: 12/05/17 13:30  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 12/11/17 22:55  
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	250	70.	100
1,1-Dichloroethane	ND		ug/l	250	70.	100
Chloroform	ND		ug/l	250	70.	100
Carbon tetrachloride	ND		ug/l	50	13.	100
1,2-Dichloropropane	ND		ug/l	100	14.	100
Dibromochloromethane	ND		ug/l	50	15.	100
1,1,2-Trichloroethane	ND		ug/l	150	50.	100
Tetrachloroethene	12000		ug/l	50	18.	100
Chlorobenzene	ND		ug/l	250	70.	100
Trichlorofluoromethane	ND		ug/l	250	70.	100
1,2-Dichloroethane	ND		ug/l	50	13.	100
1,1,1-Trichloroethane	ND		ug/l	250	70.	100
Bromodichloromethane	ND		ug/l	50	19.	100
trans-1,3-Dichloropropene	ND		ug/l	50	16.	100
cis-1,3-Dichloropropene	ND		ug/l	50	14.	100
Bromoform	ND		ug/l	200	65.	100
1,1,2,2-Tetrachloroethane	ND		ug/l	50	17.	100
Benzene	ND		ug/l	50	16.	100
Toluene	ND		ug/l	250	70.	100
Ethylbenzene	ND		ug/l	250	70.	100
Chloromethane	ND		ug/l	250	70.	100
Bromomethane	ND		ug/l	250	70.	100
Vinyl chloride	130		ug/l	100	7.1	100
Chloroethane	ND		ug/l	250	70.	100
1,1-Dichloroethene	ND		ug/l	50	17.	100
trans-1,2-Dichloroethene	ND		ug/l	250	70.	100
Trichloroethene	550		ug/l	50	18.	100
1,2-Dichlorobenzene	ND		ug/l	250	70.	100
1,3-Dichlorobenzene	ND		ug/l	250	70.	100
1,4-Dichlorobenzene	ND		ug/l	250	70.	100

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-10 D  
 Client ID: BWB-08  
 Sample Location: Not Specified

Date Collected: 12/05/17 13:30  
 Date Received: 12/06/17  
 Field Prep: Not Specified

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

Methyl tert butyl ether	ND		ug/l	250	70.	100
p/m-Xylene	ND		ug/l	250	70.	100
o-Xylene	ND		ug/l	250	70.	100
cis-1,2-Dichloroethene	1400		ug/l	250	70.	100
Styrene	ND		ug/l	250	70.	100
Dichlorodifluoromethane	ND		ug/l	500	100	100
Acetone	ND		ug/l	500	150	100
Carbon disulfide	ND		ug/l	500	100	100
2-Butanone	ND		ug/l	500	190	100
4-Methyl-2-pentanone	ND		ug/l	500	100	100
2-Hexanone	ND		ug/l	500	100	100
1,2-Dibromoethane	ND		ug/l	200	65.	100
n-Butylbenzene	ND		ug/l	250	70.	100
sec-Butylbenzene	ND		ug/l	250	70.	100
tert-Butylbenzene	ND		ug/l	250	70.	100
1,2-Dibromo-3-chloropropane	ND		ug/l	250	70.	100
Isopropylbenzene	ND		ug/l	250	70.	100
p-Isopropyltoluene	ND		ug/l	250	70.	100
Naphthalene	ND		ug/l	250	70.	100
n-Propylbenzene	ND		ug/l	250	70.	100
1,2,4-Trichlorobenzene	ND		ug/l	250	70.	100
1,3,5-Trimethylbenzene	ND		ug/l	250	70.	100
1,2,4-Trimethylbenzene	ND		ug/l	250	70.	100
Methyl Acetate	ND		ug/l	200	23.	100
Cyclohexane	ND		ug/l	1000	27.	100
Freon-113	ND		ug/l	250	70.	100
Methyl cyclohexane	ND		ug/l	1000	40.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	89		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-11  
**Client ID:** BWB-09  
**Sample Location:** Not Specified

**Date Collected:** 12/05/17 10:10  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 12/11/17 15:00  
**Analyst:** PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	1.8		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	0.69		ug/l	0.50	0.16	1
Toluene	1.2	J	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	0.18	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-11  
**Client ID:** BWB-09  
**Sample Location:** Not Specified

**Date Collected:** 12/05/17 10:10  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	1.0	J	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	33		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	0.49	J	ug/l	10	0.27	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	0.65	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	106		70-130



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-12  
**Client ID:** TRIP BLANK  
**Sample Location:** Not Specified

**Date Collected:** 12/06/17 08:00  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

**Matrix:** Water  
**Analytical Method:** 1,8260C  
**Analytical Date:** 12/11/17 15:29  
**Analyst:** PK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-12  
**Client ID:** TRIP BLANK  
**Sample Location:** Not Specified

**Date Collected:** 12/06/17 08:00  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
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	122		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	87		70-130
Dibromofluoromethane	106		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/11/17 09:19  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-08,11-12 Batch: WG1071419-5					
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:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8260C  
**Analytical Date:** 12/11/17 09:19  
**Analyst:** PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-08,11-12 Batch: WG1071419-5					
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:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/11/17 09:19  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-08,11-12 Batch: WG1071419-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	92		70-130
Dibromofluoromethane	102		70-130

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/11/17 20:36  
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,07,10 Batch: WG1071691-5					
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:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/11/17 20:36  
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,07,10 Batch: WG1071691-5					
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:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 12/11/17 20:36  
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,07,10 Batch: WG1071691-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	117		70-130
Dibromofluoromethane	90		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08,11-12 Batch: WG1071419-3 WG1071419-4								
Methylene chloride	89		90		70-130	1		20
1,1-Dichloroethane	94		94		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	92		94		70-130	2		20
Dibromochloromethane	95		100		63-130	5		20
1,1,2-Trichloroethane	88		92		70-130	4		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	97		99		75-130	2		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	87		91		70-130	4		20
cis-1,3-Dichloropropene	92		95		70-130	3		20
Bromoform	98		100		54-136	2		20
1,1,2,2-Tetrachloroethane	84		86		67-130	2		20
Benzene	93		94		70-130	1		20
Toluene	94		95		70-130	1		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	66		65		64-130	2		20
Bromomethane	85		84		39-139	1		20
Vinyl chloride	74		75		55-140	1		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08,11-12 Batch: WG1071419-3 WG1071419-4								
Chloroethane	98		97		55-138	1		20
1,1-Dichloroethene	93		94		61-145	1		20
trans-1,2-Dichloroethene	93		90		70-130	3		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	95		97		70-130	2		20
1,3-Dichlorobenzene	99		100		70-130	1		20
1,4-Dichlorobenzene	100		99		70-130	1		20
Methyl tert butyl ether	92		96		63-130	4		20
p/m-Xylene	100		105		70-130	5		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	94		93		70-130	1		20
Styrene	100		105		70-130	5		20
Dichlorodifluoromethane	97		94		36-147	3		20
Acetone	74		68		58-148	8		20
Carbon disulfide	82		81		51-130	1		20
2-Butanone	66		71		63-138	7		20
4-Methyl-2-pentanone	77		85		59-130	10		20
2-Hexanone	72		75		57-130	4		20
1,2-Dibromoethane	94		96		70-130	2		20
n-Butylbenzene	100		97		53-136	3		20
sec-Butylbenzene	98		96		70-130	2		20
tert-Butylbenzene	100		99		70-130	1		20
1,2-Dibromo-3-chloropropane	85		86		41-144	1		20

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	RPD	
	%Recovery	Qual	%Recovery	Qual			Qual	Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08,11-12 Batch: WG1071419-3 WG1071419-4								
Isopropylbenzene	99		97		70-130	2		20
p-Isopropyltoluene	100		100		70-130	0		20
Naphthalene	88		93		70-130	6		20
n-Propylbenzene	96		94		69-130	2		20
1,2,4-Trichlorobenzene	93		98		70-130	5		20
1,3,5-Trimethylbenzene	100		99		64-130	1		20
1,2,4-Trimethylbenzene	100		99		70-130	1		20
Methyl Acetate	80		86		70-130	7		20
Cyclohexane	94		94		70-130	0		20
Freon-113	110		100		70-130	10		20
Methyl cyclohexane	100		100		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	115		117		70-130
Toluene-d8	94		95		70-130
4-Bromofluorobenzene	92		91		70-130
Dibromofluoromethane	103		105		70-130



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,07,10 Batch: WG1071691-3 WG1071691-4								
Methylene chloride	90		92		70-130	2		20
1,1-Dichloroethane	100		110		70-130	10		20
Chloroform	90		93		70-130	3		20
Carbon tetrachloride	89		92		63-132	3		20
1,2-Dichloropropane	100		110		70-130	10		20
Dibromochloromethane	85		88		63-130	3		20
1,1,2-Trichloroethane	100		110		70-130	10		20
Tetrachloroethene	85		87		70-130	2		20
Chlorobenzene	94		96		75-130	2		20
Trichlorofluoromethane	93		97		62-150	4		20
1,2-Dichloroethane	95		96		70-130	1		20
1,1,1-Trichloroethane	85		88		67-130	3		20
Bromodichloromethane	83		84		67-130	1		20
trans-1,3-Dichloropropene	99		100		70-130	1		20
cis-1,3-Dichloropropene	87		91		70-130	4		20
Bromoform	56		58		54-136	4		20
1,1,2,2-Tetrachloroethane	110		120		67-130	9		20
Benzene	100		100		70-130	0		20
Toluene	100		110		70-130	10		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	120		120		64-130	0		20
Bromomethane	31	Q	32	Q	39-139	3		20
Vinyl chloride	99		100		55-140	1		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,07,10 Batch: WG1071691-3 WG1071691-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	91		97		61-145	6		20
trans-1,2-Dichloroethene	87		90		70-130	3		20
Trichloroethene	90		94		70-130	4		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	81		87		63-130	7		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	110		110		70-130	0		20
cis-1,2-Dichloroethene	86		87		70-130	1		20
Styrene	46	Q	49	Q	70-130	6		20
Dichlorodifluoromethane	120		120		36-147	0		20
Acetone	100		110		58-148	10		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	110		120		63-138	9		20
4-Methyl-2-pentanone	99		110		59-130	11		20
2-Hexanone	110		130		57-130	17		20
1,2-Dibromoethane	89		92		70-130	3		20
n-Butylbenzene	120		120		53-136	0		20
sec-Butylbenzene	110		120		70-130	9		20
tert-Butylbenzene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	80		89		41-144	11		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,07,10 Batch: WG1071691-3 WG1071691-4								
Isopropylbenzene	110		120		70-130	9		20
p-Isopropyltoluene	110		120		70-130	9		20
Naphthalene	88		95		70-130	8		20
n-Propylbenzene	120		120		69-130	0		20
1,2,4-Trichlorobenzene	82		84		70-130	2		20
1,3,5-Trimethylbenzene	120		120		64-130	0		20
1,2,4-Trimethylbenzene	140	Q	140	Q	70-130	0		20
Methyl Acetate	120		130		70-130	8		20
Cyclohexane	120		130		70-130	8		20
Freon-113	110		120		70-130	9		20
Methyl cyclohexane	100		110		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		102		70-130
Toluene-d8	110		108		70-130
4-Bromofluorobenzene	113		114		70-130
Dibromofluoromethane	89		91		70-130



## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLS HEAD PLAZA

**Lab Number:** L1744944

**Project Number:** 2172414

**Report Date:** 12/13/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08,11-12 QC Batch ID: WG1071419-6 WG1071419-7 QC Sample: L1744944-02 Client ID: BWB-02												
Methylene chloride	ND	10	9.5	95		9.5	95		70-130	0		20
1,1-Dichloroethane	ND	10	10	100		10	100		70-130	0		20
Chloroform	ND	10	11	110		12	120		70-130	9		20
Carbon tetrachloride	ND	10	12	120		13	130		63-132	8		20
1,2-Dichloropropane	ND	10	9.8	98		10	100		70-130	2		20
Dibromochloromethane	ND	10	9.8	98		10	100		63-130	2		20
1,1,2-Trichloroethane	ND	10	9.4	94		9.7	97		70-130	3		20
Tetrachloroethene	0.37J	10	11	110		11	110		70-130	0		20
Chlorobenzene	ND	10	9.8	98		10	100		75-130	2		20
Trichlorofluoromethane	ND	10	12	120		12	120		62-150	0		20
1,2-Dichloroethane	ND	10	12	120		13	130		70-130	8		20
1,1,1-Trichloroethane	ND	10	12	120		13	130		67-130	8		20
Bromodichloromethane	ND	10	11	110		11	110		67-130	0		20
trans-1,3-Dichloropropene	ND	10	8.6	86		9.1	91		70-130	6		20
cis-1,3-Dichloropropene	ND	10	9.6	96		10	100		70-130	4		20
Bromoform	ND	10	9.6	96		10	100		54-136	4		20
1,1,2,2-Tetrachloroethane	ND	10	8.5	85		8.9	89		67-130	5		20
Benzene	ND	10	9.8	98		10	100		70-130	2		20
Toluene	ND	10	9.6	96		9.9	99		70-130	3		20
Ethylbenzene	ND	10	10	100		10	100		70-130	0		20
Chloromethane	ND	10	7.2	72		7.4	74		64-130	3		20
Bromomethane	ND	10	7.5	75		8.1	81		39-139	8		20
Vinyl chloride	ND	10	7.9	79		8.0	80		55-140	1		20

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLS HEAD PLAZA

**Lab Number:** L1744944

**Project Number:** 2172414

**Report Date:** 12/13/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08,11-12 QC Batch ID: WG1071419-6 WG1071419-7 QC Sample: L1744944-02 Client ID: BWB-02												
Chloroethane	ND	10	10	100		10	100		55-138	0		20
1,1-Dichloroethene	ND	10	9.8	98		9.8	98		61-145	0		20
trans-1,2-Dichloroethene	ND	10	9.7	97		10	100		70-130	3		20
Trichloroethene	ND	10	11	110		11	110		70-130	0		20
1,2-Dichlorobenzene	ND	10	9.7	97		10	100		70-130	3		20
1,3-Dichlorobenzene	ND	10	9.8	98		10	100		70-130	2		20
1,4-Dichlorobenzene	ND	10	9.6	96		9.9	99		70-130	3		20
Methyl tert butyl ether	ND	10	10	100		11	110		63-130	10		20
p/m-Xylene	ND	20	21	105		21	105		70-130	0		20
o-Xylene	ND	20	21	105		22	110		70-130	5		20
cis-1,2-Dichloroethene	ND	10	9.8	98		10	100		70-130	2		20
Styrene	ND	20	19	95		19	95		70-130	0		20
Dichlorodifluoromethane	ND	10	9.9	99		10	100		36-147	1		20
Acetone	ND	10	12	120		12	120		58-148	0		20
Carbon disulfide	ND	10	8.6	86		8.9	89		51-130	3		20
2-Butanone	ND	10	8.5	85		9.4	94		63-138	10		20
4-Methyl-2-pentanone	ND	10	8.6	86		9.0	90		59-130	5		20
2-Hexanone	ND	10	6.8	68		7.8	78		57-130	14		20
1,2-Dibromoethane	ND	10	9.5	95		10	100		70-130	5		20
n-Butylbenzene	ND	10	9.0	90		9.5	95		53-136	5		20
sec-Butylbenzene	ND	10	9.2	92		9.6	96		70-130	4		20
tert-Butylbenzene	ND	10	9.6	96		10	100		70-130	4		20
1,2-Dibromo-3-chloropropane	ND	10	8.1	81		9.0	90		41-144	11		20

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLS HEAD PLAZA

**Lab Number:** L1744944

**Project Number:** 2172414

**Report Date:** 12/13/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-08,11-12 QC Batch ID: WG1071419-6 WG1071419-7 QC Sample: L1744944-02 Client ID: BWB-02												
Isopropylbenzene	ND	10	9.5	95		9.8	98		70-130	3		20
p-Isopropyltoluene	ND	10	9.7	97		10	100		70-130	3		20
Naphthalene	ND	10	8.8	88		10	100		70-130	13		20
n-Propylbenzene	ND	10	9.1	91		9.4	94		69-130	3		20
1,2,4-Trichlorobenzene	ND	10	9.1	91		10	100		70-130	9		20
1,3,5-Trimethylbenzene	ND	10	9.6	96		10	100		64-130	4		20
1,2,4-Trimethylbenzene	ND	10	9.4	94		9.9	99		70-130	5		20
Methyl Acetate	ND	10	7.1	71		7.9	79		70-130	11		20
Cyclohexane	ND	10	9.8J	98		10	100		70-130	2		20
Freon-113	ND	10	11	110		11	110		70-130	0		20
Methyl cyclohexane	ND	10	10	100		11	110		70-130	10		20

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>	
1,2-Dichloroethane-d4	119		126		70-130
4-Bromofluorobenzene	89		89		70-130
Dibromofluoromethane	106		107		70-130
Toluene-d8	91		92		70-130

# SEMIVOLATILES

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-02  
 Client ID: BWB-02  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 12/12/17 09:39  
 Analyst: EK

Date Collected: 12/06/17 14:20  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/08/17 00:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND		ug/l	1.9	0.64	1
3,3'-Dichlorobenzidine	ND		ug/l	4.8	1.3	1
2,4-Dinitrotoluene	ND		ug/l	4.8	0.81	1
2,6-Dinitrotoluene	ND		ug/l	4.8	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	1.9	0.60	1
4-Bromophenyl phenyl ether	ND		ug/l	1.9	0.70	1
Bis(2-chloroisopropyl)ether	ND		ug/l	1.9	0.67	1
Bis(2-chloroethoxy)methane	ND		ug/l	4.8	0.60	1
Hexachlorocyclopentadiene	ND		ug/l	19	7.5	1
Isophorone	ND		ug/l	4.8	0.58	1
Nitrobenzene	ND		ug/l	1.9	0.72	1
NDPA/DPA	ND		ug/l	1.9	0.62	1
n-Nitrosodi-n-propylamine	ND		ug/l	4.8	0.67	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	2.9	0.87	1
Butyl benzyl phthalate	ND		ug/l	4.8	1.2	1
Di-n-butylphthalate	ND		ug/l	4.8	0.66	1
Di-n-octylphthalate	ND		ug/l	4.8	1.1	1
Diethyl phthalate	ND		ug/l	4.8	0.60	1
Dimethyl phthalate	ND		ug/l	4.8	0.62	1
Biphenyl	ND		ug/l	1.9	0.73	1
4-Chloroaniline	ND		ug/l	4.8	0.61	1
2-Nitroaniline	ND		ug/l	4.8	1.1	1
3-Nitroaniline	ND		ug/l	4.8	1.2	1
4-Nitroaniline	ND		ug/l	4.8	1.2	1
Dibenzofuran	ND		ug/l	1.9	0.63	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	9.6	0.64	1
Acetophenone	ND		ug/l	4.8	0.81	1
2,4,6-Trichlorophenol	ND		ug/l	4.8	0.65	1
p-Chloro-m-cresol	ND		ug/l	1.9	0.59	1
2-Chlorophenol	ND		ug/l	1.9	0.60	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-02  
 Client ID: BWB-02  
 Sample Location: Not Specified

Date Collected: 12/06/17 14:20  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4-Dichlorophenol	ND		ug/l	4.8	0.74	1
2,4-Dimethylphenol	ND		ug/l	4.8	1.6	1
2-Nitrophenol	ND		ug/l	9.6	1.4	1
4-Nitrophenol	ND		ug/l	9.6	1.7	1
2,4-Dinitrophenol	ND		ug/l	19	5.2	1
4,6-Dinitro-o-cresol	ND		ug/l	9.6	2.0	1
Phenol	ND		ug/l	4.8	1.8	1
3-Methylphenol/4-Methylphenol	ND		ug/l	4.8	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	4.8	0.69	1
Carbazole	ND		ug/l	1.9	0.60	1
Atrazine	ND		ug/l	9.6	1.8	1
Benzaldehyde	ND		ug/l	4.8	1.0	1
Caprolactam	ND		ug/l	9.6	3.4	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	4.8	0.89	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	81		41-149

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-02  
 Client ID: BWB-02  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 12/09/17 18:58  
 Analyst: KL

Date Collected: 12/06/17 14:20  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/08/17 00:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.03	1
2-Chloronaphthalene	ND		ug/l	0.19	0.03	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.48	0.03	1
Naphthalene	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	0.03	1
Anthracene	ND		ug/l	0.10	0.03	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	0.06	J	ug/l	0.10	0.01	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
2-Methylnaphthalene	ND		ug/l	0.10	0.04	1
Pentachlorophenol	ND		ug/l	0.77	0.21	1
Hexachlorobenzene	ND		ug/l	0.77	0.03	1
Hexachloroethane	ND		ug/l	0.77	0.03	1



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-02  
 Client ID: BWB-02  
 Sample Location: Not Specified

Date Collected: 12/06/17 14:20  
 Date Received: 12/06/17  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	73		41-149

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-03  
 Client ID: DUPE  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 12/12/17 05:23  
 Analyst: EK

Date Collected: 12/06/17 00:00  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/08/17 00:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-03  
**Client ID:** DUPE  
**Sample Location:** Not Specified

**Date Collected:** 12/06/17 00:00  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	82		41-149

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-03  
 Client ID: DUPE  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 12/09/17 21:24  
 Analyst: KL

Date Collected: 12/06/17 00:00  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/08/17 00:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.04	J	ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	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	0.07	J	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
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-03  
 Client ID: DUPE  
 Sample Location: Not Specified

Date Collected: 12/06/17 00:00  
 Date Received: 12/06/17  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	68		10-120
4-Terphenyl-d14	70		41-149

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-07  
 Client ID: BWB-07  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 12/12/17 05:52  
 Analyst: EK

Date Collected: 12/06/17 11:15  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/08/17 00:15

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-07  
 Client ID: BWB-07  
 Sample Location: Not Specified

Date Collected: 12/06/17 11:15  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	92		15-120
2,4,6-Tribromophenol	68		10-120
4-Terphenyl-d14	93		41-149



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-07  
 Client ID: BWB-07  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 12/09/17 21:53  
 Analyst: KL

Date Collected: 12/06/17 11:15  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/08/17 00:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	0.04	J	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	0.02	J	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
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-07  
 Client ID: BWB-07  
 Sample Location: Not Specified

Date Collected: 12/06/17 11:15  
 Date Received: 12/06/17  
 Field Prep: Not Specified

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	106		23-120
2-Fluorobiphenyl	88		15-120
2,4,6-Tribromophenol	61		10-120
4-Terphenyl-d14	83		41-149

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 12/11/17 23:19  
**Analyst:** CB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 12/08/17 00:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-03,07 Batch: WG1070355-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63
Hexachlorocyclopentadiene	ND		ug/l	20	7.8
Isophorone	ND		ug/l	5.0	0.60
Nitrobenzene	ND		ug/l	2.0	0.75
NDPA/DPA	ND		ug/l	2.0	0.64
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91
Butyl benzyl phthalate	ND		ug/l	5.0	1.3
Di-n-butylphthalate	ND		ug/l	5.0	0.69
Di-n-octylphthalate	ND		ug/l	5.0	1.1
Diethyl phthalate	ND		ug/l	5.0	0.63
Dimethyl phthalate	ND		ug/l	5.0	0.65
Biphenyl	ND		ug/l	2.0	0.76
4-Chloroaniline	ND		ug/l	5.0	0.63
2-Nitroaniline	ND		ug/l	5.0	1.1
3-Nitroaniline	ND		ug/l	5.0	1.2
4-Nitroaniline	ND		ug/l	5.0	1.3
Dibenzofuran	ND		ug/l	2.0	0.66
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67
Acetophenone	ND		ug/l	5.0	0.85
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68
p-Chloro-m-cresol	ND		ug/l	2.0	0.62

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D  
**Analytical Date:** 12/11/17 23:19  
**Analyst:** CB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 12/08/17 00:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-03,07 Batch: WG1070355-1					
2-Chlorophenol	ND		ug/l	2.0	0.63
2,4-Dichlorophenol	ND		ug/l	5.0	0.77
2,4-Dimethylphenol	ND		ug/l	5.0	1.6
2-Nitrophenol	ND		ug/l	10	1.5
4-Nitrophenol	ND		ug/l	10	1.8
2,4-Dinitrophenol	ND		ug/l	20	5.5
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1
Phenol	ND		ug/l	5.0	1.9
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72
Carbazole	ND		ug/l	2.0	0.63
Atrazine	ND		ug/l	10	1.8
Benzaldehyde	ND		ug/l	5.0	1.1
Caprolactam	ND		ug/l	10	3.6
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

**Project Name:** BULLS HEAD PLAZA**Lab Number:** L1744944**Project Number:** 2172414**Report Date:** 12/13/17**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8270D  
 Analytical Date: 12/11/17 23:19  
 Analyst: CB

Extraction Method: EPA 3510C  
 Extraction Date: 12/08/17 00:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-03,07 Batch: WG1070355-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	38		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	87		10-120
4-Terphenyl-d14	88		41-149

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 12/09/17 16:32  
**Analyst:** KL

**Extraction Method:** EPA 3510C  
**Extraction Date:** 12/08/17 00:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02-03,07 Batch: WG1070357-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.04
Naphthalene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	0.02	J	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
2-Methylnaphthalene	ND		ug/l	0.10	0.05
Pentachlorophenol	ND		ug/l	0.80	0.22
Hexachlorobenzene	ND		ug/l	0.80	0.03
Hexachloroethane	ND		ug/l	0.80	0.03

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 12/09/17 16:32  
**Analyst:** KL

**Extraction Method:** EPA 3510C  
**Extraction Date:** 12/08/17 00:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02-03,07 Batch: WG1070357-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	79		41-149



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,07 Batch: WG1070355-2 WG1070355-3								
Bis(2-chloroethyl)ether	74		69		40-140	7		30
3,3'-Dichlorobenzidine	70		59		40-140	17		30
2,4-Dinitrotoluene	104		89		48-143	16		30
2,6-Dinitrotoluene	98		86		40-140	13		30
4-Chlorophenyl phenyl ether	84		74		40-140	13		30
4-Bromophenyl phenyl ether	89		78		40-140	13		30
Bis(2-chloroisopropyl)ether	66		62		40-140	6		30
Bis(2-chloroethoxy)methane	83		73		40-140	13		30
Hexachlorocyclopentadiene	58		52		40-140	11		30
Isophorone	84		74		40-140	13		30
Nitrobenzene	80		74		40-140	8		30
NDPA/DPA	88		76		40-140	15		30
n-Nitrosodi-n-propylamine	82		73		29-132	12		30
Bis(2-ethylhexyl)phthalate	95		86		40-140	10		30
Butyl benzyl phthalate	95		82		40-140	15		30
Di-n-butylphthalate	93		80		40-140	15		30
Di-n-octylphthalate	94		84		40-140	11		30
Diethyl phthalate	90		80		40-140	12		30
Dimethyl phthalate	91		80		40-140	13		30
Biphenyl	82		72		40-140	13		30
4-Chloroaniline	48		41		40-140	16		30
2-Nitroaniline	103		90		52-143	13		30
3-Nitroaniline	66		57		25-145	15		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,07 Batch: WG1070355-2 WG1070355-3								
4-Nitroaniline	87		77		51-143	12		30
Dibenzofuran	82		72		40-140	13		30
1,2,4,5-Tetrachlorobenzene	77		70		2-134	10		30
Acetophenone	86		78		39-129	10		30
2,4,6-Trichlorophenol	96		84		30-130	13		30
p-Chloro-m-cresol	94		82		23-97	14		30
2-Chlorophenol	77		72		27-123	7		30
2,4-Dichlorophenol	92		80		30-130	14		30
2,4-Dimethylphenol	74		70		30-130	6		30
2-Nitrophenol	97		86		30-130	12		30
4-Nitrophenol	65		59		10-80	10		30
2,4-Dinitrophenol	83		77		20-130	8		30
4,6-Dinitro-o-cresol	99		86		20-164	14		30
Phenol	42		39		12-110	7		30
3-Methylphenol/4-Methylphenol	74		65		30-130	13		30
2,4,5-Trichlorophenol	97		87		30-130	11		30
Carbazole	89		77		55-144	14		30
Atrazine	99		88		40-140	12		30
Benzaldehyde	65		62		40-140	5		30
Caprolactam	25		24		10-130	4		30
2,3,4,6-Tetrachlorophenol	97		84		40-140	14		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Project Number: 2172414

Lab Number: L1744944

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,07 Batch: WG1070355-2 WG1070355-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	57		56		21-120
Phenol-d6	44		41		10-120
Nitrobenzene-d5	88		83		23-120
2-Fluorobiphenyl	93		82		15-120
2,4,6-Tribromophenol	113		101		10-120
4-Terphenyl-d14	95		83		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-03,07 Batch: WG1070357-2 WG1070357-3								
Acenaphthene	82		79		40-140	4		40
2-Chloronaphthalene	86		83		40-140	4		40
Fluoranthene	86		79		40-140	8		40
Hexachlorobutadiene	70		71		40-140	1		40
Naphthalene	77		78		40-140	1		40
Benzo(a)anthracene	92		87		40-140	6		40
Benzo(a)pyrene	87		82		40-140	6		40
Benzo(b)fluoranthene	89		89		40-140	0		40
Benzo(k)fluoranthene	90		87		40-140	3		40
Chrysene	89		85		40-140	5		40
Acenaphthylene	97		91		40-140	6		40
Anthracene	91		86		40-140	6		40
Benzo(ghi)perylene	101		93		40-140	8		40
Fluorene	88		80		40-140	10		40
Phenanthrene	85		81		40-140	5		40
Dibenzo(a,h)anthracene	101		96		40-140	5		40
Indeno(1,2,3-cd)pyrene	104		98		40-140	6		40
Pyrene	84		76		40-140	10		40
2-Methylnaphthalene	82		81		40-140	1		40
Pentachlorophenol	91		80		40-140	13		40
Hexachlorobenzene	83		80		40-140	4		40
Hexachloroethane	64		65		40-140	2		40

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-03,07 Batch: WG1070357-2 WG1070357-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	56		56		21-120
Phenol-d6	44		41		10-120
Nitrobenzene-d5	90		88		23-120
2-Fluorobiphenyl	79		76		15-120
2,4,6-Tribromophenol	84		71		10-120
4-Terphenyl-d14	78		69		41-149

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLS HEAD PLAZA

**Lab Number:** L1744944

**Project Number:** 2172414

**Report Date:** 12/13/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,07 QC Batch ID: WG1070355-4 WG1070355-5 QC Sample: L1744944-02 Client ID: BWB-02												
Bis(2-chloroethyl)ether	ND	40	33	83		32	80		40-140	3		30
3,3'-Dichlorobenzidine	ND	40	15	38	Q	14	35	Q	40-140	7		30
2,4-Dinitrotoluene	ND	40	37	93		37	93		48-143	0		30
2,6-Dinitrotoluene	ND	40	36	90		36	90		40-140	0		30
4-Chlorophenyl phenyl ether	ND	40	33	83		34	85		40-140	3		30
4-Bromophenyl phenyl ether	ND	40	33	83		32	80		40-140	3		30
Bis(2-chloroisopropyl)ether	ND	40	32	80		31	78		40-140	3		30
Bis(2-chloroethoxy)methane	ND	40	34	85		34	85		40-140	0		30
Hexachlorocyclopentadiene	ND	40	22	55		22	55		40-140	0		30
Isophorone	ND	40	35	88		34	85		40-140	3		30
Nitrobenzene	ND	40	35	88		35	88		40-140	0		30
NDPA/DPA	ND	40	34	85		34	85		40-140	0		30
n-Nitrosodi-n-propylamine	ND	40	35	88		35	88		29-132	0		30
Bis(2-ethylhexyl)phthalate	ND	40	44	110		43	110		40-140	2		30
Butyl benzyl phthalate	ND	40	44	110		43	110		40-140	2		30
Di-n-butylphthalate	ND	40	40	100		39	98		40-140	3		30
Di-n-octylphthalate	ND	40	44	110		43	110		40-140	2		30
Diethyl phthalate	ND	40	35	88		35	88		40-140	0		30
Dimethyl phthalate	ND	40	34	85		34	85		40-140	0		30
Biphenyl	ND	40	32	80		33	83		40-140	3		30
4-Chloroaniline	ND	40	16	40		16	40		40-140	0		30
2-Nitroaniline	ND	40	38	95		36	90		52-143	5		30
3-Nitroaniline	ND	40	18	45		17	43		25-145	6		30

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLS HEAD PLAZA

**Lab Number:** L1744944

**Project Number:** 2172414

**Report Date:** 12/13/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,07 QC Batch ID: WG1070355-4 WG1070355-5 QC Sample: L1744944-02 Client ID: BWB-02												
4-Nitroaniline	ND	40	23	58		21	53		51-143	9		30
Dibenzofuran	ND	40	31	78		32	80		40-140	3		30
1,2,4,5-Tetrachlorobenzene	ND	40	30	75		31	78		2-134	3		30
Acetophenone	ND	40	36	90		36	90		39-129	0		30
2,4,6-Trichlorophenol	ND	40	35	88		36	90		30-130	3		30
p-Chloro-m-cresol	ND	40	36	90		36	90		23-97	0		30
2-Chlorophenol	ND	40	34	85		34	85		27-123	0		30
2,4-Dichlorophenol	ND	40	37	93		36	90		30-130	3		30
2,4-Dimethylphenol	ND	40	24	60		24	60		30-130	0		30
2-Nitrophenol	ND	40	37	93		37	93		30-130	0		30
4-Nitrophenol	ND	40	27	68		25	63		10-80	8		30
2,4-Dinitrophenol	ND	40	33	83		35	88		20-130	6		30
4,6-Dinitro-o-cresol	ND	40	34	85		36	90		20-164	6		30
Phenol	ND	40	20	50		19	48		12-110	5		30
3-Methylphenol/4-Methylphenol	ND	40	31	78		30	75		30-130	3		30
2,4,5-Trichlorophenol	ND	40	37	93		38	95		30-130	3		30
Carbazole	ND	40	36	90		36	90		55-144	0		30
Atrazine	ND	40	38	95		38	95		40-140	0		30
Benzaldehyde	ND	40	29	73		29	73		40-140	0		30
Caprolactam	ND	40	12	30		12	30		10-130	0		30
2,3,4,6-Tetrachlorophenol	ND	40	34	85		36	90		40-140	6		30



## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLS HEAD PLAZA

**Lab Number:** L1744944

**Project Number:** 2172414

**Report Date:** 12/13/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatiles Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,07 QC Batch ID: WG1070355-4 WG1070355-5 QC Sample: L1744944-02  
Client ID: BWB-02

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>	
2,4,6-Tribromophenol	98		99		10-120
2-Fluorobiphenyl	86		87		15-120
2-Fluorophenol	70		68		21-120
4-Terphenyl-d14	88		89		41-149
Nitrobenzene-d5	91		90		23-120
Phenol-d6	53		49		10-120

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLS HEAD PLAZA

**Lab Number:** L1744944

**Project Number:** 2172414

**Report Date:** 12/13/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-03,07 QC Batch ID: WG1070357-4 WG1070357-5 QC Sample: L1744944-02 Client ID: BWB-02												
Acenaphthene	ND	40	32	80		32	80		40-140	0		40
2-Chloronaphthalene	ND	40	33	83		34	85		40-140	3		40
Fluoranthene	ND	40	33	83		32	80		40-140	3		40
Hexachlorobutadiene	ND	40	27	68		27	68		40-140	0		40
Naphthalene	ND	40	29	73		30	75		40-140	3		40
Benzo(a)anthracene	ND	40	35	88		35	88		40-140	0		40
Benzo(a)pyrene	ND	40	34	85		33	83		40-140	3		40
Benzo(b)fluoranthene	ND	40	35	88		33	83		40-140	6		40
Benzo(k)fluoranthene	ND	40	35	88		33	83		40-140	6		40
Chrysene	ND	40	34	85		34	85		40-140	0		40
Acenaphthylene	ND	40	36	90		37	93		40-140	3		40
Anthracene	ND	40	35	88		34	85		40-140	3		40
Benzo(ghi)perylene	ND	40	38	95		38	95		40-140	0		40
Fluorene	ND	40	33	83		33	83		40-140	0		40
Phenanthrene	0.06J	40	34	85		34	85		40-140	0		40
Dibenzo(a,h)anthracene	ND	40	39	98		39	98		40-140	0		40
Indeno(1,2,3-cd)pyrene	ND	40	39	98		40	100		40-140	3		40
Pyrene	ND	40	32	80		32	80		40-140	0		40
2-Methylnaphthalene	ND	40	31	78		32	80		40-140	3		40
Pentachlorophenol	ND	40	34	85		34	85		40-140	0		40
Hexachlorobenzene	ND	40	33	83		32	80		40-140	3		40
Hexachloroethane	ND	40	23	58		25	63		40-140	8		40

### Matrix Spike Analysis Batch Quality Control

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatiles Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-03,07 QC Batch ID: WG1070357-4 WG1070357-5 QC Sample: L1744944-02  
Client ID: BWB-02

<b>Surrogate</b>	<b>MS % Recovery</b>	<b>Qualifier</b>	<b>MSD % Recovery</b>	<b>Qualifier</b>	<b>Acceptance Criteria</b>
2,4,6-Tribromophenol	84		82		10-120
2-Fluorobiphenyl	87		88		15-120
2-Fluorophenol	64		64		21-120
4-Terphenyl-d14	79		78		41-149
Nitrobenzene-d5	91		94		23-120
Phenol-d6	47		46		10-120



# PCBS

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-02  
**Client ID:** BWB-02  
**Sample Location:** Not Specified  
  
**Matrix:** Water  
**Analytical Method:** 1,8082A  
**Analytical Date:** 12/11/17 23:27  
**Analyst:** WR

**Date Collected:** 12/06/17 14:20  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 12/10/17 05:27  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 12/11/17  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 12/11/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	87		30-150	B

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-03  
 Client ID: DUPE  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 12/11/17 22:29  
 Analyst: WR

Date Collected: 12/06/17 00:00  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/10/17 05:27  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 12/11/17  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 12/11/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	80		30-150	B

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-07  
 Client ID: BWB-07  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 12/11/17 22:44  
 Analyst: WR

Date Collected: 12/06/17 11:15  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/10/17 05:27  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 12/11/17  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 12/11/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	82		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	78		30-150	B



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8082A  
**Analytical Date:** 12/11/17 19:29  
**Analyst:** WR

**Extraction Method:** EPA 3510C  
**Extraction Date:** 12/10/17 05:27  
**Cleanup Method:** EPA 3665A  
**Cleanup Date:** 12/11/17  
**Cleanup Method:** EPA 3660B  
**Cleanup Date:** 12/11/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02-03,07 Batch: WG1071010-1						
Aroclor 1016	ND		ug/l	0.083	0.020	A
Aroclor 1221	ND		ug/l	0.083	0.032	A
Aroclor 1232	ND		ug/l	0.083	0.027	A
Aroclor 1242	ND		ug/l	0.083	0.030	A
Aroclor 1248	ND		ug/l	0.083	0.023	A
Aroclor 1254	ND		ug/l	0.083	0.035	A
Aroclor 1260	ND		ug/l	0.083	0.020	A
Aroclor 1262	ND		ug/l	0.083	0.017	A
Aroclor 1268	ND		ug/l	0.083	0.027	A
PCBs, Total	ND		ug/l	0.083	0.017	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	108		30-150	A
2,4,5,6-Tetrachloro-m-xylene	101		30-150	B
Decachlorobiphenyl	110		30-150	B

## Lab Control Sample Analysis

Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02-03,07 Batch: WG1071010-2 WG1071010-3									
Aroclor 1016	96		99		40-140	3		50	A
Aroclor 1260	98		105		40-140	7		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		99		30-150	A
Decachlorobiphenyl	105		111		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		96		30-150	B
Decachlorobiphenyl	108		114		30-150	B

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLS HEAD PLAZA

**Lab Number:** L1744944

**Project Number:** 2172414

**Report Date:** 12/13/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02-03,07 QC Batch ID: WG1071010-6 WG1071010-7 QC Sample: L1744944-02 Client ID: BWB-02													
Aroclor 1016	ND	2.6	2.45	94		2.62	101		40-140	7		50	A
Aroclor 1260	ND	2.6	2.51	96		2.65	102		40-140	5		50	A

<i>Surrogate</i>	<i>MS</i>		<i>MSD</i>		<i>Acceptance Criteria</i>	<i>Column</i>
	<i>% Recovery</i>	<i>Qualifier</i>	<i>% Recovery</i>	<i>Qualifier</i>		
2,4,5,6-Tetrachloro-m-xylene	93		98		30-150	A
Decachlorobiphenyl	99		106		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		96		30-150	B
Decachlorobiphenyl	101		107		30-150	B

# PESTICIDES

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-02  
 Client ID: BWB-02  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8081B  
 Analytical Date: 12/12/17 10:19  
 Analyst: KEG

Date Collected: 12/06/17 14:20  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/09/17 19:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.004	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	ND		ug/l	0.020	0.006	1	A
Heptachlor	ND		ug/l	0.020	0.003	1	A
Aldrin	ND		ug/l	0.020	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	1	A
Endrin	ND		ug/l	0.040	0.004	1	A
Endrin aldehyde	ND		ug/l	0.040	0.008	1	A
Endrin ketone	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.004	1	A
4,4'-DDE	ND		ug/l	0.040	0.004	1	A
4,4'-DDD	ND		ug/l	0.040	0.005	1	A
4,4'-DDT	ND		ug/l	0.040	0.004	1	A
Endosulfan I	ND		ug/l	0.020	0.003	1	A
Endosulfan II	ND		ug/l	0.040	0.005	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	1	A
Methoxychlor	ND		ug/l	0.200	0.007	1	A
Toxaphene	ND		ug/l	0.200	0.063	1	A
cis-Chlordane	ND		ug/l	0.020	0.007	1	A
trans-Chlordane	ND		ug/l	0.020	0.006	1	A
Chlordane	ND		ug/l	0.200	0.046	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	117		30-150	A
2,4,5,6-Tetrachloro-m-xylene	102		30-150	B
Decachlorobiphenyl	119		30-150	B

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-03  
 Client ID: DUPE  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8081B  
 Analytical Date: 12/12/17 10:32  
 Analyst: CD

Date Collected: 12/06/17 00:00  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/09/17 19:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.004	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	ND		ug/l	0.020	0.006	1	A
Heptachlor	ND		ug/l	0.020	0.003	1	A
Aldrin	ND		ug/l	0.020	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	1	A
Endrin	ND		ug/l	0.040	0.004	1	A
Endrin aldehyde	ND		ug/l	0.040	0.008	1	A
Endrin ketone	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.004	1	A
4,4'-DDE	ND		ug/l	0.040	0.004	1	A
4,4'-DDD	ND		ug/l	0.040	0.005	1	A
4,4'-DDT	ND		ug/l	0.040	0.004	1	A
Endosulfan I	ND		ug/l	0.020	0.003	1	A
Endosulfan II	ND		ug/l	0.040	0.005	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	1	A
Methoxychlor	ND		ug/l	0.200	0.007	1	A
Toxaphene	ND		ug/l	0.200	0.063	1	A
cis-Chlordane	ND		ug/l	0.020	0.007	1	A
trans-Chlordane	ND		ug/l	0.020	0.006	1	A
Chlordane	ND		ug/l	0.200	0.046	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	106		30-150	A
Decachlorobiphenyl	118		30-150	A
2,4,5,6-Tetrachloro-m-xylene	105		30-150	B
Decachlorobiphenyl	119		30-150	B

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-07  
 Client ID: BWB-07  
 Sample Location: Not Specified  
 Matrix: Water  
 Analytical Method: 1,8081B  
 Analytical Date: 12/12/17 10:44  
 Analyst: CD

Date Collected: 12/06/17 11:15  
 Date Received: 12/06/17  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 12/09/17 19:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
<b>Organochlorine Pesticides by GC - Westborough Lab</b>							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.004	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	ND		ug/l	0.020	0.006	1	A
Heptachlor	ND		ug/l	0.020	0.003	1	A
Aldrin	ND		ug/l	0.020	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	1	A
Endrin	ND		ug/l	0.040	0.004	1	A
Endrin aldehyde	ND		ug/l	0.040	0.008	1	A
Endrin ketone	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.004	1	A
4,4'-DDE	ND		ug/l	0.040	0.004	1	A
4,4'-DDD	ND		ug/l	0.040	0.005	1	A
4,4'-DDT	ND		ug/l	0.040	0.004	1	A
Endosulfan I	ND		ug/l	0.020	0.003	1	A
Endosulfan II	ND		ug/l	0.040	0.005	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	1	A
Methoxychlor	ND		ug/l	0.200	0.007	1	A
Toxaphene	ND		ug/l	0.200	0.063	1	A
cis-Chlordane	ND		ug/l	0.020	0.007	1	A
trans-Chlordane	ND		ug/l	0.020	0.006	1	A
Chlordane	ND		ug/l	0.200	0.046	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	106		30-150	A
2,4,5,6-Tetrachloro-m-xylene	93		30-150	B
Decachlorobiphenyl	104		30-150	B



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8081B  
**Analytical Date:** 12/12/17 09:05  
**Analyst:** KEG

**Extraction Method:** EPA 3510C  
**Extraction Date:** 12/09/17 19:52

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02-03,07 Batch: WG1070989-1						
Delta-BHC	ND		ug/l	0.020	0.005	A
Lindane	ND		ug/l	0.020	0.004	A
Alpha-BHC	ND		ug/l	0.020	0.004	A
Beta-BHC	ND		ug/l	0.020	0.006	A
Heptachlor	ND		ug/l	0.020	0.003	A
Aldrin	ND		ug/l	0.020	0.002	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	A
Endrin	ND		ug/l	0.040	0.004	A
Endrin aldehyde	ND		ug/l	0.040	0.008	A
Endrin ketone	ND		ug/l	0.040	0.005	A
Dieldrin	ND		ug/l	0.040	0.004	A
4,4'-DDE	ND		ug/l	0.040	0.004	A
4,4'-DDD	ND		ug/l	0.040	0.005	A
4,4'-DDT	ND		ug/l	0.040	0.004	A
Endosulfan I	ND		ug/l	0.020	0.003	A
Endosulfan II	ND		ug/l	0.040	0.005	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	A
Methoxychlor	ND		ug/l	0.200	0.007	A
Toxaphene	ND		ug/l	0.200	0.063	A
cis-Chlordane	ND		ug/l	0.020	0.007	A
trans-Chlordane	ND		ug/l	0.020	0.006	A
Chlordane	ND		ug/l	0.200	0.046	A

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081B  
Analytical Date: 12/12/17 09:05  
Analyst: KEG

Extraction Method: EPA 3510C  
Extraction Date: 12/09/17 19:52

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02-03,07 Batch: WG1070989-1						

Surrogate	%Recovery	Qualifier	Acceptance	
			Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	110		30-150	A
Decachlorobiphenyl	106		30-150	A
2,4,5,6-Tetrachloro-m-xylene	109		30-150	B
Decachlorobiphenyl	104		30-150	B

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-03,07 Batch: WG1070989-2 WG1070989-3									
Delta-BHC	124		118		30-150	5		20	A
Lindane	110		106		30-150	4		20	A
Alpha-BHC	115		110		30-150	4		20	A
Beta-BHC	118		113		30-150	4		20	A
Heptachlor	108		103		30-150	5		20	A
Aldrin	108		103		30-150	5		20	A
Heptachlor epoxide	119		116		30-150	3		20	A
Endrin	116		115		30-150	1		20	A
Endrin aldehyde	112		108		30-150	4		20	A
Endrin ketone	104		103		30-150	1		20	A
Dieldrin	115		112		30-150	3		20	A
4,4'-DDE	111		109		30-150	2		20	A
4,4'-DDD	109		109		30-150	0		20	A
4,4'-DDT	113		111		30-150	2		20	A
Endosulfan I	116		113		30-150	3		20	A
Endosulfan II	116		113		30-150	3		20	A
Endosulfan sulfate	119		115		30-150	3		20	A
Methoxychlor	116		114		30-150	2		20	A
cis-Chlordane	111		108		30-150	3		20	A
trans-Chlordane	112		109		30-150	3		20	A

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-03,07 Batch: WG1070989-2 WG1070989-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	112		107		30-150	A
Decachlorobiphenyl	109		120		30-150	A
2,4,5,6-Tetrachloro-m-xylene	111		105		30-150	B
Decachlorobiphenyl	110		121		30-150	B

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** BULLS HEAD PLAZA

**Lab Number:** L1744944

**Project Number:** 2172414

**Report Date:** 12/13/17

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>	<i>Column</i>
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-03,07 QC Batch ID: WG1070989-4 WG1070989-5 QC Sample: L1744944-02 Client ID: BWB-02													
Delta-BHC	ND	0.5	0.489	98		0.697	139		30-150	35	Q	30	A
Lindane	ND	0.5	0.441	88		0.655	131		30-150	39	Q	30	A
Alpha-BHC	ND	0.5	0.456	91		0.648	130		30-150	35	Q	30	A
Beta-BHC	ND	0.5	0.474	95		0.676	135		30-150	35	Q	30	A
Heptachlor	ND	0.5	0.438	88		0.618	124		30-150	34	Q	30	A
Aldrin	ND	0.5	0.432	86		0.656	131		30-150	41	Q	30	A
Heptachlor epoxide	ND	0.5	0.490	98		0.679	136		30-150	32	Q	30	A
Endrin	ND	0.5	0.494	99		0.690	138		30-150	33	Q	30	A
Endrin aldehyde	ND	0.5	0.474	95		0.658	132		30-150	33	Q	30	A
Endrin ketone	ND	0.5	0.443	89		0.623	125		30-150	34	Q	30	A
Dieldrin	ND	0.5	0.475	95		0.668	134		30-150	34	Q	30	A
4,4'-DDE	ND	0.5	0.452	90		0.645	129		30-150	35	Q	30	A
4,4'-DDD	ND	0.5	0.454	91		0.665	133		30-150	38	Q	30	A
4,4'-DDT	ND	0.5	0.469	94		0.684	137		30-150	37	Q	30	A
Endosulfan I	ND	0.5	0.485	97		0.682	136		30-150	34	Q	30	A
Endosulfan II	ND	0.5	0.486	97		0.703	141		30-150	37	Q	30	A
Endosulfan sulfate	ND	0.5	0.505	101		0.725	145		30-150	36	Q	30	A
Methoxychlor	ND	0.5	0.496	99		0.692	138		30-150	33	Q	30	A
cis-Chlordane	ND	0.5	0.461	92		0.642	128		30-150	33	Q	30	A
trans-Chlordane	ND	0.5	0.459	92		0.694	139		30-150	41	Q	30	A

### Matrix Spike Analysis Batch Quality Control

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>Qual</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Qual</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-03,07 QC Batch ID: WG1070989-4 WG1070989-5 QC Sample: L1744944-02  
Client ID: BWB-02

<b>Surrogate</b>	<b>MS</b>		<b>MSD</b>		<b>Acceptance Criteria</b>	<b>Column</b>
	<b>% Recovery</b>	<b>Qualifier</b>	<b>% Recovery</b>	<b>Qualifier</b>		
2,4,5,6-Tetrachloro-m-xylene	90		127		30-150	A
Decachlorobiphenyl	96		136		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		124		30-150	B
Decachlorobiphenyl	98		137		30-150	B



## METALS



Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

## SAMPLE RESULTS

Lab ID: L1744944-01

Date Collected: 12/06/17 16:55

Client ID: BWB-01

Date Received: 12/06/17

Sample Location: Not Specified

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Iron, Total	0.0401	J	mg/l	0.0500	0.0191	1	12/09/17 11:45	12/12/17 13:20	EPA 3005A	1,6020A	AM
Manganese, Total	0.02694		mg/l	0.00100	0.00044	1	12/09/17 11:45	12/12/17 13:20	EPA 3005A	1,6020A	AM



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-02  
 Client ID: BWB-02  
 Sample Location: Not Specified  
 Matrix: Water

Date Collected: 12/06/17 14:20  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	0.115		mg/l	0.0100	0.00327	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Antimony, Total	0.00204	J	mg/l	0.00400	0.00042	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00258		mg/l	0.00050	0.00016	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Barium, Total	0.1351		mg/l	0.00050	0.00017	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00036		mg/l	0.00020	0.00005	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Calcium, Total	127.		mg/l	0.100	0.0394	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Chromium, Total	0.01449		mg/l	0.00100	0.00017	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00019	J	mg/l	0.00050	0.00016	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Copper, Total	0.00220		mg/l	0.00100	0.00038	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Iron, Total	0.156		mg/l	0.0500	0.0191	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Lead, Total	ND		mg/l	0.01000	0.00343	10	12/09/17 11:45	12/12/17 12:50	EPA 3005A	1,6020A	AM
Magnesium, Total	34.3		mg/l	0.0700	0.0242	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Manganese, Total	0.01476		mg/l	0.00100	0.00044	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	12/11/17 16:26	12/12/17 14:57	EPA 7470A	1,7470A	MG
Nickel, Total	0.00486		mg/l	0.00200	0.00055	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Potassium, Total	25.7		mg/l	0.100	0.0309	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Selenium, Total	0.00223	J	mg/l	0.00500	0.00173	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Sodium, Total	1750		mg/l	1.00	0.293	10	12/09/17 11:45	12/12/17 12:50	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00500	0.00143	10	12/09/17 11:45	12/12/17 12:50	EPA 3005A	1,6020A	AM
Vanadium, Total	0.01438		mg/l	0.00500	0.00157	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM
Zinc, Total	0.06976		mg/l	0.01000	0.00341	1	12/09/17 11:45	12/12/17 12:30	EPA 3005A	1,6020A	AM



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-03  
 Client ID: DUPE  
 Sample Location: Not Specified  
 Matrix: Water

Date Collected: 12/06/17 00:00  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	0.120		mg/l	0.0100	0.00327	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Antimony, Total	0.00169	J	mg/l	0.00400	0.00042	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00248		mg/l	0.00050	0.00016	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Barium, Total	0.1340		mg/l	0.00050	0.00017	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00038		mg/l	0.00020	0.00005	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Calcium, Total	131.		mg/l	0.100	0.0394	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Chromium, Total	0.01147		mg/l	0.00100	0.00017	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00034	J	mg/l	0.00050	0.00016	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Copper, Total	0.00223		mg/l	0.00100	0.00038	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Iron, Total	0.135		mg/l	0.0500	0.0191	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Lead, Total	ND		mg/l	0.00500	0.00171	5	12/09/17 11:45	12/12/17 13:24	EPA 3005A	1,6020A	AM
Magnesium, Total	34.7		mg/l	0.0700	0.0242	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Manganese, Total	0.01212		mg/l	0.00100	0.00044	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	12/11/17 16:26	12/12/17 15:25	EPA 7470A	1,7470A	MG
Nickel, Total	0.00380		mg/l	0.00200	0.00055	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Potassium, Total	26.9		mg/l	0.100	0.0309	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Selenium, Total	0.00210	J	mg/l	0.00500	0.00173	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Sodium, Total	1750		mg/l	0.500	0.146	5	12/09/17 11:45	12/12/17 13:24	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00250	0.00071	5	12/09/17 11:45	12/12/17 13:24	EPA 3005A	1,6020A	AM
Vanadium, Total	0.01128		mg/l	0.00500	0.00157	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM
Zinc, Total	0.1281		mg/l	0.01000	0.00341	1	12/09/17 11:45	12/12/17 12:16	EPA 3005A	1,6020A	AM



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

Lab ID: L1744944-07  
 Client ID: BWB-07  
 Sample Location: Not Specified  
 Matrix: Water

Date Collected: 12/06/17 11:15  
 Date Received: 12/06/17  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	0.205		mg/l	0.0100	0.00327	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00110		mg/l	0.00050	0.00016	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Barium, Total	0.1236		mg/l	0.00050	0.00017	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00007	J	mg/l	0.00020	0.00005	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Calcium, Total	197.		mg/l	0.100	0.0394	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Chromium, Total	0.00879		mg/l	0.00100	0.00017	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00045	J	mg/l	0.00050	0.00016	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Copper, Total	0.00173		mg/l	0.00100	0.00038	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Iron, Total	0.273		mg/l	0.0500	0.0191	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Lead, Total	0.00072	J	mg/l	0.00100	0.00034	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Magnesium, Total	55.1		mg/l	0.0700	0.0242	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Manganese, Total	0.05907		mg/l	0.00100	0.00044	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	12/11/17 16:26	12/12/17 15:27	EPA 7470A	1,7470A	MG
Nickel, Total	0.00617		mg/l	0.00200	0.00055	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Potassium, Total	24.0		mg/l	0.100	0.0309	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Selenium, Total	0.00276	J	mg/l	0.00500	0.00173	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Sodium, Total	515.		mg/l	2.00	0.586	20	12/09/17 11:45	12/12/17 13:28	EPA 3005A	1,6020A	AM
Thallium, Total	0.00068		mg/l	0.00050	0.00014	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Vanadium, Total	0.00608		mg/l	0.00500	0.00157	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM
Zinc, Total	0.07155		mg/l	0.01000	0.00341	1	12/09/17 11:45	12/12/17 12:12	EPA 3005A	1,6020A	AM



Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

## SAMPLE RESULTS

Lab ID: L1744944-09

Date Collected: 12/06/17 09:00

Client ID: BWB-06

Date Received: 12/06/17

Sample Location: Not Specified

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Iron, Total	0.0892		mg/l	0.0500	0.0191	1	12/09/17 11:45	12/12/17 12:07	EPA 3005A	1,6020A	AM
Manganese, Total	0.01712		mg/l	0.00100	0.00044	1	12/09/17 11:45	12/12/17 12:07	EPA 3005A	1,6020A	AM



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab for sample(s): 01-03,07,09 Batch: WG1070931-1</b>									
Aluminum, Total	ND	mg/l	0.0100	0.00327	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Antimony, Total	ND	mg/l	0.00400	0.00042	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Arsenic, Total	ND	mg/l	0.00050	0.00016	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Barium, Total	ND	mg/l	0.00050	0.00017	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Beryllium, Total	ND	mg/l	0.00050	0.00010	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Cadmium, Total	ND	mg/l	0.00020	0.00005	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Calcium, Total	ND	mg/l	0.100	0.0394	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Chromium, Total	ND	mg/l	0.00100	0.00017	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Cobalt, Total	ND	mg/l	0.00050	0.00016	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Copper, Total	ND	mg/l	0.00100	0.00038	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Iron, Total	ND	mg/l	0.0500	0.0191	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Lead, Total	ND	mg/l	0.00100	0.00034	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Magnesium, Total	ND	mg/l	0.0700	0.0242	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Manganese, Total	ND	mg/l	0.00100	0.00044	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Nickel, Total	ND	mg/l	0.00200	0.00055	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Potassium, Total	ND	mg/l	0.100	0.0309	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Selenium, Total	ND	mg/l	0.00500	0.00173	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Silver, Total	ND	mg/l	0.00040	0.00016	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Sodium, Total	ND	mg/l	0.100	0.0293	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Thallium, Total	ND	mg/l	0.00050	0.00014	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Vanadium, Total	ND	mg/l	0.00500	0.00157	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM
Zinc, Total	ND	mg/l	0.01000	0.00341	1	12/09/17 11:45	12/12/17 11:39	1,6020A	AM

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab for sample(s): 02-03,07 Batch: WG1071367-1</b>									
Mercury, Total	ND	mg/l	0.00020	0.00006	1	12/11/17 16:26	12/12/17 14:53	1,7470A	MG



**Project Name:** BULLS HEAD PLAZA

**Lab Number:** L1744944

**Project Number:** 2172414

**Report Date:** 12/13/17

## **Method Blank Analysis Batch Quality Control**

### **Prep Information**

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Digestion Method: EPA 7470A



## Lab Control Sample Analysis

### Batch Quality Control

Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Mansfield Lab Associated sample(s): 01-03,07,09 Batch: WG1070931-2								
Aluminum, Total	108		-		80-120	-		
Antimony, Total	99		-		80-120	-		
Arsenic, Total	99		-		80-120	-		
Barium, Total	102		-		80-120	-		
Beryllium, Total	96		-		80-120	-		
Cadmium, Total	98		-		80-120	-		
Calcium, Total	110		-		80-120	-		
Chromium, Total	101		-		80-120	-		
Cobalt, Total	98		-		80-120	-		
Copper, Total	100		-		80-120	-		
Iron, Total	104		-		80-120	-		
Lead, Total	110		-		80-120	-		
Magnesium, Total	109		-		80-120	-		
Manganese, Total	104		-		80-120	-		
Nickel, Total	98		-		80-120	-		
Potassium, Total	107		-		80-120	-		
Selenium, Total	105		-		80-120	-		
Silver, Total	103		-		80-120	-		
Sodium, Total	106		-		80-120	-		
Thallium, Total	107		-		80-120	-		
Vanadium, Total	100		-		80-120	-		

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** BULLS HEAD PLAZA

**Project Number:** 2172414

**Lab Number:** L1744944

**Report Date:** 12/13/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03,07,09 Batch: WG1070931-2					
Zinc, Total	99	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 02-03,07 Batch: WG1071367-2					
Mercury, Total	107	-	80-120	-	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03,07,09 QC Batch ID: WG1070931-3 WG1070931-4 QC Sample: L1744944-02 Client ID: BWB-02												
Aluminum, Total	0.115	2	2.30	109		2.30	109		75-125	0		20
Antimony, Total	0.00204J	0.5	0.5590	112		0.5552	111		75-125	1		20
Arsenic, Total	0.00258	0.12	0.1283	105		0.1278	104		75-125	0		20
Barium, Total	0.1351	2	2.203	103		2.190	103		75-125	1		20
Beryllium, Total	ND	0.05	0.04982	100		0.04897	98		75-125	2		20
Cadmium, Total	0.00036	0.051	0.05300	103		0.05229	102		75-125	1		20
Calcium, Total	127.	10	190	630	Q	194	670	Q	75-125	2		20
Chromium, Total	0.01449	0.2	0.2171	101		0.2147	100		75-125	1		20
Cobalt, Total	0.00019J	0.5	0.5129	102		0.5048	101		75-125	2		20
Copper, Total	0.00220	0.25	0.2590	103		0.2596	103		75-125	0		20
Iron, Total	0.156	1	1.22	106		1.16	100		75-125	5		20
Lead, Total	ND	0.51	0.5717	112		0.5604	110		75-125	2		20
Magnesium, Total	34.3	10	55.4	211	Q	55.4	211	Q	75-125	0		20
Manganese, Total	0.01476	0.5	0.5271	102		0.5289	103		75-125	0		20
Nickel, Total	0.00486	0.5	0.5153	102		0.5068	100		75-125	2		20
Potassium, Total	25.7	10	45.6	199	Q	46.7	210	Q	75-125	2		20
Selenium, Total	0.00223J	0.12	0.131	109		0.131	109		75-125	0		20
Silver, Total	ND	0.05	0.05062	101		0.04995	100		75-125	1		20
Sodium, Total	1750	10	1660	0	Q	1680	0	Q	75-125	1		20
Thallium, Total	ND	0.12	0.1258	105		0.1240	103		75-125	1		20
Vanadium, Total	0.01438	0.5	0.5276	103		0.5206	101		75-125	1		20

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

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): 01-03,07,09 QC Batch ID: WG1070931-3 WG1070931-4 QC Sample: L1744944-02 Client ID: BWB-02									
Zinc, Total	0.06976	0.5	0.5778	102	0.5711	100	75-125	1	20
Total Metals - Mansfield Lab Associated sample(s): 02-03,07 QC Batch ID: WG1071367-3 WG1071367-4 QC Sample: L1744944-02 Client ID: BWB-02									
Mercury, Total	ND	0.005	0.00503	101	0.00489	98	75-125	3	20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-01  
**Client ID:** BWB-01  
**Sample Location:** Not Specified  
**Matrix:** Water

**Date Collected:** 12/06/17 16:55  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Nitrogen, Nitrate	1.8		mg/l	0.10	0.033	1	-	12/07/17 19:58	44,353.2	MR
<b>Anions by Ion Chromatography - Westborough Lab</b>										
Sulfate	227.		mg/l	10.0	1.60	10	-	12/08/17 18:38	44,300.0	AU



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-02  
**Client ID:** BWB-02  
**Sample Location:** Not Specified  
**Matrix:** Water

**Date Collected:** 12/06/17 14:20  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	12/07/17 12:55	12/07/17 15:49	1,9010C/9012B	LH





Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

## SAMPLE RESULTS

Lab ID: L1744944-03

Date Collected: 12/06/17 00:00

Client ID: DUPE

Date Received: 12/06/17

Sample Location: Not Specified

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	12/07/17 12:55	12/07/17 15:52	1,9010C/9012B	LH



Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

## SAMPLE RESULTS

Lab ID: L1744944-07

Date Collected: 12/06/17 11:15

Client ID: BWB-07

Date Received: 12/06/17

Sample Location: Not Specified

Field Prep: Not Specified

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	12/07/17 12:55	12/07/17 15:55	1,9010C/9012B	LH



**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

**SAMPLE RESULTS**

**Lab ID:** L1744944-09  
**Client ID:** BWB-06  
**Sample Location:** Not Specified  
**Matrix:** Water

**Date Collected:** 12/06/17 09:00  
**Date Received:** 12/06/17  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Nitrogen, Nitrate	5.1		mg/l	0.10	0.033	1	-	12/07/17 19:59	44,353.2	MR
<b>Anions by Ion Chromatography - Westborough Lab</b>										
Sulfate	126.		mg/l	10.0	1.60	10	-	12/08/17 18:50	44,300.0	AU



Project Name: BULLS HEAD PLAZA

Lab Number: L1744944

Project Number: 2172414

Report Date: 12/13/17

**Method Blank Analysis**  
**Batch Quality Control**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02-03,07 Batch: WG1070119-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	12/07/17 12:55	12/07/17 15:31	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01,09 Batch: WG1070251-1										
Nitrogen, Nitrate	ND		mg/l	0.10	0.033	1	-	12/07/17 18:57	44,353.2	MR
Anions by Ion Chromatography - Westborough Lab for sample(s): 01,09 Batch: WG1071933-1										
Sulfate	ND		mg/l	1.00	0.160	1	-	12/08/17 17:50	44,300.0	AU

## Lab Control Sample Analysis

Batch Quality Control

Project Name: BULLS HEAD PLAZA

Project Number: 2172414

Lab Number: L1744944

Report Date: 12/13/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-03,07 Batch: WG1070119-2 WG1070119-3								
Cyanide, Total	111		109		85-115	2		20
General Chemistry - Westborough Lab Associated sample(s): 01,09 Batch: WG1070251-2								
Nitrogen, Nitrate	96		-		90-110	-		
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01,09 Batch: WG1071933-2								
Sulfate	104		-		90-110	-		

### Matrix Spike Analysis Batch Quality Control

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	RPD Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-03,07 QC Batch ID: WG1070119-4 WG1070119-5 QC Sample: L1744944-02 Client ID: BWB-02												
Cyanide, Total	ND	0.2	0.178	89		0.174	87		80-120	2		20
General Chemistry - Westborough Lab Associated sample(s): 01,09 QC Batch ID: WG1070251-4 QC Sample: L1744945-01 Client ID: MS Sample												
Nitrogen, Nitrate	ND	4	3.5	88		-	-		83-113	-		6
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01,09 QC Batch ID: WG1071933-3 QC Sample: L1744594-04 Client ID: MS Sample												
Sulfate	32.5	8	40.3	98		-	-		90-110	-		20

### Lab Duplicate Analysis Batch Quality Control

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Lab Number:** L1744944  
**Report Date:** 12/13/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01,09 QC Batch ID: WG1070251-3 QC Sample: L1744945-01 Client ID: DUP Sample						
Nitrogen, Nitrate	ND	ND	mg/l	NC		6
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01,09 QC Batch ID: WG1071933-4 QC Sample: L1744594-04 Client ID: DUP Sample						
Sulfate	32.5	32.8	mg/l	1		20





**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

Serial\_No:12131719:15  
**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent
B	Absent
C	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1744944-01A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-01B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-01C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-01D	Plastic 250ml unpreserved	A	7	7	4.4	Y	Absent		SO4-300(28),NO3-353(2)
L1744944-01E	Plastic 250ml HNO3 preserved	A	<2	<2	4.4	Y	Absent		FE-6020T(180),MN-6020T(180)
L1744944-02A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1744944-02A1	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1744944-02A2	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1744944-02B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1744944-02B1	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1744944-02B2	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1744944-02C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1744944-02C1	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1744944-02C2	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1744944-02D	Plastic 250ml HNO3 preserved	C	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)

**Project Name:** BULLS HEAD PLAZA  
**Project Number:** 2172414

**Serial\_No:**12131719:15  
**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1744944-02D1	Plastic 250ml HNO3 preserved	C	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1744944-02D2	Plastic 250ml HNO3 preserved	B	<2	<2	2.5	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1744944-02E	Plastic 250ml NaOH preserved	C	>12	>12	2.9	Y	Absent		TCN-9010(14)
L1744944-02E1	Plastic 250ml NaOH preserved	C	>12	>12	2.9	Y	Absent		TCN-9010(14)
L1744944-02E2	Plastic 250ml NaOH preserved	B	>12	>12	2.5	Y	Absent		TCN-9010(14)
L1744944-02F	Amber 500ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1744944-02F1	Amber 500ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1744944-02F2	Amber 500ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1744944-02G	Amber 500ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1744944-02G1	Amber 500ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1744944-02G2	Amber 500ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1744944-02H	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1744944-02H1	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1744944-02H2	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1744944-02I	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1744944-02I1	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1744944-02I2	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1744944-02J	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-1200ML(7)
L1744944-02J1	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-1200ML(7)
L1744944-02J2	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-1200ML(7)

**Project Name:** BULLS HEAD PLAZA  
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**Lab Number:** L1744944  
**Report Date:** 12/13/17

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1744944-02K	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-1200ML(7)
L1744944-02K1	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-1200ML(7)
L1744944-02K2	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-1200ML(7)
L1744944-03A	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1744944-03B	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1744944-03C	Vial HCl preserved	B	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1744944-03D	Plastic 250ml HNO3 preserved	B	<2	<2	2.5	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1744944-03E	Plastic 250ml NaOH preserved	B	>12	>12	2.5	Y	Absent		TCN-9010(14)
L1744944-03F	Amber 500ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1744944-03G	Amber 500ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1744944-03H	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1744944-03I	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1744944-03J	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-1200ML(7)
L1744944-03K	Amber 1000ml unpreserved	B	7	7	2.5	Y	Absent		NYTCL-8082-1200ML(7)
L1744944-04A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-04B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-04C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-05A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-05B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-05C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-06A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-06B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-06C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-07A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)

**Project Name:** BULLS HEAD PLAZA  
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**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L1744944-07B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-07C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-07D	Plastic 250ml HNO3 preserved	A	<2	<2	4.4	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1744944-07E	Plastic 250ml NaOH preserved	A	>12	>12	4.4	Y	Absent		TCN-9010(14)
L1744944-07F	Amber 500ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8081(7)
L1744944-07G	Amber 500ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8081(7)
L1744944-07H	Amber 1000ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1744944-07I	Amber 1000ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1744944-07J	Amber 1000ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8082-1200ML(7)
L1744944-07K	Amber 1000ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8082-1200ML(7)
L1744944-08A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-08B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-08C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-09A	Plastic 250ml unpreserved	A	7	7	4.4	Y	Absent		SO4-300(28),NO3-353(2)
L1744944-09B	Plastic 250ml HNO3 preserved	A	<2	<2	4.4	Y	Absent		FE-6020T(180),MN-6020T(180)
L1744944-10A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-10B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-10C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-11A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-11B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-11C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-12A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)
L1744944-12B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260-R2(14)

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**Lab Number:** L1744944  
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## 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).
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.
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.

### 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

**Report Format:** DU Report with 'J' Qualifiers



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#### Data Qualifiers

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



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## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.

## 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:** 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 300:** DW: Bromide

**EPA 6860:** NPW and SCM: Perchlorate

**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation

**EPA 9012B:** NPW: Total Cyanide

**EPA 9050A:** NPW: Specific Conductance

**SM3500:** NPW: Ferrous Iron

**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**SM5310C:** DW: Dissolved Organic Carbon

### Mansfield Facility

**SM 2540D:** TSS

**EPA 3005A** NPW

**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:** 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, SM4500CI-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, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, 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 624:** Volatile Halocarbons & Aromatics,

**EPA 608:** 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:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

### Mansfield Facility:

#### Drinking Water

**EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.**

#### 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, Pb, Mn, Ni, Se, Ag, TL, Zn.


**EPA 245.1 Hg.**

**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	<b>Mansfield, MA 02048</b> 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page	Date Rec'd in Lab <b>12/7/17</b>	ALPHA Job # <b>174944</b>									
			of											
<b>Client Information</b> Client: <b>Labella Associates</b> Address: <b>300 State Street</b> <b>Rochester, NY 14614</b> Phone: Fax: Email: <b>angelbert@labellapc.com</b>		<b>Project Information</b> Project Name: <b>Bulls Head Plaza</b> Project Location: Project # <b>2172414</b> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other										
Turn-Around Time Standard <input type="checkbox"/> Due Date: <b>12/14/17</b> Rush (only if pre approved) <input checked="" type="checkbox"/> # of Days: <b>5</b>		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Billing Information</b> <input checked="" type="checkbox"/> Same as Client Info PO #										
These samples have been previously analyzed by Alpha <input type="checkbox"/>		<b>ANALYSIS</b>		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:										
Other project specific requirements/comments: <b>Email results to abretta@labellapc.com and acquisition@labellapc.com</b>		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do (Please Specify below)		Total Bottles										
Please specify Metals or TAL.		Sample Specific Comments												
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL + CR-51 VOCs	TCL + CR-51 SVOCs	TAL Metals	PCBS	Pesticides	Cyanide	Fe + Mn 7070	Nitrate + Sulfate 9056	
44944-01	BWB-01	12/6/17	1655	GW	AJE	X						X	X	5
-02	BWB-02	12/6/17	1420	GW	AJE	X	X	X	X	X	X			11
-02	BWB-02 MS	12/6/17	1420	GW	AJE	X	X	X	X	X	X			11
-02	BWB-02 MSP	12/6/17	1420	GW	AJE	X	X	X	X	X	X			11
-03	Dupe	12/6/17		GW	AJE	X	X	X	X	X	X			11
-04	BWB-03	12/4/17	1245	GW	AJE	X								3
-05	BWB-04	12/4/17	1450	GW	AJE	X								3
-06	BWB-05	12/4/17	1705	GW	AJE	X								3
-07	BWB-07	12/6/17	1115	GW	AJE	X	X	X	X	X	X			11
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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 Preservative		V A P A A P P P B A C A A E C A		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.)				
Relinquished By: <b>[Signature]</b>		Date/Time: <b>12/6/17 / 1200</b>		Received By: <b>[Signature]</b>		Date/Time: <b>12/6/17 15:30</b> <b>12/7/17 0925</b>								



 <b>NEW YORK CHAIN OF CUSTODY</b> 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	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page _____ of _____	Date Rec'd In Lab <b>12/7/17</b>	ALPHA Job # <b>44944</b>																																																																																	
	<b>Project Information</b> Project Name: <b>Bulls Head Plaza</b> Project Location: Project # <b>2172124</b>	<b>Deliverables</b> <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other	<b>Billing Information</b> <input checked="" type="checkbox"/> Same as Client Info PO #																																																																																		
<b>Client Information</b> Client: <b>LaBella Associates</b> Address: <b>300 State Street</b> <b>Rochester, NY 14614</b> Phone: Fax: Email:	(Use Project name as Project #) <input type="checkbox"/> Project Manager: <b>Ten Gillen</b> ALPHAQuote #: Turn-Around Time Standard <input type="checkbox"/> Due Date: <b>12/14/17</b> Rush (only if pre approved) <input checked="" type="checkbox"/> # of Days: <b>5</b>	<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge	<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:																																																																																		
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: <b>Please email results to abrett@labellapc.com and aaquilina@labellapc.com</b>	<b>ANALYSIS</b> TOL + CP-51 VOCs Pb+Mo 7470 Nitrate, $\text{NO}_3^-$ / $\text{NO}_2^-$	<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do (Please Specify below) Sample Specific Comments	Total Bottles																																																																																		
<table border="1"> <thead> <tr> <th rowspan="2">ALPHA Lab ID (Lab Use Only)</th> <th rowspan="2">Sample ID</th> <th colspan="2">Collection</th> <th rowspan="2">Sample Matrix</th> <th rowspan="2">Sampler's Initials</th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> <th rowspan="2"></th> </tr> <tr> <th>Date</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td>44944-08</td> <td>BWB-06</td> <td>12/5/17</td> <td>1450</td> <td>GW</td> <td>AJE</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-09</td> <td>PWB-16</td> <td>12/6/17</td> <td>0900</td> <td>GW</td> <td>AJE</td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-10</td> <td>BWB-08</td> <td>12/5/17</td> <td>1330</td> <td>GW</td> <td>AJE</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-11</td> <td>BWB-09</td> <td>12/5/17</td> <td>1000</td> <td>GW</td> <td>AJE</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>-12</td> <td>Trip Blank</td> <td>12/8/17</td> <td>0800</td> <td>GW</td> <td>AJE</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	ALPHA Lab ID (Lab Use Only)	Sample ID		Collection		Sample Matrix	Sampler's Initials								Date	Time	44944-08	BWB-06	12/5/17	1450	GW	AJE	X								-09	PWB-16	12/6/17	0900	GW	AJE		X	X						-10	BWB-08	12/5/17	1330	GW	AJE	X								-11	BWB-09	12/5/17	1000	GW	AJE	X								-12	Trip Blank	12/8/17	0800	GW	AJE	X						
ALPHA Lab ID (Lab Use Only)			Sample ID	Collection											Sample Matrix	Sampler's Initials																																																																					
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-10	BWB-08	12/5/17	1330	GW	AJE	X																																																																															
-11	BWB-09	12/5/17	1000	GW	AJE	X																																																																															
-12	Trip Blank	12/8/17	0800	GW	AJE	X																																																																															
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Relinquished By: <b>[Signature]</b> Date/Time: <b>12/6/17 1800</b>	Received By: <b>[Signature]</b> Date/Time: <b>12/6/17 18:30</b>	Received By: <b>[Signature]</b> Date/Time: <b>12/7/17 0825</b>																																																																																			
Form No: 01-25 HC (rev. 30-Sept-2013)																																																																																					



# APPENDIX 4

CAMP Data



**Upwind CAMP Data**  
**Bullshead Plaza Phase II ESA**  
**835-855 West Main Street, Rochester, NY**  
**2172124**

TrakPro            Version                            4.7 ASCII            Data            File

Model:            DustTrak            II  
 Model            Number:                            8530  
 Serial            Number:                            8530142611  
 Test              ID:                                    1  
 Test              Abbreviation:        MANUAL\_001  
 Start             Date:                                11/27/2017  
 Start             Time:                                9:16:47  
 Duration        (dd:hh:mm:ss):    0:01:01:00  
 Log              Interval            (mm:ss):                            1:00  
 Number        of                            points:                            61  
 Notes:

Statistics        Channel:            AEROSOL  
                   Units:              mg/m^3  
                   Average:                            0.06  
                   Minimum:                            0.015  
                   Time              of                            Minimum:                            10:13:47  
                   Date              of                            Minimum:                            11/27/2017  
                   Maximum:                            0.457  
                   Time              of                            Maximum:                            10:01:47  
                   Date              of                            Maximum:                            11/27/2017

Calibration     Sensor:            AEROSOL  
                   Cal.                date                            1/17/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m^3
11/27/2017	9:17:47	0.067
11/27/2017	9:18:47	0.053
11/27/2017	9:19:47	0.046
11/27/2017	9:20:47	0.036
11/27/2017	9:21:47	0.081
11/27/2017	9:22:47	0.052
11/27/2017	9:23:47	0.033
11/27/2017	9:24:47	0.065
11/27/2017	9:25:47	0.06
11/27/2017	9:26:47	0.047
11/27/2017	9:27:47	0.03

11/27/2017	9:28:47	0.029
11/27/2017	9:29:47	0.023
11/27/2017	9:30:47	0.025
11/27/2017	9:31:47	0.024
11/27/2017	9:32:47	0.026
11/27/2017	9:33:47	0.027
11/27/2017	9:34:47	0.027
11/27/2017	9:35:47	0.043
11/27/2017	9:36:47	0.042
11/27/2017	9:37:47	0.063
11/27/2017	9:38:47	0.062
11/27/2017	9:39:47	0.035
11/27/2017	9:40:47	0.021
11/27/2017	9:41:47	0.069
11/27/2017	9:42:47	0.055
11/27/2017	9:43:47	0.034
11/27/2017	9:44:47	0.029
11/27/2017	9:45:47	0.035
11/27/2017	9:46:47	0.059
11/27/2017	9:47:47	0.132
11/27/2017	9:48:47	0.141
11/27/2017	9:49:47	0.075
11/27/2017	9:50:47	0.073
11/27/2017	9:51:47	0.083
11/27/2017	9:52:47	0.082
11/27/2017	9:53:47	0.097
11/27/2017	9:54:47	0.037
11/27/2017	9:55:47	0.022
11/27/2017	9:56:47	0.019
11/27/2017	9:57:47	0.045
11/27/2017	9:58:47	0.025
11/27/2017	9:59:47	0.024
11/27/2017	10:00:47	0.103
11/27/2017	10:01:47	0.457
11/27/2017	10:02:47	0.291
11/27/2017	10:03:47	0.022
11/27/2017	10:04:47	0.073
11/27/2017	10:05:47	0.099
11/27/2017	10:06:47	0.092
11/27/2017	10:07:47	0.022



**Upwind CAMP Data**  
**Bullshead Plaza Phase II ESA**  
**835-855 West Main Street, Rochester, NY**  
**2172124**

11/27/2017	10:08:47	0.037
11/27/2017	10:09:47	0.034
11/27/2017	10:10:47	0.052
11/27/2017	10:11:47	0.055
11/27/2017	10:12:47	0.02
11/27/2017	10:13:47	0.015
11/27/2017	10:14:47	0.016
11/27/2017	10:15:47	0.024
11/27/2017	10:16:47	0.036
11/27/2017	10:17:47	0.038

Model: DustTrak II  
 Model Number: 8530  
 Serial Number: 8530142611  
 Test ID: 2  
 Test Abbreviation: MANUAL\_002  
 Start Date: 11/27/2017  
 Start Time: 10:39:23  
 Duration (dd:hh:mm:ss): 0:02:16:00  
 Log Interval (mm:ss): 1:00  
 Number of points: 136  
 Notes:

Statistics Channel: AEROSOL  
 Units: mg/m<sup>3</sup>  
 Average: 0.011  
 Minimum: 0.008  
 Time of Minimum: 11:53:23  
 Date of Minimum: 11/27/2017  
 Maximum: 0.047  
 Time of Maximum: 12:49:23  
 Date of Maximum: 11/27/2017

Calibration Sensor: AEROSOL  
 Cal. date: 1/17/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/27/2017	10:40:23	0.023
11/27/2017	10:41:23	0.011



11/27/2017	10:42:23	0.01
11/27/2017	10:43:23	0.01
11/27/2017	10:44:23	0.01
11/27/2017	10:45:23	0.01
11/27/2017	10:46:23	0.01
11/27/2017	10:47:23	0.009
11/27/2017	10:48:23	0.014
11/27/2017	10:49:23	0.009
11/27/2017	10:50:23	0.009
11/27/2017	10:51:23	0.009
11/27/2017	10:52:23	0.01
11/27/2017	10:53:23	0.01
11/27/2017	10:54:23	0.009
11/27/2017	10:55:23	0.009
11/27/2017	10:56:23	0.009
11/27/2017	10:57:23	0.009
11/27/2017	10:58:23	0.009
11/27/2017	10:59:23	0.01
11/27/2017	11:00:23	0.01
11/27/2017	11:01:23	0.01
11/27/2017	11:02:23	0.01
11/27/2017	11:03:23	0.009
11/27/2017	11:04:23	0.009
11/27/2017	11:05:23	0.009
11/27/2017	11:06:23	0.009
11/27/2017	11:07:23	0.009
11/27/2017	11:08:23	0.01
11/27/2017	11:09:23	0.01
11/27/2017	11:10:23	0.012
11/27/2017	11:11:23	0.01
11/27/2017	11:12:23	0.009
11/27/2017	11:13:23	0.009
11/27/2017	11:14:23	0.01
11/27/2017	11:15:23	0.009
11/27/2017	11:16:23	0.009
11/27/2017	11:17:23	0.01
11/27/2017	11:18:23	0.012
11/27/2017	11:19:23	0.011
11/27/2017	11:20:23	0.009
11/27/2017	11:21:23	0.009

11/27/2017	11:22:23	0.009
11/27/2017	11:23:23	0.009
11/27/2017	11:24:23	0.009
11/27/2017	11:25:23	0.009
11/27/2017	11:26:23	0.011
11/27/2017	11:27:23	0.009
11/27/2017	11:28:23	0.009
11/27/2017	11:29:23	0.009
11/27/2017	11:30:23	0.011
11/27/2017	11:31:23	0.009
11/27/2017	11:32:23	0.009
11/27/2017	11:33:23	0.009
11/27/2017	11:34:23	0.009
11/27/2017	11:35:23	0.011
11/27/2017	11:36:23	0.012
11/27/2017	11:37:23	0.01
11/27/2017	11:38:23	0.01
11/27/2017	11:39:23	0.015
11/27/2017	11:40:23	0.013
11/27/2017	11:41:23	0.014
11/27/2017	11:42:23	0.01
11/27/2017	11:43:23	0.009
11/27/2017	11:44:23	0.009
11/27/2017	11:45:23	0.015
11/27/2017	11:46:23	0.024
11/27/2017	11:47:23	0.01
11/27/2017	11:48:23	0.011
11/27/2017	11:49:23	0.011
11/27/2017	11:50:23	0.01
11/27/2017	11:51:23	0.009
11/27/2017	11:52:23	0.009
11/27/2017	11:53:23	0.008
11/27/2017	11:54:23	0.008
11/27/2017	11:55:23	0.011
11/27/2017	11:56:23	0.01
11/27/2017	11:57:23	0.009
11/27/2017	11:58:23	0.009
11/27/2017	11:59:23	0.009
11/27/2017	12:00:23	0.009
11/27/2017	12:01:23	0.009

11/27/2017	12:02:23	0.009
11/27/2017	12:03:23	0.009
11/27/2017	12:04:23	0.009
11/27/2017	12:05:23	0.009
11/27/2017	12:06:23	0.009
11/27/2017	12:07:23	0.009
11/27/2017	12:08:23	0.01
11/27/2017	12:09:23	0.009
11/27/2017	12:10:23	0.009
11/27/2017	12:11:23	0.009
11/27/2017	12:12:23	0.011
11/27/2017	12:13:23	0.009
11/27/2017	12:14:23	0.009
11/27/2017	12:15:23	0.009
11/27/2017	12:16:23	0.009
11/27/2017	12:17:23	0.009
11/27/2017	12:18:23	0.009
11/27/2017	12:19:23	0.009
11/27/2017	12:20:23	0.009
11/27/2017	12:21:23	0.009
11/27/2017	12:22:23	0.01
11/27/2017	12:23:23	0.01
11/27/2017	12:24:23	0.01
11/27/2017	12:25:23	0.01
11/27/2017	12:26:23	0.01
11/27/2017	12:27:23	0.01
11/27/2017	12:28:23	0.011
11/27/2017	12:29:23	0.02
11/27/2017	12:30:23	0.023
11/27/2017	12:31:23	0.025
11/27/2017	12:32:23	0.017
11/27/2017	12:33:23	0.009
11/27/2017	12:34:23	0.014
11/27/2017	12:35:23	0.01
11/27/2017	12:36:23	0.01
11/27/2017	12:37:23	0.012
11/27/2017	12:38:23	0.011
11/27/2017	12:39:23	0.014
11/27/2017	12:40:23	0.012
11/27/2017	12:41:23	0.01



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

11/27/2017	12:42:23	0.01
11/27/2017	12:43:23	0.01
11/27/2017	12:44:23	0.011
11/27/2017	12:45:23	0.011
11/27/2017	12:46:23	0.016
11/27/2017	12:47:23	0.014
11/27/2017	12:48:23	0.029
11/27/2017	12:49:23	0.047
11/27/2017	12:50:23	0.018
11/27/2017	12:51:23	0.01
11/27/2017	12:52:23	0.009
11/27/2017	12:53:23	0.012
11/27/2017	12:54:23	0.011
11/27/2017	12:55:23	0.014

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530142611  
Test ID: 3  
Test Abbreviation: MANUAL\_003  
Start Date: 11/27/2017  
Start Time: 13:17:54  
Duration (dd:hh:mm:ss): 0:02:15:00  
Log Interval (mm:ss): 1:00  
Number of points: 135  
Notes:

Statistics Channel: AEROSOL  
Units: mg/m<sup>3</sup>  
Average: 0.012  
Minimum: 0.01  
Time of Minimum: 13:19:54  
Date of Minimum: 11/27/2017  
Maximum: 0.023  
Time of Maximum: 14:30:54  
Date of Maximum: 11/27/2017

Calibration Sensor: AEROSOL  
Cal. date: 1/17/2017



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/27/2017	13:18:54	0.011
11/27/2017	13:19:54	0.01
11/27/2017	13:20:54	0.01
11/27/2017	13:21:54	0.01
11/27/2017	13:22:54	0.01
11/27/2017	13:23:54	0.01
11/27/2017	13:24:54	0.01
11/27/2017	13:25:54	0.01
11/27/2017	13:26:54	0.01
11/27/2017	13:27:54	0.011
11/27/2017	13:28:54	0.01
11/27/2017	13:29:54	0.01
11/27/2017	13:30:54	0.01
11/27/2017	13:31:54	0.011
11/27/2017	13:32:54	0.01
11/27/2017	13:33:54	0.01
11/27/2017	13:34:54	0.011
11/27/2017	13:35:54	0.01
11/27/2017	13:36:54	0.01
11/27/2017	13:37:54	0.01
11/27/2017	13:38:54	0.01
11/27/2017	13:39:54	0.01
11/27/2017	13:40:54	0.011
11/27/2017	13:41:54	0.012
11/27/2017	13:42:54	0.01
11/27/2017	13:43:54	0.011
11/27/2017	13:44:54	0.013
11/27/2017	13:45:54	0.011
11/27/2017	13:46:54	0.011
11/27/2017	13:47:54	0.011
11/27/2017	13:48:54	0.011
11/27/2017	13:49:54	0.011
11/27/2017	13:50:54	0.011
11/27/2017	13:51:54	0.011
11/27/2017	13:52:54	0.01
11/27/2017	13:53:54	0.013
11/27/2017	13:54:54	0.01
11/27/2017	13:55:54	0.011

11/27/2017	13:56:54	0.011
11/27/2017	13:57:54	0.012
11/27/2017	13:58:54	0.012
11/27/2017	13:59:54	0.011
11/27/2017	14:00:54	0.011
11/27/2017	14:01:54	0.015
11/27/2017	14:02:54	0.013
11/27/2017	14:03:54	0.012
11/27/2017	14:04:54	0.011
11/27/2017	14:05:54	0.012
11/27/2017	14:06:54	0.012
11/27/2017	14:07:54	0.011
11/27/2017	14:08:54	0.011
11/27/2017	14:09:54	0.011
11/27/2017	14:10:54	0.01
11/27/2017	14:11:54	0.011
11/27/2017	14:12:54	0.016
11/27/2017	14:13:54	0.011
11/27/2017	14:14:54	0.011
11/27/2017	14:15:54	0.01
11/27/2017	14:16:54	0.011
11/27/2017	14:17:54	0.011
11/27/2017	14:18:54	0.011
11/27/2017	14:19:54	0.011
11/27/2017	14:20:54	0.011
11/27/2017	14:21:54	0.011
11/27/2017	14:22:54	0.01
11/27/2017	14:23:54	0.01
11/27/2017	14:24:54	0.01
11/27/2017	14:25:54	0.011
11/27/2017	14:26:54	0.01
11/27/2017	14:27:54	0.01
11/27/2017	14:28:54	0.011
11/27/2017	14:29:54	0.011
11/27/2017	14:30:54	0.023
11/27/2017	14:31:54	0.02
11/27/2017	14:32:54	0.013
11/27/2017	14:33:54	0.022
11/27/2017	14:34:54	0.011
11/27/2017	14:35:54	0.011

11/27/2017	14:36:54	0.011
11/27/2017	14:37:54	0.012
11/27/2017	14:38:54	0.013
11/27/2017	14:39:54	0.012
11/27/2017	14:40:54	0.012
11/27/2017	14:41:54	0.012
11/27/2017	14:42:54	0.012
11/27/2017	14:43:54	0.011
11/27/2017	14:44:54	0.012
11/27/2017	14:45:54	0.011
11/27/2017	14:46:54	0.011
11/27/2017	14:47:54	0.012
11/27/2017	14:48:54	0.012
11/27/2017	14:49:54	0.015
11/27/2017	14:50:54	0.012
11/27/2017	14:51:54	0.012
11/27/2017	14:52:54	0.012
11/27/2017	14:53:54	0.012
11/27/2017	14:54:54	0.012
11/27/2017	14:55:54	0.012
11/27/2017	14:56:54	0.013
11/27/2017	14:57:54	0.012
11/27/2017	14:58:54	0.013
11/27/2017	14:59:54	0.013
11/27/2017	15:00:54	0.018
11/27/2017	15:01:54	0.014
11/27/2017	15:02:54	0.014
11/27/2017	15:03:54	0.017
11/27/2017	15:04:54	0.014
11/27/2017	15:05:54	0.013
11/27/2017	15:06:54	0.014
11/27/2017	15:07:54	0.013
11/27/2017	15:08:54	0.013
11/27/2017	15:09:54	0.013
11/27/2017	15:10:54	0.014
11/27/2017	15:11:54	0.014
11/27/2017	15:12:54	0.013
11/27/2017	15:13:54	0.015
11/27/2017	15:14:54	0.014
11/27/2017	15:15:54	0.013





**Upwind CAMP Data**  
**Bullshead Plaza Phase II ESA**  
**835-855 West Main Street, Rochester, NY**  
**2172124**

11/27/2017	15:16:54	0.014
11/27/2017	15:17:54	0.014
11/27/2017	15:18:54	0.015
11/27/2017	15:19:54	0.014
11/27/2017	15:20:54	0.018
11/27/2017	15:21:54	0.019
11/27/2017	15:22:54	0.017
11/27/2017	15:23:54	0.014
11/27/2017	15:24:54	0.013
11/27/2017	15:25:54	0.014
11/27/2017	15:26:54	0.014
11/27/2017	15:27:54	0.014
11/27/2017	15:28:54	0.015
11/27/2017	15:29:54	0.015
11/27/2017	15:30:54	0.013
11/27/2017	15:31:54	0.023
11/27/2017	15:32:54	0.021

Model: DustTrak II  
 Model Number: 8530  
 Serial Number: 8530142611  
 Test ID: 4  
 Test Abbreviation: MANUAL\_004  
 Start Date: 11/28/2017  
 Start Time: 9:19:48  
 Duration (dd:hh:mm:ss): 0:05:27:00  
 Log Interval (mm:ss): 1:00  
 Number of points: 327  
 Notes:

Statistics Channel: AEROSOL  
 Units: mg/m<sup>3</sup>  
 Average: 0.006  
 Minimum: -0.001  
 Time of Minimum: 14:10:48  
 Date of Minimum: 11/28/2017  
 Maximum: 0.049  
 Time of Maximum: 9:56:48  
 Date of Maximum: 11/28/2017



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

Calibration      Sensor:            AEROSOL  
                         Cal.                        date                        1/17/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/28/2017	9:20:48	0.031
11/28/2017	9:21:48	0.028
11/28/2017	9:22:48	0.029
11/28/2017	9:23:48	0.028
11/28/2017	9:24:48	0.027
11/28/2017	9:25:48	0.027
11/28/2017	9:26:48	0.029
11/28/2017	9:27:48	0.029
11/28/2017	9:28:48	0.026
11/28/2017	9:29:48	0.025
11/28/2017	9:30:48	0.025
11/28/2017	9:31:48	0.026
11/28/2017	9:32:48	0.025
11/28/2017	9:33:48	0.025
11/28/2017	9:34:48	0.023
11/28/2017	9:35:48	0.023
11/28/2017	9:36:48	0.023
11/28/2017	9:37:48	0.024
11/28/2017	9:38:48	0.024
11/28/2017	9:39:48	0.024
11/28/2017	9:40:48	0.022
11/28/2017	9:41:48	0.022
11/28/2017	9:42:48	0.022
11/28/2017	9:43:48	0.025
11/28/2017	9:44:48	0.021
11/28/2017	9:45:48	0.023
11/28/2017	9:46:48	0.021
11/28/2017	9:47:48	0.02
11/28/2017	9:48:48	0.022
11/28/2017	9:49:48	0.02
11/28/2017	9:50:48	0.02
11/28/2017	9:51:48	0.019
11/28/2017	9:52:48	0.019
11/28/2017	9:53:48	0.019
11/28/2017	9:54:48	0.018



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

11/28/2017	9:55:48	0.024
11/28/2017	9:56:48	0.049
11/28/2017	9:57:48	0.018
11/28/2017	9:58:48	0.018
11/28/2017	9:59:48	0.018
11/28/2017	10:00:48	0.018
11/28/2017	10:01:48	0.018
11/28/2017	10:02:48	0.017
11/28/2017	10:03:48	0.015
11/28/2017	10:04:48	0.015
11/28/2017	10:05:48	0.016
11/28/2017	10:06:48	0.014
11/28/2017	10:07:48	0.017
11/28/2017	10:08:48	0.014
11/28/2017	10:09:48	0.013
11/28/2017	10:10:48	0.013
11/28/2017	10:11:48	0.018
11/28/2017	10:12:48	0.018
11/28/2017	10:13:48	0.044
11/28/2017	10:14:48	0.016
11/28/2017	10:15:48	0.013
11/28/2017	10:16:48	0.012
11/28/2017	10:17:48	0.012
11/28/2017	10:18:48	0.011
11/28/2017	10:19:48	0.012
11/28/2017	10:20:48	0.011
11/28/2017	10:21:48	0.011
11/28/2017	10:22:48	0.011
11/28/2017	10:23:48	0.011
11/28/2017	10:24:48	0.011
11/28/2017	10:25:48	0.011
11/28/2017	10:26:48	0.011
11/28/2017	10:27:48	0.011
11/28/2017	10:28:48	0.011
11/28/2017	10:29:48	0.016
11/28/2017	10:30:48	0.012
11/28/2017	10:31:48	0.009
11/28/2017	10:32:48	0.009
11/28/2017	10:33:48	0.013
11/28/2017	10:34:48	0.009

11/28/2017	10:35:48	0.009
11/28/2017	10:36:48	0.009
11/28/2017	10:37:48	0.008
11/28/2017	10:38:48	0.009
11/28/2017	10:39:48	0.008
11/28/2017	10:40:48	0.008
11/28/2017	10:41:48	0.009
11/28/2017	10:42:48	0.01
11/28/2017	10:43:48	0.013
11/28/2017	10:44:48	0.009
11/28/2017	10:45:48	0.009
11/28/2017	10:46:48	0.008
11/28/2017	10:47:48	0.008
11/28/2017	10:48:48	0.008
11/28/2017	10:49:48	0.008
11/28/2017	10:50:48	0.009
11/28/2017	10:51:48	0.009
11/28/2017	10:52:48	0.011
11/28/2017	10:53:48	0.009
11/28/2017	10:54:48	0.007
11/28/2017	10:55:48	0.008
11/28/2017	10:56:48	0.007
11/28/2017	10:57:48	0.011
11/28/2017	10:58:48	0.01
11/28/2017	10:59:48	0.007
11/28/2017	11:00:48	0.008
11/28/2017	11:01:48	0.007
11/28/2017	11:02:48	0.006
11/28/2017	11:03:48	0.006
11/28/2017	11:04:48	0.005
11/28/2017	11:05:48	0.007
11/28/2017	11:06:48	0.01
11/28/2017	11:07:48	0.008
11/28/2017	11:08:48	0.008
11/28/2017	11:09:48	0.007
11/28/2017	11:10:48	0.006
11/28/2017	11:11:48	0.005
11/28/2017	11:12:48	0.006
11/28/2017	11:13:48	0.006
11/28/2017	11:14:48	0.006

11/28/2017	11:15:48	0.005
11/28/2017	11:16:48	0.006
11/28/2017	11:17:48	0.005
11/28/2017	11:18:48	0.006
11/28/2017	11:19:48	0.005
11/28/2017	11:20:48	0.003
11/28/2017	11:21:48	0.004
11/28/2017	11:22:48	0.004
11/28/2017	11:23:48	0.004
11/28/2017	11:24:48	0.003
11/28/2017	11:25:48	0.003
11/28/2017	11:26:48	0.004
11/28/2017	11:27:48	0.005
11/28/2017	11:28:48	0.003
11/28/2017	11:29:48	0.004
11/28/2017	11:30:48	0.003
11/28/2017	11:31:48	0.002
11/28/2017	11:32:48	0.003
11/28/2017	11:33:48	0.003
11/28/2017	11:34:48	0.002
11/28/2017	11:35:48	0.003
11/28/2017	11:36:48	0.002
11/28/2017	11:37:48	0.002
11/28/2017	11:38:48	0.002
11/28/2017	11:39:48	0.002
11/28/2017	11:40:48	0.002
11/28/2017	11:41:48	0.003
11/28/2017	11:42:48	0.002
11/28/2017	11:43:48	0.002
11/28/2017	11:44:48	0.004
11/28/2017	11:45:48	0.002
11/28/2017	11:46:48	0.001
11/28/2017	11:47:48	0.002
11/28/2017	11:48:48	0.002
11/28/2017	11:49:48	0.001
11/28/2017	11:50:48	0.001
11/28/2017	11:51:48	0.002
11/28/2017	11:52:48	0.001
11/28/2017	11:53:48	0.002
11/28/2017	11:54:48	0.002

11/28/2017	11:55:48	0.002
11/28/2017	11:56:48	0.002
11/28/2017	11:57:48	0.002
11/28/2017	11:58:48	0.001
11/28/2017	11:59:48	0.001
11/28/2017	12:00:48	0.001
11/28/2017	12:01:48	0.002
11/28/2017	12:02:48	0.001
11/28/2017	12:03:48	0.001
11/28/2017	12:04:48	0.001
11/28/2017	12:05:48	0.001
11/28/2017	12:06:48	0.001
11/28/2017	12:07:48	0.001
11/28/2017	12:08:48	0.001
11/28/2017	12:09:48	0.001
11/28/2017	12:10:48	0.001
11/28/2017	12:11:48	0.002
11/28/2017	12:12:48	0.001
11/28/2017	12:13:48	0.001
11/28/2017	12:14:48	0.001
11/28/2017	12:15:48	0
11/28/2017	12:16:48	0
11/28/2017	12:17:48	0
11/28/2017	12:18:48	0
11/28/2017	12:19:48	0
11/28/2017	12:20:48	0
11/28/2017	12:21:48	0
11/28/2017	12:22:48	0
11/28/2017	12:23:48	0
11/28/2017	12:24:48	0
11/28/2017	12:25:48	0
11/28/2017	12:26:48	0
11/28/2017	12:27:48	0.001
11/28/2017	12:28:48	0.001
11/28/2017	12:29:48	0.001
11/28/2017	12:30:48	0
11/28/2017	12:31:48	0
11/28/2017	12:32:48	0
11/28/2017	12:33:48	0.001
11/28/2017	12:34:48	0.001

11/28/2017	12:35:48	0
11/28/2017	12:36:48	0
11/28/2017	12:37:48	0
11/28/2017	12:38:48	0
11/28/2017	12:39:48	0
11/28/2017	12:40:48	0.001
11/28/2017	12:41:48	0
11/28/2017	12:42:48	0
11/28/2017	12:43:48	0
11/28/2017	12:44:48	0.001
11/28/2017	12:45:48	0
11/28/2017	12:46:48	0
11/28/2017	12:47:48	0
11/28/2017	12:48:48	0
11/28/2017	12:49:48	0
11/28/2017	12:50:48	0
11/28/2017	12:51:48	0
11/28/2017	12:52:48	0
11/28/2017	12:53:48	0
11/28/2017	12:54:48	0
11/28/2017	12:55:48	0
11/28/2017	12:56:48	0
11/28/2017	12:57:48	0.001
11/28/2017	12:58:48	0
11/28/2017	12:59:48	0.009
11/28/2017	13:00:48	0.002
11/28/2017	13:01:48	0.001
11/28/2017	13:02:48	0
11/28/2017	13:03:48	0
11/28/2017	13:04:48	0
11/28/2017	13:05:48	0
11/28/2017	13:06:48	0
11/28/2017	13:07:48	0
11/28/2017	13:08:48	0.002
11/28/2017	13:09:48	0
11/28/2017	13:10:48	0
11/28/2017	13:11:48	0
11/28/2017	13:12:48	0
11/28/2017	13:13:48	0
11/28/2017	13:14:48	0





Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
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11/28/2017	13:15:48	0
11/28/2017	13:16:48	0
11/28/2017	13:17:48	0
11/28/2017	13:18:48	0
11/28/2017	13:19:48	0
11/28/2017	13:20:48	0
11/28/2017	13:21:48	0
11/28/2017	13:22:48	0
11/28/2017	13:23:48	0
11/28/2017	13:24:48	0
11/28/2017	13:25:48	0
11/28/2017	13:26:48	0
11/28/2017	13:27:48	0
11/28/2017	13:28:48	0
11/28/2017	13:29:48	0
11/28/2017	13:30:48	0
11/28/2017	13:31:48	0
11/28/2017	13:32:48	0
11/28/2017	13:33:48	0
11/28/2017	13:34:48	0
11/28/2017	13:35:48	0
11/28/2017	13:36:48	0
11/28/2017	13:37:48	0
11/28/2017	13:38:48	0
11/28/2017	13:39:48	0
11/28/2017	13:40:48	0
11/28/2017	13:41:48	0
11/28/2017	13:42:48	0
11/28/2017	13:43:48	0
11/28/2017	13:44:48	0
11/28/2017	13:45:48	0
11/28/2017	13:46:48	0
11/28/2017	13:47:48	0
11/28/2017	13:48:48	0
11/28/2017	13:49:48	0
11/28/2017	13:50:48	0
11/28/2017	13:51:48	0
11/28/2017	13:52:48	0
11/28/2017	13:53:48	0
11/28/2017	13:54:48	0



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
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11/28/2017	13:55:48	0
11/28/2017	13:56:48	0
11/28/2017	13:57:48	0
11/28/2017	13:58:48	0
11/28/2017	13:59:48	0
11/28/2017	14:00:48	0
11/28/2017	14:01:48	0
11/28/2017	14:02:48	0
11/28/2017	14:03:48	0
11/28/2017	14:04:48	0
11/28/2017	14:05:48	0
11/28/2017	14:06:48	0
11/28/2017	14:07:48	0
11/28/2017	14:08:48	0
11/28/2017	14:09:48	0
11/28/2017	14:10:48	-0.001
11/28/2017	14:11:48	-0.001
11/28/2017	14:12:48	0
11/28/2017	14:13:48	0
11/28/2017	14:14:48	0
11/28/2017	14:15:48	0
11/28/2017	14:16:48	0
11/28/2017	14:17:48	-0.001
11/28/2017	14:18:48	0
11/28/2017	14:19:48	0
11/28/2017	14:20:48	0
11/28/2017	14:21:48	0
11/28/2017	14:22:48	0
11/28/2017	14:23:48	0
11/28/2017	14:24:48	0
11/28/2017	14:25:48	0
11/28/2017	14:26:48	0
11/28/2017	14:27:48	0
11/28/2017	14:28:48	0
11/28/2017	14:29:48	0
11/28/2017	14:30:48	0
11/28/2017	14:31:48	0
11/28/2017	14:32:48	0
11/28/2017	14:33:48	0
11/28/2017	14:34:48	0



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
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11/28/2017	14:35:48	0.001
11/28/2017	14:36:48	0
11/28/2017	14:37:48	-0.001
11/28/2017	14:38:48	0
11/28/2017	14:39:48	0
11/28/2017	14:40:48	0
11/28/2017	14:41:48	0
11/28/2017	14:42:48	0
11/28/2017	14:43:48	0
11/28/2017	14:44:48	0
11/28/2017	14:45:48	0.001
11/28/2017	14:46:48	0.001

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530142611  
Test ID: 5  
Test Abbreviation: MANUAL\_005  
Start Date: 11/29/2017  
Start Time: 8:24:53  
Duration (dd:hh:mm:ss): 0:04:21:00  
Log Interval (mm:ss): 1:00  
Number of points: 261  
Notes:

Statistics Channel: AEROSOL  
Units: mg/m<sup>3</sup>  
Average: 0.026  
Minimum: 0.004  
Time of Minimum: 9:24:53  
Date of Minimum: 11/29/2017  
Maximum: 0.706  
Time of Maximum: 9:57:53  
Date of Maximum: 11/29/2017

Calibration Sensor: AEROSOL  
Cal. date 1/17/2017

Date Time AEROSOL  
MM/dd/yyyy hh:mm:ss mg/m<sup>3</sup>

11/29/2017	8:25:53	0.014
11/29/2017	8:26:53	0.012
11/29/2017	8:27:53	0.019
11/29/2017	8:28:53	0.012
11/29/2017	8:29:53	0.012
11/29/2017	8:30:53	0.015
11/29/2017	8:31:53	0.013
11/29/2017	8:32:53	0.011
11/29/2017	8:33:53	0.011
11/29/2017	8:34:53	0.013
11/29/2017	8:35:53	0.009
11/29/2017	8:36:53	0.01
11/29/2017	8:37:53	0.01
11/29/2017	8:38:53	0.01
11/29/2017	8:39:53	0.008
11/29/2017	8:40:53	0.008
11/29/2017	8:41:53	0.009
11/29/2017	8:42:53	0.017
11/29/2017	8:43:53	0.011
11/29/2017	8:44:53	0.009
11/29/2017	8:45:53	0.012
11/29/2017	8:46:53	0.008
11/29/2017	8:47:53	0.017
11/29/2017	8:48:53	0.02
11/29/2017	8:49:53	0.012
11/29/2017	8:50:53	0.008
11/29/2017	8:51:53	0.008
11/29/2017	8:52:53	0.008
11/29/2017	8:53:53	0.008
11/29/2017	8:54:53	0.008
11/29/2017	8:55:53	0.014
11/29/2017	8:56:53	0.008
11/29/2017	8:57:53	0.012
11/29/2017	8:58:53	0.01
11/29/2017	8:59:53	0.02
11/29/2017	9:00:53	0.011
11/29/2017	9:01:53	0.01
11/29/2017	9:02:53	0.009
11/29/2017	9:03:53	0.015
11/29/2017	9:04:53	0.022

11/29/2017	9:05:53	0.009
11/29/2017	9:06:53	0.03
11/29/2017	9:07:53	0.013
11/29/2017	9:08:53	0.012
11/29/2017	9:09:53	0.008
11/29/2017	9:10:53	0.021
11/29/2017	9:11:53	0.017
11/29/2017	9:12:53	0.015
11/29/2017	9:13:53	0.016
11/29/2017	9:14:53	0.018
11/29/2017	9:15:53	0.008
11/29/2017	9:16:53	0.008
11/29/2017	9:17:53	0.007
11/29/2017	9:18:53	0.03
11/29/2017	9:19:53	0.007
11/29/2017	9:20:53	0.046
11/29/2017	9:21:53	0.01
11/29/2017	9:22:53	0.01
11/29/2017	9:23:53	0.01
11/29/2017	9:24:53	0.004
11/29/2017	9:25:53	0.004
11/29/2017	9:26:53	0.022
11/29/2017	9:27:53	0.024
11/29/2017	9:28:53	0.011
11/29/2017	9:29:53	0.02
11/29/2017	9:30:53	0.016
11/29/2017	9:31:53	0.017
11/29/2017	9:32:53	0.029
11/29/2017	9:33:53	0.008
11/29/2017	9:34:53	0.005
11/29/2017	9:35:53	0.032
11/29/2017	9:36:53	0.023
11/29/2017	9:37:53	0.014
11/29/2017	9:38:53	0.012
11/29/2017	9:39:53	0.016
11/29/2017	9:40:53	0.011
11/29/2017	9:41:53	0.015
11/29/2017	9:42:53	0.016
11/29/2017	9:43:53	0.035
11/29/2017	9:44:53	0.131

11/29/2017	9:45:53	0.108
11/29/2017	9:46:53	0.028
11/29/2017	9:47:53	0.023
11/29/2017	9:48:53	0.034
11/29/2017	9:49:53	0.043
11/29/2017	9:50:53	0.054
11/29/2017	9:51:53	0.042
11/29/2017	9:52:53	0.055
11/29/2017	9:53:53	0.067
11/29/2017	9:54:53	0.082
11/29/2017	9:55:53	0.244
11/29/2017	9:56:53	0.425
11/29/2017	9:57:53	0.706
11/29/2017	9:58:53	0.51
11/29/2017	9:59:53	0.062
11/29/2017	10:00:53	0.017
11/29/2017	10:01:53	0.007
11/29/2017	10:02:53	0.004
11/29/2017	10:03:53	0.005
11/29/2017	10:04:53	0.005
11/29/2017	10:05:53	0.007
11/29/2017	10:06:53	0.014
11/29/2017	10:07:53	0.025
11/29/2017	10:08:53	0.022
11/29/2017	10:09:53	0.023
11/29/2017	10:10:53	0.032
11/29/2017	10:11:53	0.016
11/29/2017	10:12:53	0.022
11/29/2017	10:13:53	0.027
11/29/2017	10:14:53	0.041
11/29/2017	10:15:53	0.052
11/29/2017	10:16:53	0.032
11/29/2017	10:17:53	0.011
11/29/2017	10:18:53	0.022
11/29/2017	10:19:53	0.059
11/29/2017	10:20:53	0.023
11/29/2017	10:21:53	0.02
11/29/2017	10:22:53	0.016
11/29/2017	10:23:53	0.057
11/29/2017	10:24:53	0.039

11/29/2017	10:25:53	0.073
11/29/2017	10:26:53	0.01
11/29/2017	10:27:53	0.007
11/29/2017	10:28:53	0.01
11/29/2017	10:29:53	0.017
11/29/2017	10:30:53	0.013
11/29/2017	10:31:53	0.035
11/29/2017	10:32:53	0.028
11/29/2017	10:33:53	0.036
11/29/2017	10:34:53	0.048
11/29/2017	10:35:53	0.038
11/29/2017	10:36:53	0.073
11/29/2017	10:37:53	0.032
11/29/2017	10:38:53	0.01
11/29/2017	10:39:53	0.031
11/29/2017	10:40:53	0.027
11/29/2017	10:41:53	0.022
11/29/2017	10:42:53	0.014
11/29/2017	10:43:53	0.034
11/29/2017	10:44:53	0.004
11/29/2017	10:45:53	0.007
11/29/2017	10:46:53	0.013
11/29/2017	10:47:53	0.082
11/29/2017	10:48:53	0.031
11/29/2017	10:49:53	0.044
11/29/2017	10:50:53	0.047
11/29/2017	10:51:53	0.031
11/29/2017	10:52:53	0.044
11/29/2017	10:53:53	0.029
11/29/2017	10:54:53	0.022
11/29/2017	10:55:53	0.022
11/29/2017	10:56:53	0.033
11/29/2017	10:57:53	0.023
11/29/2017	10:58:53	0.019
11/29/2017	10:59:53	0.026
11/29/2017	11:00:53	0.012
11/29/2017	11:01:53	0.019
11/29/2017	11:02:53	0.024
11/29/2017	11:03:53	0.019
11/29/2017	11:04:53	0.027



11/29/2017	11:05:53	0.014
11/29/2017	11:06:53	0.028
11/29/2017	11:07:53	0.028
11/29/2017	11:08:53	0.032
11/29/2017	11:09:53	0.039
11/29/2017	11:10:53	0.036
11/29/2017	11:11:53	0.022
11/29/2017	11:12:53	0.037
11/29/2017	11:13:53	0.063
11/29/2017	11:14:53	0.07
11/29/2017	11:15:53	0.058
11/29/2017	11:16:53	0.041
11/29/2017	11:17:53	0.02
11/29/2017	11:18:53	0.026
11/29/2017	11:19:53	0.025
11/29/2017	11:20:53	0.019
11/29/2017	11:21:53	0.021
11/29/2017	11:22:53	0.014
11/29/2017	11:23:53	0.036
11/29/2017	11:24:53	0.031
11/29/2017	11:25:53	0.039
11/29/2017	11:26:53	0.027
11/29/2017	11:27:53	0.009
11/29/2017	11:28:53	0.01
11/29/2017	11:29:53	0.022
11/29/2017	11:30:53	0.021
11/29/2017	11:31:53	0.015
11/29/2017	11:32:53	0.006
11/29/2017	11:33:53	0.004
11/29/2017	11:34:53	0.009
11/29/2017	11:35:53	0.005
11/29/2017	11:36:53	0.004
11/29/2017	11:37:53	0.005
11/29/2017	11:38:53	0.004
11/29/2017	11:39:53	0.005
11/29/2017	11:40:53	0.005
11/29/2017	11:41:53	0.005
11/29/2017	11:42:53	0.005
11/29/2017	11:43:53	0.006
11/29/2017	11:44:53	0.007

11/29/2017	11:45:53	0.005
11/29/2017	11:46:53	0.005
11/29/2017	11:47:53	0.004
11/29/2017	11:48:53	0.004
11/29/2017	11:49:53	0.005
11/29/2017	11:50:53	0.007
11/29/2017	11:51:53	0.009
11/29/2017	11:52:53	0.006
11/29/2017	11:53:53	0.007
11/29/2017	11:54:53	0.006
11/29/2017	11:55:53	0.009
11/29/2017	11:56:53	0.005
11/29/2017	11:57:53	0.005
11/29/2017	11:58:53	0.005
11/29/2017	11:59:53	0.005
11/29/2017	12:00:53	0.005
11/29/2017	12:01:53	0.006
11/29/2017	12:02:53	0.005
11/29/2017	12:03:53	0.005
11/29/2017	12:04:53	0.005
11/29/2017	12:05:53	0.004
11/29/2017	12:06:53	0.004
11/29/2017	12:07:53	0.004
11/29/2017	12:08:53	0.005
11/29/2017	12:09:53	0.005
11/29/2017	12:10:53	0.004
11/29/2017	12:11:53	0.004
11/29/2017	12:12:53	0.006
11/29/2017	12:13:53	0.004
11/29/2017	12:14:53	0.006
11/29/2017	12:15:53	0.007
11/29/2017	12:16:53	0.007
11/29/2017	12:17:53	0.006
11/29/2017	12:18:53	0.005
11/29/2017	12:19:53	0.005
11/29/2017	12:20:53	0.005
11/29/2017	12:21:53	0.006
11/29/2017	12:22:53	0.005
11/29/2017	12:23:53	0.006
11/29/2017	12:24:53	0.006



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
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11/29/2017	12:25:53	0.006
11/29/2017	12:26:53	0.006
11/29/2017	12:27:53	0.005
11/29/2017	12:28:53	0.006
11/29/2017	12:29:53	0.005
11/29/2017	12:30:53	0.005
11/29/2017	12:31:53	0.005
11/29/2017	12:32:53	0.005
11/29/2017	12:33:53	0.005
11/29/2017	12:34:53	0.007
11/29/2017	12:35:53	0.006
11/29/2017	12:36:53	0.004
11/29/2017	12:37:53	0.006
11/29/2017	12:38:53	0.006
11/29/2017	12:39:53	0.006
11/29/2017	12:40:53	0.007
11/29/2017	12:41:53	0.005
11/29/2017	12:42:53	0.006
11/29/2017	12:43:53	0.007
11/29/2017	12:44:53	0.007
11/29/2017	12:45:53	0.008

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530142611  
Test ID: 6  
Test Abbreviation: MANUAL\_006  
Start Date: 11/29/2017  
Start Time: 13:12:57  
Duration (dd:hh:mm:ss): 0:02:38:00  
Log Interval (mm:ss): 1:00  
Number of points: 158  
Notes:

Statistics Channel: AEROSOL  
Units: mg/m<sup>3</sup>  
Average: 0.014  
Minimum: 0.004  
Time of Minimum: 13:47:57  
Date of Minimum: 11/29/2017



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
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Maximum: 0.67  
Time of Maximum: 14:52:57  
Date of Maximum: 11/29/2017

Calibration Sensor: AEROSOL  
Cal. date 1/17/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/29/2017	13:13:57	0.009
11/29/2017	13:14:57	0.005
11/29/2017	13:15:57	0.006
11/29/2017	13:16:57	0.006
11/29/2017	13:17:57	0.008
11/29/2017	13:18:57	0.006
11/29/2017	13:19:57	0.006
11/29/2017	13:20:57	0.005
11/29/2017	13:21:57	0.006
11/29/2017	13:22:57	0.006
11/29/2017	13:23:57	0.006
11/29/2017	13:24:57	0.006
11/29/2017	13:25:57	0.006
11/29/2017	13:26:57	0.007
11/29/2017	13:27:57	0.006
11/29/2017	13:28:57	0.007
11/29/2017	13:29:57	0.006
11/29/2017	13:30:57	0.006
11/29/2017	13:31:57	0.006
11/29/2017	13:32:57	0.006
11/29/2017	13:33:57	0.005
11/29/2017	13:34:57	0.006
11/29/2017	13:35:57	0.006
11/29/2017	13:36:57	0.011
11/29/2017	13:37:57	0.005
11/29/2017	13:38:57	0.006
11/29/2017	13:39:57	0.005
11/29/2017	13:40:57	0.005
11/29/2017	13:41:57	0.007
11/29/2017	13:42:57	0.005
11/29/2017	13:43:57	0.006



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
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11/29/2017	13:44:57	0.007
11/29/2017	13:45:57	0.005
11/29/2017	13:46:57	0.005
11/29/2017	13:47:57	0.004
11/29/2017	13:48:57	0.005
11/29/2017	13:49:57	0.005
11/29/2017	13:50:57	0.006
11/29/2017	13:51:57	0.006
11/29/2017	13:52:57	0.008
11/29/2017	13:53:57	0.008
11/29/2017	13:54:57	0.006
11/29/2017	13:55:57	0.004
11/29/2017	13:56:57	0.005
11/29/2017	13:57:57	0.005
11/29/2017	13:58:57	0.005
11/29/2017	13:59:57	0.005
11/29/2017	14:00:57	0.005
11/29/2017	14:01:57	0.005
11/29/2017	14:02:57	0.005
11/29/2017	14:03:57	0.006
11/29/2017	14:04:57	0.005
11/29/2017	14:05:57	0.005
11/29/2017	14:06:57	0.006
11/29/2017	14:07:57	0.005
11/29/2017	14:08:57	0.005
11/29/2017	14:09:57	0.006
11/29/2017	14:10:57	0.005
11/29/2017	14:11:57	0.006
11/29/2017	14:12:57	0.006
11/29/2017	14:13:57	0.006
11/29/2017	14:14:57	0.006
11/29/2017	14:15:57	0.005
11/29/2017	14:16:57	0.005
11/29/2017	14:17:57	0.005
11/29/2017	14:18:57	0.005
11/29/2017	14:19:57	0.005
11/29/2017	14:20:57	0.005
11/29/2017	14:21:57	0.005
11/29/2017	14:22:57	0.006
11/29/2017	14:23:57	0.006



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
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11/29/2017	14:24:57	0.005
11/29/2017	14:25:57	0.006
11/29/2017	14:26:57	0.006
11/29/2017	14:27:57	0.006
11/29/2017	14:28:57	0.006
11/29/2017	14:29:57	0.006
11/29/2017	14:30:57	0.006
11/29/2017	14:31:57	0.006
11/29/2017	14:32:57	0.006
11/29/2017	14:33:57	0.006
11/29/2017	14:34:57	0.006
11/29/2017	14:35:57	0.006
11/29/2017	14:36:57	0.005
11/29/2017	14:37:57	0.005
11/29/2017	14:38:57	0.005
11/29/2017	14:39:57	0.005
11/29/2017	14:40:57	0.005
11/29/2017	14:41:57	0.007
11/29/2017	14:42:57	0.006
11/29/2017	14:43:57	0.051
11/29/2017	14:44:57	0.101
11/29/2017	14:45:57	0.015
11/29/2017	14:46:57	0.013
11/29/2017	14:47:57	0.012
11/29/2017	14:48:57	0.011
11/29/2017	14:49:57	0.015
11/29/2017	14:50:57	0.027
11/29/2017	14:51:57	0.022
11/29/2017	14:52:57	0.67
11/29/2017	14:53:57	0.073
11/29/2017	14:54:57	0.042
11/29/2017	14:55:57	0.034
11/29/2017	14:56:57	0.029
11/29/2017	14:57:57	0.028
11/29/2017	14:58:57	0.022
11/29/2017	14:59:57	0.019
11/29/2017	15:00:57	0.018
11/29/2017	15:01:57	0.022
11/29/2017	15:02:57	0.026
11/29/2017	15:03:57	0.039

11/29/2017	15:04:57	0.046
11/29/2017	15:05:57	0.02
11/29/2017	15:06:57	0.014
11/29/2017	15:07:57	0.013
11/29/2017	15:08:57	0.011
11/29/2017	15:09:57	0.009
11/29/2017	15:10:57	0.012
11/29/2017	15:11:57	0.018
11/29/2017	15:12:57	0.013
11/29/2017	15:13:57	0.009
11/29/2017	15:14:57	0.008
11/29/2017	15:15:57	0.007
11/29/2017	15:16:57	0.008
11/29/2017	15:17:57	0.006
11/29/2017	15:18:57	0.008
11/29/2017	15:19:57	0.009
11/29/2017	15:20:57	0.007
11/29/2017	15:21:57	0.006
11/29/2017	15:22:57	0.007
11/29/2017	15:23:57	0.005
11/29/2017	15:24:57	0.005
11/29/2017	15:25:57	0.004
11/29/2017	15:26:57	0.007
11/29/2017	15:27:57	0.007
11/29/2017	15:28:57	0.007
11/29/2017	15:29:57	0.005
11/29/2017	15:30:57	0.008
11/29/2017	15:31:57	0.008
11/29/2017	15:32:57	0.007
11/29/2017	15:33:57	0.009
11/29/2017	15:34:57	0.011
11/29/2017	15:35:57	0.012
11/29/2017	15:36:57	0.011
11/29/2017	15:37:57	0.01
11/29/2017	15:38:57	0.008
11/29/2017	15:39:57	0.006
11/29/2017	15:40:57	0.006
11/29/2017	15:41:57	0.008
11/29/2017	15:42:57	0.014
11/29/2017	15:43:57	0.013





Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
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11/29/2017	15:44:57	0.014
11/29/2017	15:45:57	0.012
11/29/2017	15:46:57	0.005
11/29/2017	15:47:57	0.004
11/29/2017	15:48:57	0.004
11/29/2017	15:49:57	0.005
11/29/2017	15:50:57	0.013

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530142611  
Test ID: 7  
Test Abbreviation: MANUAL\_007  
Start Date: 11/30/2017  
Start Time: 8:31:10  
Duration (dd:hh:mm:ss): 0:06:24:00  
Log Interval (mm:ss): 1:00  
Number of points: 384  
Notes:

Statistics Channel: AEROSOL  
Units: mg/m<sup>3</sup>  
Average: 0.017  
Minimum: 0.008  
Time of Minimum: 9:39:10  
Date of Minimum: 11/30/2017  
Maximum: 0.084  
Time of Maximum: 12:45:10  
Date of Maximum: 11/30/2017

Calibration Sensor: AEROSOL  
Cal. date: 1/17/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/30/2017	8:32:10	0.038
11/30/2017	8:33:10	0.017
11/30/2017	8:34:10	0.02
11/30/2017	8:35:10	0.017
11/30/2017	8:36:10	0.014

11/30/2017	8:37:10	0.012
11/30/2017	8:38:10	0.012
11/30/2017	8:39:10	0.013
11/30/2017	8:40:10	0.015
11/30/2017	8:41:10	0.019
11/30/2017	8:42:10	0.015
11/30/2017	8:43:10	0.017
11/30/2017	8:44:10	0.016
11/30/2017	8:45:10	0.015
11/30/2017	8:46:10	0.017
11/30/2017	8:47:10	0.016
11/30/2017	8:48:10	0.015
11/30/2017	8:49:10	0.015
11/30/2017	8:50:10	0.016
11/30/2017	8:51:10	0.016
11/30/2017	8:52:10	0.017
11/30/2017	8:53:10	0.017
11/30/2017	8:54:10	0.017
11/30/2017	8:55:10	0.017
11/30/2017	8:56:10	0.022
11/30/2017	8:57:10	0.016
11/30/2017	8:58:10	0.018
11/30/2017	8:59:10	0.017
11/30/2017	9:00:10	0.018
11/30/2017	9:01:10	0.025
11/30/2017	9:02:10	0.026
11/30/2017	9:03:10	0.02
11/30/2017	9:04:10	0.018
11/30/2017	9:05:10	0.026
11/30/2017	9:06:10	0.02
11/30/2017	9:07:10	0.034
11/30/2017	9:08:10	0.019
11/30/2017	9:09:10	0.019
11/30/2017	9:10:10	0.018
11/30/2017	9:11:10	0.019
11/30/2017	9:12:10	0.02
11/30/2017	9:13:10	0.033
11/30/2017	9:14:10	0.02
11/30/2017	9:15:10	0.019
11/30/2017	9:16:10	0.02

11/30/2017	9:17:10	0.02
11/30/2017	9:18:10	0.019
11/30/2017	9:19:10	0.024
11/30/2017	9:20:10	0.026
11/30/2017	9:21:10	0.021
11/30/2017	9:22:10	0.018
11/30/2017	9:23:10	0.018
11/30/2017	9:24:10	0.016
11/30/2017	9:25:10	0.016
11/30/2017	9:26:10	0.017
11/30/2017	9:27:10	0.021
11/30/2017	9:28:10	0.016
11/30/2017	9:29:10	0.015
11/30/2017	9:30:10	0.014
11/30/2017	9:31:10	0.013
11/30/2017	9:32:10	0.012
11/30/2017	9:33:10	0.012
11/30/2017	9:34:10	0.011
11/30/2017	9:35:10	0.01
11/30/2017	9:36:10	0.01
11/30/2017	9:37:10	0.009
11/30/2017	9:38:10	0.009
11/30/2017	9:39:10	0.008
11/30/2017	9:40:10	0.01
11/30/2017	9:41:10	0.012
11/30/2017	9:42:10	0.012
11/30/2017	9:43:10	0.013
11/30/2017	9:44:10	0.012
11/30/2017	9:45:10	0.019
11/30/2017	9:46:10	0.017
11/30/2017	9:47:10	0.014
11/30/2017	9:48:10	0.014
11/30/2017	9:49:10	0.013
11/30/2017	9:50:10	0.013
11/30/2017	9:51:10	0.015
11/30/2017	9:52:10	0.013
11/30/2017	9:53:10	0.011
11/30/2017	9:54:10	0.011
11/30/2017	9:55:10	0.011
11/30/2017	9:56:10	0.011

11/30/2017	9:57:10	0.011
11/30/2017	9:58:10	0.01
11/30/2017	9:59:10	0.01
11/30/2017	10:00:10	0.011
11/30/2017	10:01:10	0.011
11/30/2017	10:02:10	0.01
11/30/2017	10:03:10	0.015
11/30/2017	10:04:10	0.067
11/30/2017	10:05:10	0.018
11/30/2017	10:06:10	0.016
11/30/2017	10:07:10	0.016
11/30/2017	10:08:10	0.015
11/30/2017	10:09:10	0.018
11/30/2017	10:10:10	0.017
11/30/2017	10:11:10	0.017
11/30/2017	10:12:10	0.016
11/30/2017	10:13:10	0.016
11/30/2017	10:14:10	0.015
11/30/2017	10:15:10	0.014
11/30/2017	10:16:10	0.014
11/30/2017	10:17:10	0.015
11/30/2017	10:18:10	0.014
11/30/2017	10:19:10	0.014
11/30/2017	10:20:10	0.015
11/30/2017	10:21:10	0.015
11/30/2017	10:22:10	0.015
11/30/2017	10:23:10	0.015
11/30/2017	10:24:10	0.015
11/30/2017	10:25:10	0.014
11/30/2017	10:26:10	0.015
11/30/2017	10:27:10	0.015
11/30/2017	10:28:10	0.014
11/30/2017	10:29:10	0.014
11/30/2017	10:30:10	0.016
11/30/2017	10:31:10	0.014
11/30/2017	10:32:10	0.014
11/30/2017	10:33:10	0.014
11/30/2017	10:34:10	0.014
11/30/2017	10:35:10	0.014
11/30/2017	10:36:10	0.014

11/30/2017	10:37:10	0.013
11/30/2017	10:38:10	0.013
11/30/2017	10:39:10	0.013
11/30/2017	10:40:10	0.013
11/30/2017	10:41:10	0.013
11/30/2017	10:42:10	0.013
11/30/2017	10:43:10	0.013
11/30/2017	10:44:10	0.013
11/30/2017	10:45:10	0.014
11/30/2017	10:46:10	0.014
11/30/2017	10:47:10	0.013
11/30/2017	10:48:10	0.013
11/30/2017	10:49:10	0.014
11/30/2017	10:50:10	0.013
11/30/2017	10:51:10	0.013
11/30/2017	10:52:10	0.013
11/30/2017	10:53:10	0.014
11/30/2017	10:54:10	0.013
11/30/2017	10:55:10	0.013
11/30/2017	10:56:10	0.013
11/30/2017	10:57:10	0.013
11/30/2017	10:58:10	0.013
11/30/2017	10:59:10	0.012
11/30/2017	11:00:10	0.012
11/30/2017	11:01:10	0.012
11/30/2017	11:02:10	0.013
11/30/2017	11:03:10	0.013
11/30/2017	11:04:10	0.013
11/30/2017	11:05:10	0.014
11/30/2017	11:06:10	0.014
11/30/2017	11:07:10	0.013
11/30/2017	11:08:10	0.014
11/30/2017	11:09:10	0.014
11/30/2017	11:10:10	0.014
11/30/2017	11:11:10	0.014
11/30/2017	11:12:10	0.014
11/30/2017	11:13:10	0.014
11/30/2017	11:14:10	0.014
11/30/2017	11:15:10	0.014
11/30/2017	11:16:10	0.015

11/30/2017	11:17:10	0.015
11/30/2017	11:18:10	0.015
11/30/2017	11:19:10	0.016
11/30/2017	11:20:10	0.016
11/30/2017	11:21:10	0.015
11/30/2017	11:22:10	0.015
11/30/2017	11:23:10	0.015
11/30/2017	11:24:10	0.016
11/30/2017	11:25:10	0.016
11/30/2017	11:26:10	0.016
11/30/2017	11:27:10	0.016
11/30/2017	11:28:10	0.016
11/30/2017	11:29:10	0.015
11/30/2017	11:30:10	0.016
11/30/2017	11:31:10	0.017
11/30/2017	11:32:10	0.017
11/30/2017	11:33:10	0.017
11/30/2017	11:34:10	0.018
11/30/2017	11:35:10	0.017
11/30/2017	11:36:10	0.016
11/30/2017	11:37:10	0.016
11/30/2017	11:38:10	0.016
11/30/2017	11:39:10	0.016
11/30/2017	11:40:10	0.017
11/30/2017	11:41:10	0.016
11/30/2017	11:42:10	0.017
11/30/2017	11:43:10	0.016
11/30/2017	11:44:10	0.016
11/30/2017	11:45:10	0.016
11/30/2017	11:46:10	0.016
11/30/2017	11:47:10	0.015
11/30/2017	11:48:10	0.015
11/30/2017	11:49:10	0.015
11/30/2017	11:50:10	0.015
11/30/2017	11:51:10	0.015
11/30/2017	11:52:10	0.015
11/30/2017	11:53:10	0.015
11/30/2017	11:54:10	0.015
11/30/2017	11:55:10	0.014
11/30/2017	11:56:10	0.014

11/30/2017	11:57:10	0.014
11/30/2017	11:58:10	0.014
11/30/2017	11:59:10	0.014
11/30/2017	12:00:10	0.014
11/30/2017	12:01:10	0.014
11/30/2017	12:02:10	0.014
11/30/2017	12:03:10	0.014
11/30/2017	12:04:10	0.014
11/30/2017	12:05:10	0.014
11/30/2017	12:06:10	0.014
11/30/2017	12:07:10	0.014
11/30/2017	12:08:10	0.014
11/30/2017	12:09:10	0.014
11/30/2017	12:10:10	0.014
11/30/2017	12:11:10	0.014
11/30/2017	12:12:10	0.015
11/30/2017	12:13:10	0.014
11/30/2017	12:14:10	0.015
11/30/2017	12:15:10	0.015
11/30/2017	12:16:10	0.015
11/30/2017	12:17:10	0.015
11/30/2017	12:18:10	0.015
11/30/2017	12:19:10	0.015
11/30/2017	12:20:10	0.015
11/30/2017	12:21:10	0.015
11/30/2017	12:22:10	0.015
11/30/2017	12:23:10	0.016
11/30/2017	12:24:10	0.016
11/30/2017	12:25:10	0.016
11/30/2017	12:26:10	0.016
11/30/2017	12:27:10	0.016
11/30/2017	12:28:10	0.016
11/30/2017	12:29:10	0.016
11/30/2017	12:30:10	0.016
11/30/2017	12:31:10	0.016
11/30/2017	12:32:10	0.016
11/30/2017	12:33:10	0.016
11/30/2017	12:34:10	0.016
11/30/2017	12:35:10	0.016
11/30/2017	12:36:10	0.018



11/30/2017	12:37:10	0.019
11/30/2017	12:38:10	0.021
11/30/2017	12:39:10	0.017
11/30/2017	12:40:10	0.017
11/30/2017	12:41:10	0.017
11/30/2017	12:42:10	0.016
11/30/2017	12:43:10	0.016
11/30/2017	12:44:10	0.016
11/30/2017	12:45:10	0.084
11/30/2017	12:46:10	0.016
11/30/2017	12:47:10	0.016
11/30/2017	12:48:10	0.018
11/30/2017	12:49:10	0.017
11/30/2017	12:50:10	0.017
11/30/2017	12:51:10	0.017
11/30/2017	12:52:10	0.017
11/30/2017	12:53:10	0.017
11/30/2017	12:54:10	0.018
11/30/2017	12:55:10	0.017
11/30/2017	12:56:10	0.017
11/30/2017	12:57:10	0.017
11/30/2017	12:58:10	0.019
11/30/2017	12:59:10	0.018
11/30/2017	13:00:10	0.017
11/30/2017	13:01:10	0.017
11/30/2017	13:02:10	0.017
11/30/2017	13:03:10	0.017
11/30/2017	13:04:10	0.016
11/30/2017	13:05:10	0.017
11/30/2017	13:06:10	0.017
11/30/2017	13:07:10	0.017
11/30/2017	13:08:10	0.016
11/30/2017	13:09:10	0.016
11/30/2017	13:10:10	0.015
11/30/2017	13:11:10	0.016
11/30/2017	13:12:10	0.017
11/30/2017	13:13:10	0.017
11/30/2017	13:14:10	0.017
11/30/2017	13:15:10	0.019
11/30/2017	13:16:10	0.017

11/30/2017	13:17:10	0.017
11/30/2017	13:18:10	0.018
11/30/2017	13:19:10	0.017
11/30/2017	13:20:10	0.016
11/30/2017	13:21:10	0.017
11/30/2017	13:22:10	0.016
11/30/2017	13:23:10	0.017
11/30/2017	13:24:10	0.018
11/30/2017	13:25:10	0.017
11/30/2017	13:26:10	0.017
11/30/2017	13:27:10	0.018
11/30/2017	13:28:10	0.017
11/30/2017	13:29:10	0.017
11/30/2017	13:30:10	0.017
11/30/2017	13:31:10	0.017
11/30/2017	13:32:10	0.017
11/30/2017	13:33:10	0.017
11/30/2017	13:34:10	0.017
11/30/2017	13:35:10	0.018
11/30/2017	13:36:10	0.018
11/30/2017	13:37:10	0.019
11/30/2017	13:38:10	0.019
11/30/2017	13:39:10	0.021
11/30/2017	13:40:10	0.019
11/30/2017	13:41:10	0.019
11/30/2017	13:42:10	0.019
11/30/2017	13:43:10	0.019
11/30/2017	13:44:10	0.019
11/30/2017	13:45:10	0.02
11/30/2017	13:46:10	0.02
11/30/2017	13:47:10	0.019
11/30/2017	13:48:10	0.019
11/30/2017	13:49:10	0.02
11/30/2017	13:50:10	0.019
11/30/2017	13:51:10	0.02
11/30/2017	13:52:10	0.02
11/30/2017	13:53:10	0.024
11/30/2017	13:54:10	0.023
11/30/2017	13:55:10	0.024
11/30/2017	13:56:10	0.023

11/30/2017	13:57:10	0.023
11/30/2017	13:58:10	0.023
11/30/2017	13:59:10	0.023
11/30/2017	14:00:10	0.021
11/30/2017	14:01:10	0.02
11/30/2017	14:02:10	0.02
11/30/2017	14:03:10	0.022
11/30/2017	14:04:10	0.02
11/30/2017	14:05:10	0.02
11/30/2017	14:06:10	0.02
11/30/2017	14:07:10	0.019
11/30/2017	14:08:10	0.019
11/30/2017	14:09:10	0.021
11/30/2017	14:10:10	0.02
11/30/2017	14:11:10	0.02
11/30/2017	14:12:10	0.02
11/30/2017	14:13:10	0.019
11/30/2017	14:14:10	0.019
11/30/2017	14:15:10	0.019
11/30/2017	14:16:10	0.018
11/30/2017	14:17:10	0.019
11/30/2017	14:18:10	0.019
11/30/2017	14:19:10	0.018
11/30/2017	14:20:10	0.019
11/30/2017	14:21:10	0.019
11/30/2017	14:22:10	0.019
11/30/2017	14:23:10	0.018
11/30/2017	14:24:10	0.018
11/30/2017	14:25:10	0.019
11/30/2017	14:26:10	0.019
11/30/2017	14:27:10	0.019
11/30/2017	14:28:10	0.019
11/30/2017	14:29:10	0.019
11/30/2017	14:30:10	0.019
11/30/2017	14:31:10	0.019
11/30/2017	14:32:10	0.02
11/30/2017	14:33:10	0.019
11/30/2017	14:34:10	0.02
11/30/2017	14:35:10	0.02
11/30/2017	14:36:10	0.02



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

11/30/2017	14:37:10	0.019
11/30/2017	14:38:10	0.019
11/30/2017	14:39:10	0.019
11/30/2017	14:40:10	0.019
11/30/2017	14:41:10	0.02
11/30/2017	14:42:10	0.02
11/30/2017	14:43:10	0.02
11/30/2017	14:44:10	0.019
11/30/2017	14:45:10	0.02
11/30/2017	14:46:10	0.022
11/30/2017	14:47:10	0.023
11/30/2017	14:48:10	0.021
11/30/2017	14:49:10	0.021
11/30/2017	14:50:10	0.022
11/30/2017	14:51:10	0.022
11/30/2017	14:52:10	0.021
11/30/2017	14:53:10	0.022
11/30/2017	14:54:10	0.024
11/30/2017	14:55:10	0.027

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530142611  
Test ID: 8  
Test Abbreviation: MANUAL\_008  
Start Date: 12/1/2017  
Start Time: 8:54:37  
Duration (dd:hh:mm:ss): 0:06:21:00  
Log Interval (mm:ss): 1:00  
Number of points: 381  
Notes:

Statistics Channel: AEROSOL  
Units: mg/m<sup>3</sup>  
Average: 0.006  
Minimum: 0.003  
Time of Minimum: 9:48:37  
Date of Minimum: 12/1/2017  
Maximum: 0.059  
Time of Maximum: 12:34:37



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

Date of Maximum: 12/1/2017

Calibration Sensor: AEROSOL  
Cal. date 1/17/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
12/1/2017	8:55:37	0.005
12/1/2017	8:56:37	0.005
12/1/2017	8:57:37	0.005
12/1/2017	8:58:37	0.004
12/1/2017	8:59:37	0.004
12/1/2017	9:00:37	0.005
12/1/2017	9:01:37	0.004
12/1/2017	9:02:37	0.004
12/1/2017	9:03:37	0.004
12/1/2017	9:04:37	0.004
12/1/2017	9:05:37	0.005
12/1/2017	9:06:37	0.006
12/1/2017	9:07:37	0.005
12/1/2017	9:08:37	0.005
12/1/2017	9:09:37	0.005
12/1/2017	9:10:37	0.005
12/1/2017	9:11:37	0.005
12/1/2017	9:12:37	0.006
12/1/2017	9:13:37	0.007
12/1/2017	9:14:37	0.006
12/1/2017	9:15:37	0.006
12/1/2017	9:16:37	0.006
12/1/2017	9:17:37	0.005
12/1/2017	9:18:37	0.005
12/1/2017	9:19:37	0.007
12/1/2017	9:20:37	0.006
12/1/2017	9:21:37	0.004
12/1/2017	9:22:37	0.006
12/1/2017	9:23:37	0.005
12/1/2017	9:24:37	0.005
12/1/2017	9:25:37	0.005
12/1/2017	9:26:37	0.004
12/1/2017	9:27:37	0.006

12/1/2017	9:28:37	0.01
12/1/2017	9:29:37	0.005
12/1/2017	9:30:37	0.004
12/1/2017	9:31:37	0.004
12/1/2017	9:32:37	0.004
12/1/2017	9:33:37	0.004
12/1/2017	9:34:37	0.004
12/1/2017	9:35:37	0.004
12/1/2017	9:36:37	0.005
12/1/2017	9:37:37	0.007
12/1/2017	9:38:37	0.005
12/1/2017	9:39:37	0.005
12/1/2017	9:40:37	0.005
12/1/2017	9:41:37	0.004
12/1/2017	9:42:37	0.005
12/1/2017	9:43:37	0.005
12/1/2017	9:44:37	0.004
12/1/2017	9:45:37	0.004
12/1/2017	9:46:37	0.004
12/1/2017	9:47:37	0.004
12/1/2017	9:48:37	0.003
12/1/2017	9:49:37	0.006
12/1/2017	9:50:37	0.005
12/1/2017	9:51:37	0.005
12/1/2017	9:52:37	0.004
12/1/2017	9:53:37	0.005
12/1/2017	9:54:37	0.005
12/1/2017	9:55:37	0.004
12/1/2017	9:56:37	0.004
12/1/2017	9:57:37	0.003
12/1/2017	9:58:37	0.003
12/1/2017	9:59:37	0.004
12/1/2017	10:00:37	0.004
12/1/2017	10:01:37	0.004
12/1/2017	10:02:37	0.004
12/1/2017	10:03:37	0.024
12/1/2017	10:04:37	0.007
12/1/2017	10:05:37	0.006
12/1/2017	10:06:37	0.004
12/1/2017	10:07:37	0.004

12/1/2017	10:08:37	0.004
12/1/2017	10:09:37	0.004
12/1/2017	10:10:37	0.005
12/1/2017	10:11:37	0.005
12/1/2017	10:12:37	0.003
12/1/2017	10:13:37	0.004
12/1/2017	10:14:37	0.005
12/1/2017	10:15:37	0.006
12/1/2017	10:16:37	0.006
12/1/2017	10:17:37	0.005
12/1/2017	10:18:37	0.007
12/1/2017	10:19:37	0.006
12/1/2017	10:20:37	0.006
12/1/2017	10:21:37	0.006
12/1/2017	10:22:37	0.005
12/1/2017	10:23:37	0.004
12/1/2017	10:24:37	0.005
12/1/2017	10:25:37	0.006
12/1/2017	10:26:37	0.006
12/1/2017	10:27:37	0.005
12/1/2017	10:28:37	0.005
12/1/2017	10:29:37	0.004
12/1/2017	10:30:37	0.004
12/1/2017	10:31:37	0.004
12/1/2017	10:32:37	0.004
12/1/2017	10:33:37	0.006
12/1/2017	10:34:37	0.004
12/1/2017	10:35:37	0.005
12/1/2017	10:36:37	0.005
12/1/2017	10:37:37	0.005
12/1/2017	10:38:37	0.005
12/1/2017	10:39:37	0.005
12/1/2017	10:40:37	0.005
12/1/2017	10:41:37	0.005
12/1/2017	10:42:37	0.006
12/1/2017	10:43:37	0.005
12/1/2017	10:44:37	0.005
12/1/2017	10:45:37	0.005
12/1/2017	10:46:37	0.005
12/1/2017	10:47:37	0.006



12/1/2017	10:48:37	0.005
12/1/2017	10:49:37	0.007
12/1/2017	10:50:37	0.007
12/1/2017	10:51:37	0.014
12/1/2017	10:52:37	0.006
12/1/2017	10:53:37	0.006
12/1/2017	10:54:37	0.007
12/1/2017	10:55:37	0.006
12/1/2017	10:56:37	0.005
12/1/2017	10:57:37	0.005
12/1/2017	10:58:37	0.007
12/1/2017	10:59:37	0.004
12/1/2017	11:00:37	0.003
12/1/2017	11:01:37	0.003
12/1/2017	11:02:37	0.004
12/1/2017	11:03:37	0.003
12/1/2017	11:04:37	0.003
12/1/2017	11:05:37	0.006
12/1/2017	11:06:37	0.006
12/1/2017	11:07:37	0.004
12/1/2017	11:08:37	0.004
12/1/2017	11:09:37	0.005
12/1/2017	11:10:37	0.004
12/1/2017	11:11:37	0.005
12/1/2017	11:12:37	0.004
12/1/2017	11:13:37	0.004
12/1/2017	11:14:37	0.013
12/1/2017	11:15:37	0.005
12/1/2017	11:16:37	0.004
12/1/2017	11:17:37	0.003
12/1/2017	11:18:37	0.007
12/1/2017	11:19:37	0.005
12/1/2017	11:20:37	0.005
12/1/2017	11:21:37	0.005
12/1/2017	11:22:37	0.005
12/1/2017	11:23:37	0.005
12/1/2017	11:24:37	0.006
12/1/2017	11:25:37	0.004
12/1/2017	11:26:37	0.005
12/1/2017	11:27:37	0.011

12/1/2017	11:28:37	0.005
12/1/2017	11:29:37	0.007
12/1/2017	11:30:37	0.005
12/1/2017	11:31:37	0.006
12/1/2017	11:32:37	0.008
12/1/2017	11:33:37	0.006
12/1/2017	11:34:37	0.005
12/1/2017	11:35:37	0.005
12/1/2017	11:36:37	0.005
12/1/2017	11:37:37	0.006
12/1/2017	11:38:37	0.005
12/1/2017	11:39:37	0.005
12/1/2017	11:40:37	0.004
12/1/2017	11:41:37	0.005
12/1/2017	11:42:37	0.008
12/1/2017	11:43:37	0.006
12/1/2017	11:44:37	0.012
12/1/2017	11:45:37	0.007
12/1/2017	11:46:37	0.006
12/1/2017	11:47:37	0.004
12/1/2017	11:48:37	0.004
12/1/2017	11:49:37	0.006
12/1/2017	11:50:37	0.004
12/1/2017	11:51:37	0.005
12/1/2017	11:52:37	0.004
12/1/2017	11:53:37	0.006
12/1/2017	11:54:37	0.005
12/1/2017	11:55:37	0.004
12/1/2017	11:56:37	0.006
12/1/2017	11:57:37	0.004
12/1/2017	11:58:37	0.005
12/1/2017	11:59:37	0.005
12/1/2017	12:00:37	0.004
12/1/2017	12:01:37	0.005
12/1/2017	12:02:37	0.005
12/1/2017	12:03:37	0.006
12/1/2017	12:04:37	0.007
12/1/2017	12:05:37	0.006
12/1/2017	12:06:37	0.007
12/1/2017	12:07:37	0.006



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

12/1/2017	12:08:37	0.005
12/1/2017	12:09:37	0.006
12/1/2017	12:10:37	0.006
12/1/2017	12:11:37	0.004
12/1/2017	12:12:37	0.005
12/1/2017	12:13:37	0.005
12/1/2017	12:14:37	0.038
12/1/2017	12:15:37	0.042
12/1/2017	12:16:37	0.007
12/1/2017	12:17:37	0.01
12/1/2017	12:18:37	0.007
12/1/2017	12:19:37	0.008
12/1/2017	12:20:37	0.008
12/1/2017	12:21:37	0.009
12/1/2017	12:22:37	0.012
12/1/2017	12:23:37	0.012
12/1/2017	12:24:37	0.009
12/1/2017	12:25:37	0.011
12/1/2017	12:26:37	0.01
12/1/2017	12:27:37	0.01
12/1/2017	12:28:37	0.011
12/1/2017	12:29:37	0.008
12/1/2017	12:30:37	0.013
12/1/2017	12:31:37	0.01
12/1/2017	12:32:37	0.007
12/1/2017	12:33:37	0.006
12/1/2017	12:34:37	0.059
12/1/2017	12:35:37	0.008
12/1/2017	12:36:37	0.005
12/1/2017	12:37:37	0.003
12/1/2017	12:38:37	0.007
12/1/2017	12:39:37	0.016
12/1/2017	12:40:37	0.014
12/1/2017	12:41:37	0.007
12/1/2017	12:42:37	0.004
12/1/2017	12:43:37	0.004
12/1/2017	12:44:37	0.005
12/1/2017	12:45:37	0.004
12/1/2017	12:46:37	0.004
12/1/2017	12:47:37	0.004

12/1/2017	12:48:37	0.007
12/1/2017	12:49:37	0.005
12/1/2017	12:50:37	0.005
12/1/2017	12:51:37	0.005
12/1/2017	12:52:37	0.005
12/1/2017	12:53:37	0.006
12/1/2017	12:54:37	0.006
12/1/2017	12:55:37	0.005
12/1/2017	12:56:37	0.007
12/1/2017	12:57:37	0.008
12/1/2017	12:58:37	0.005
12/1/2017	12:59:37	0.005
12/1/2017	13:00:37	0.004
12/1/2017	13:01:37	0.004
12/1/2017	13:02:37	0.004
12/1/2017	13:03:37	0.004
12/1/2017	13:04:37	0.005
12/1/2017	13:05:37	0.004
12/1/2017	13:06:37	0.005
12/1/2017	13:07:37	0.006
12/1/2017	13:08:37	0.006
12/1/2017	13:09:37	0.004
12/1/2017	13:10:37	0.003
12/1/2017	13:11:37	0.004
12/1/2017	13:12:37	0.004
12/1/2017	13:13:37	0.004
12/1/2017	13:14:37	0.005
12/1/2017	13:15:37	0.005
12/1/2017	13:16:37	0.004
12/1/2017	13:17:37	0.004
12/1/2017	13:18:37	0.008
12/1/2017	13:19:37	0.005
12/1/2017	13:20:37	0.005
12/1/2017	13:21:37	0.007
12/1/2017	13:22:37	0.004
12/1/2017	13:23:37	0.005
12/1/2017	13:24:37	0.004
12/1/2017	13:25:37	0.006
12/1/2017	13:26:37	0.008
12/1/2017	13:27:37	0.005

12/1/2017	13:28:37	0.006
12/1/2017	13:29:37	0.012
12/1/2017	13:30:37	0.007
12/1/2017	13:31:37	0.005
12/1/2017	13:32:37	0.006
12/1/2017	13:33:37	0.006
12/1/2017	13:34:37	0.01
12/1/2017	13:35:37	0.006
12/1/2017	13:36:37	0.005
12/1/2017	13:37:37	0.006
12/1/2017	13:38:37	0.004
12/1/2017	13:39:37	0.005
12/1/2017	13:40:37	0.009
12/1/2017	13:41:37	0.006
12/1/2017	13:42:37	0.005
12/1/2017	13:43:37	0.006
12/1/2017	13:44:37	0.006
12/1/2017	13:45:37	0.006
12/1/2017	13:46:37	0.006
12/1/2017	13:47:37	0.007
12/1/2017	13:48:37	0.006
12/1/2017	13:49:37	0.006
12/1/2017	13:50:37	0.007
12/1/2017	13:51:37	0.006
12/1/2017	13:52:37	0.006
12/1/2017	13:53:37	0.007
12/1/2017	13:54:37	0.006
12/1/2017	13:55:37	0.006
12/1/2017	13:56:37	0.005
12/1/2017	13:57:37	0.005
12/1/2017	13:58:37	0.004
12/1/2017	13:59:37	0.005
12/1/2017	14:00:37	0.005
12/1/2017	14:01:37	0.005
12/1/2017	14:02:37	0.008
12/1/2017	14:03:37	0.007
12/1/2017	14:04:37	0.006
12/1/2017	14:05:37	0.005
12/1/2017	14:06:37	0.007
12/1/2017	14:07:37	0.007

12/1/2017	14:08:37	0.009
12/1/2017	14:09:37	0.006
12/1/2017	14:10:37	0.005
12/1/2017	14:11:37	0.005
12/1/2017	14:12:37	0.006
12/1/2017	14:13:37	0.007
12/1/2017	14:14:37	0.005
12/1/2017	14:15:37	0.009
12/1/2017	14:16:37	0.007
12/1/2017	14:17:37	0.005
12/1/2017	14:18:37	0.006
12/1/2017	14:19:37	0.007
12/1/2017	14:20:37	0.009
12/1/2017	14:21:37	0.008
12/1/2017	14:22:37	0.007
12/1/2017	14:23:37	0.011
12/1/2017	14:24:37	0.007
12/1/2017	14:25:37	0.006
12/1/2017	14:26:37	0.007
12/1/2017	14:27:37	0.005
12/1/2017	14:28:37	0.007
12/1/2017	14:29:37	0.003
12/1/2017	14:30:37	0.003
12/1/2017	14:31:37	0.007
12/1/2017	14:32:37	0.008
12/1/2017	14:33:37	0.004
12/1/2017	14:34:37	0.004
12/1/2017	14:35:37	0.006
12/1/2017	14:36:37	0.006
12/1/2017	14:37:37	0.005
12/1/2017	14:38:37	0.006
12/1/2017	14:39:37	0.004
12/1/2017	14:40:37	0.005
12/1/2017	14:41:37	0.008
12/1/2017	14:42:37	0.004
12/1/2017	14:43:37	0.006
12/1/2017	14:44:37	0.004
12/1/2017	14:45:37	0.004
12/1/2017	14:46:37	0.013
12/1/2017	14:47:37	0.004



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

12/1/2017	14:48:37	0.006
12/1/2017	14:49:37	0.005
12/1/2017	14:50:37	0.014
12/1/2017	14:51:37	0.048
12/1/2017	14:52:37	0.016
12/1/2017	14:53:37	0.016
12/1/2017	14:54:37	0.016
12/1/2017	14:55:37	0.02
12/1/2017	14:56:37	0.02
12/1/2017	14:57:37	0.018
12/1/2017	14:58:37	0.016
12/1/2017	14:59:37	0.016
12/1/2017	15:00:37	0.013
12/1/2017	15:01:37	0.012
12/1/2017	15:02:37	0.01
12/1/2017	15:03:37	0.009
12/1/2017	15:04:37	0.009
12/1/2017	15:05:37	0.008
12/1/2017	15:06:37	0.007
12/1/2017	15:07:37	0.007
12/1/2017	15:08:37	0.006
12/1/2017	15:09:37	0.006
12/1/2017	15:10:37	0.005
12/1/2017	15:11:37	0.005
12/1/2017	15:12:37	0.005
12/1/2017	15:13:37	0.004
12/1/2017	15:14:37	0.004
12/1/2017	15:15:37	0.004

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530142611  
Test ID: 9  
Test Abbreviation: MANUAL\_009  
Start Date: 12/4/2017  
Start Time: 9:03:27  
Duration (dd:hh:mm:ss): 0:05:38:00  
Log Interval (mm:ss): 1:00  
Number of points: 338  
Notes:





**Upwind CAMP Data**  
**Bullshead Plaza Phase II ESA**  
**835-855 West Main Street, Rochester, NY**  
**2172124**

Statistics	Channel:	AEROSOL		
	Units:	mg/m <sup>3</sup>		
	Average:	0.088		
	Minimum:	0.033		
	Time	of	Minimum:	14:40:27
	Date	of	Minimum:	12/4/2017
	Maximum:	0.194		
	Time	of	Maximum:	10:30:27
	Date	of	Maximum:	12/4/2017

Calibration	Sensor:	AEROSOL		
	Cal.	date	1/17/2017	

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
12/4/2017	9:04:27	0.102
12/4/2017	9:05:27	0.095
12/4/2017	9:06:27	0.094
12/4/2017	9:07:27	0.097
12/4/2017	9:08:27	0.097
12/4/2017	9:09:27	0.103
12/4/2017	9:10:27	0.097
12/4/2017	9:11:27	0.102
12/4/2017	9:12:27	0.101
12/4/2017	9:13:27	0.096
12/4/2017	9:14:27	0.1
12/4/2017	9:15:27	0.103
12/4/2017	9:16:27	0.108
12/4/2017	9:17:27	0.106
12/4/2017	9:18:27	0.102
12/4/2017	9:19:27	0.108
12/4/2017	9:20:27	0.101
12/4/2017	9:21:27	0.099
12/4/2017	9:22:27	0.105
12/4/2017	9:23:27	0.114
12/4/2017	9:24:27	0.109
12/4/2017	9:25:27	0.101
12/4/2017	9:26:27	0.101
12/4/2017	9:27:27	0.102

12/4/2017	9:28:27	0.102
12/4/2017	9:29:27	0.102
12/4/2017	9:30:27	0.103
12/4/2017	9:31:27	0.104
12/4/2017	9:32:27	0.103
12/4/2017	9:33:27	0.104
12/4/2017	9:34:27	0.108
12/4/2017	9:35:27	0.104
12/4/2017	9:36:27	0.104
12/4/2017	9:37:27	0.106
12/4/2017	9:38:27	0.111
12/4/2017	9:39:27	0.119
12/4/2017	9:40:27	0.158
12/4/2017	9:41:27	0.115
12/4/2017	9:42:27	0.11
12/4/2017	9:43:27	0.106
12/4/2017	9:44:27	0.114
12/4/2017	9:45:27	0.106
12/4/2017	9:46:27	0.104
12/4/2017	9:47:27	0.107
12/4/2017	9:48:27	0.104
12/4/2017	9:49:27	0.102
12/4/2017	9:50:27	0.104
12/4/2017	9:51:27	0.103
12/4/2017	9:52:27	0.102
12/4/2017	9:53:27	0.103
12/4/2017	9:54:27	0.103
12/4/2017	9:55:27	0.102
12/4/2017	9:56:27	0.102
12/4/2017	9:57:27	0.102
12/4/2017	9:58:27	0.102
12/4/2017	9:59:27	0.102
12/4/2017	10:00:27	0.101
12/4/2017	10:01:27	0.102
12/4/2017	10:02:27	0.103
12/4/2017	10:03:27	0.109
12/4/2017	10:04:27	0.108
12/4/2017	10:05:27	0.104
12/4/2017	10:06:27	0.108
12/4/2017	10:07:27	0.115

12/4/2017	10:08:27	0.111
12/4/2017	10:09:27	0.105
12/4/2017	10:10:27	0.106
12/4/2017	10:11:27	0.104
12/4/2017	10:12:27	0.103
12/4/2017	10:13:27	0.104
12/4/2017	10:14:27	0.107
12/4/2017	10:15:27	0.103
12/4/2017	10:16:27	0.103
12/4/2017	10:17:27	0.103
12/4/2017	10:18:27	0.104
12/4/2017	10:19:27	0.103
12/4/2017	10:20:27	0.103
12/4/2017	10:21:27	0.103
12/4/2017	10:22:27	0.104
12/4/2017	10:23:27	0.116
12/4/2017	10:24:27	0.101
12/4/2017	10:25:27	0.101
12/4/2017	10:26:27	0.105
12/4/2017	10:27:27	0.103
12/4/2017	10:28:27	0.103
12/4/2017	10:29:27	0.168
12/4/2017	10:30:27	0.194
12/4/2017	10:31:27	0.174
12/4/2017	10:32:27	0.105
12/4/2017	10:33:27	0.138
12/4/2017	10:34:27	0.113
12/4/2017	10:35:27	0.111
12/4/2017	10:36:27	0.105
12/4/2017	10:37:27	0.112
12/4/2017	10:38:27	0.108
12/4/2017	10:39:27	0.111
12/4/2017	10:40:27	0.109
12/4/2017	10:41:27	0.101
12/4/2017	10:42:27	0.102
12/4/2017	10:43:27	0.101
12/4/2017	10:44:27	0.102
12/4/2017	10:45:27	0.1
12/4/2017	10:46:27	0.103
12/4/2017	10:47:27	0.103

12/4/2017	10:48:27	0.106
12/4/2017	10:49:27	0.103
12/4/2017	10:50:27	0.1
12/4/2017	10:51:27	0.101
12/4/2017	10:52:27	0.103
12/4/2017	10:53:27	0.102
12/4/2017	10:54:27	0.104
12/4/2017	10:55:27	0.103
12/4/2017	10:56:27	0.102
12/4/2017	10:57:27	0.101
12/4/2017	10:58:27	0.101
12/4/2017	10:59:27	0.106
12/4/2017	11:00:27	0.106
12/4/2017	11:01:27	0.106
12/4/2017	11:02:27	0.101
12/4/2017	11:03:27	0.1
12/4/2017	11:04:27	0.096
12/4/2017	11:05:27	0.099
12/4/2017	11:06:27	0.093
12/4/2017	11:07:27	0.095
12/4/2017	11:08:27	0.102
12/4/2017	11:09:27	0.114
12/4/2017	11:10:27	0.095
12/4/2017	11:11:27	0.095
12/4/2017	11:12:27	0.095
12/4/2017	11:13:27	0.094
12/4/2017	11:14:27	0.094
12/4/2017	11:15:27	0.094
12/4/2017	11:16:27	0.093
12/4/2017	11:17:27	0.094
12/4/2017	11:18:27	0.095
12/4/2017	11:19:27	0.093
12/4/2017	11:20:27	0.093
12/4/2017	11:21:27	0.093
12/4/2017	11:22:27	0.093
12/4/2017	11:23:27	0.095
12/4/2017	11:24:27	0.094
12/4/2017	11:25:27	0.094
12/4/2017	11:26:27	0.094
12/4/2017	11:27:27	0.094

12/4/2017	11:28:27	0.095
12/4/2017	11:29:27	0.094
12/4/2017	11:30:27	0.095
12/4/2017	11:31:27	0.095
12/4/2017	11:32:27	0.096
12/4/2017	11:33:27	0.096
12/4/2017	11:34:27	0.094
12/4/2017	11:35:27	0.095
12/4/2017	11:36:27	0.095
12/4/2017	11:37:27	0.096
12/4/2017	11:38:27	0.096
12/4/2017	11:39:27	0.096
12/4/2017	11:40:27	0.096
12/4/2017	11:41:27	0.095
12/4/2017	11:42:27	0.096
12/4/2017	11:43:27	0.1
12/4/2017	11:44:27	0.101
12/4/2017	11:45:27	0.097
12/4/2017	11:46:27	0.096
12/4/2017	11:47:27	0.097
12/4/2017	11:48:27	0.096
12/4/2017	11:49:27	0.097
12/4/2017	11:50:27	0.096
12/4/2017	11:51:27	0.096
12/4/2017	11:52:27	0.095
12/4/2017	11:53:27	0.095
12/4/2017	11:54:27	0.094
12/4/2017	11:55:27	0.096
12/4/2017	11:56:27	0.1
12/4/2017	11:57:27	0.095
12/4/2017	11:58:27	0.091
12/4/2017	11:59:27	0.092
12/4/2017	12:00:27	0.093
12/4/2017	12:01:27	0.092
12/4/2017	12:02:27	0.093
12/4/2017	12:03:27	0.093
12/4/2017	12:04:27	0.095
12/4/2017	12:05:27	0.094
12/4/2017	12:06:27	0.093
12/4/2017	12:07:27	0.093

12/4/2017	12:08:27	0.095
12/4/2017	12:09:27	0.092
12/4/2017	12:10:27	0.093
12/4/2017	12:11:27	0.097
12/4/2017	12:12:27	0.093
12/4/2017	12:13:27	0.09
12/4/2017	12:14:27	0.089
12/4/2017	12:15:27	0.089
12/4/2017	12:16:27	0.089
12/4/2017	12:17:27	0.088
12/4/2017	12:18:27	0.089
12/4/2017	12:19:27	0.09
12/4/2017	12:20:27	0.089
12/4/2017	12:21:27	0.088
12/4/2017	12:22:27	0.089
12/4/2017	12:23:27	0.089
12/4/2017	12:24:27	0.089
12/4/2017	12:25:27	0.089
12/4/2017	12:26:27	0.088
12/4/2017	12:27:27	0.088
12/4/2017	12:28:27	0.088
12/4/2017	12:29:27	0.087
12/4/2017	12:30:27	0.087
12/4/2017	12:31:27	0.089
12/4/2017	12:32:27	0.088
12/4/2017	12:33:27	0.088
12/4/2017	12:34:27	0.087
12/4/2017	12:35:27	0.087
12/4/2017	12:36:27	0.087
12/4/2017	12:37:27	0.086
12/4/2017	12:38:27	0.086
12/4/2017	12:39:27	0.086
12/4/2017	12:40:27	0.088
12/4/2017	12:41:27	0.087
12/4/2017	12:42:27	0.086
12/4/2017	12:43:27	0.087
12/4/2017	12:44:27	0.085
12/4/2017	12:45:27	0.083
12/4/2017	12:46:27	0.082
12/4/2017	12:47:27	0.081

12/4/2017	12:48:27	0.082
12/4/2017	12:49:27	0.079
12/4/2017	12:50:27	0.078
12/4/2017	12:51:27	0.079
12/4/2017	12:52:27	0.077
12/4/2017	12:53:27	0.076
12/4/2017	12:54:27	0.077
12/4/2017	12:55:27	0.079
12/4/2017	12:56:27	0.078
12/4/2017	12:57:27	0.076
12/4/2017	12:58:27	0.076
12/4/2017	12:59:27	0.081
12/4/2017	13:00:27	0.076
12/4/2017	13:01:27	0.076
12/4/2017	13:02:27	0.076
12/4/2017	13:03:27	0.076
12/4/2017	13:04:27	0.077
12/4/2017	13:05:27	0.076
12/4/2017	13:06:27	0.082
12/4/2017	13:07:27	0.077
12/4/2017	13:08:27	0.075
12/4/2017	13:09:27	0.075
12/4/2017	13:10:27	0.075
12/4/2017	13:11:27	0.075
12/4/2017	13:12:27	0.075
12/4/2017	13:13:27	0.075
12/4/2017	13:14:27	0.074
12/4/2017	13:15:27	0.074
12/4/2017	13:16:27	0.075
12/4/2017	13:17:27	0.078
12/4/2017	13:18:27	0.076
12/4/2017	13:19:27	0.073
12/4/2017	13:20:27	0.071
12/4/2017	13:21:27	0.071
12/4/2017	13:22:27	0.071
12/4/2017	13:23:27	0.07
12/4/2017	13:24:27	0.07
12/4/2017	13:25:27	0.069
12/4/2017	13:26:27	0.069
12/4/2017	13:27:27	0.069



12/4/2017	13:28:27	0.07
12/4/2017	13:29:27	0.07
12/4/2017	13:30:27	0.07
12/4/2017	13:31:27	0.07
12/4/2017	13:32:27	0.07
12/4/2017	13:33:27	0.068
12/4/2017	13:34:27	0.067
12/4/2017	13:35:27	0.067
12/4/2017	13:36:27	0.066
12/4/2017	13:37:27	0.066
12/4/2017	13:38:27	0.065
12/4/2017	13:39:27	0.065
12/4/2017	13:40:27	0.065
12/4/2017	13:41:27	0.064
12/4/2017	13:42:27	0.064
12/4/2017	13:43:27	0.065
12/4/2017	13:44:27	0.065
12/4/2017	13:45:27	0.064
12/4/2017	13:46:27	0.064
12/4/2017	13:47:27	0.064
12/4/2017	13:48:27	0.064
12/4/2017	13:49:27	0.063
12/4/2017	13:50:27	0.064
12/4/2017	13:51:27	0.064
12/4/2017	13:52:27	0.064
12/4/2017	13:53:27	0.063
12/4/2017	13:54:27	0.064
12/4/2017	13:55:27	0.063
12/4/2017	13:56:27	0.063
12/4/2017	13:57:27	0.065
12/4/2017	13:58:27	0.065
12/4/2017	13:59:27	0.065
12/4/2017	14:00:27	0.062
12/4/2017	14:01:27	0.062
12/4/2017	14:02:27	0.064
12/4/2017	14:03:27	0.062
12/4/2017	14:04:27	0.064
12/4/2017	14:05:27	0.063
12/4/2017	14:06:27	0.062
12/4/2017	14:07:27	0.061



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
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12/4/2017	14:08:27	0.06
12/4/2017	14:09:27	0.06
12/4/2017	14:10:27	0.06
12/4/2017	14:11:27	0.064
12/4/2017	14:12:27	0.065
12/4/2017	14:13:27	0.06
12/4/2017	14:14:27	0.063
12/4/2017	14:15:27	0.061
12/4/2017	14:16:27	0.059
12/4/2017	14:17:27	0.058
12/4/2017	14:18:27	0.058
12/4/2017	14:19:27	0.058
12/4/2017	14:20:27	0.058
12/4/2017	14:21:27	0.057
12/4/2017	14:22:27	0.057
12/4/2017	14:23:27	0.057
12/4/2017	14:24:27	0.06
12/4/2017	14:25:27	0.058
12/4/2017	14:26:27	0.057
12/4/2017	14:27:27	0.066
12/4/2017	14:28:27	0.062
12/4/2017	14:29:27	0.052
12/4/2017	14:30:27	0.05
12/4/2017	14:31:27	0.049
12/4/2017	14:32:27	0.05
12/4/2017	14:33:27	0.05
12/4/2017	14:34:27	0.062
12/4/2017	14:35:27	0.049
12/4/2017	14:36:27	0.04
12/4/2017	14:37:27	0.037
12/4/2017	14:38:27	0.036
12/4/2017	14:39:27	0.035
12/4/2017	14:40:27	0.033
12/4/2017	14:41:27	0.033

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530142611  
Test ID: 10  
Test Abbreviation: MANUAL\_010



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

Start Date: 12/5/2017  
Start Time: 8:51:39  
Duration (dd:hh:mm:ss): 0:01:00:00  
Log Interval (mm:ss): 1:00  
Number of points: 60  
Notes:

Statistics Channel: AEROSOL  
Units: mg/m<sup>3</sup>  
Average: 0.068  
Minimum: 0.049  
Time of Minimum: 9:51:39  
Date of Minimum: 12/5/2017  
Maximum: 0.084  
Time of Maximum: 9:09:39  
Date of Maximum: 12/5/2017

Calibration Sensor: AEROSOL  
Cal. date 1/17/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
12/5/2017	8:52:39	0.074
12/5/2017	8:53:39	0.077
12/5/2017	8:54:39	0.078
12/5/2017	8:55:39	0.077
12/5/2017	8:56:39	0.077
12/5/2017	8:57:39	0.079
12/5/2017	8:58:39	0.082
12/5/2017	8:59:39	0.08
12/5/2017	9:00:39	0.08
12/5/2017	9:01:39	0.08
12/5/2017	9:02:39	0.08
12/5/2017	9:03:39	0.079
12/5/2017	9:04:39	0.083
12/5/2017	9:05:39	0.08
12/5/2017	9:06:39	0.077
12/5/2017	9:07:39	0.08
12/5/2017	9:08:39	0.081
12/5/2017	9:09:39	0.084

12/5/2017	9:10:39	0.081
12/5/2017	9:11:39	0.08
12/5/2017	9:12:39	0.075
12/5/2017	9:13:39	0.071
12/5/2017	9:14:39	0.072
12/5/2017	9:15:39	0.072
12/5/2017	9:16:39	0.066
12/5/2017	9:17:39	0.067
12/5/2017	9:18:39	0.069
12/5/2017	9:19:39	0.074
12/5/2017	9:20:39	0.072
12/5/2017	9:21:39	0.072
12/5/2017	9:22:39	0.07
12/5/2017	9:23:39	0.069
12/5/2017	9:24:39	0.069
12/5/2017	9:25:39	0.068
12/5/2017	9:26:39	0.068
12/5/2017	9:27:39	0.064
12/5/2017	9:28:39	0.065
12/5/2017	9:29:39	0.066
12/5/2017	9:30:39	0.064
12/5/2017	9:31:39	0.062
12/5/2017	9:32:39	0.061
12/5/2017	9:33:39	0.06
12/5/2017	9:34:39	0.058
12/5/2017	9:35:39	0.059
12/5/2017	9:36:39	0.059
12/5/2017	9:37:39	0.063
12/5/2017	9:38:39	0.062
12/5/2017	9:39:39	0.064
12/5/2017	9:40:39	0.057
12/5/2017	9:41:39	0.054
12/5/2017	9:42:39	0.054
12/5/2017	9:43:39	0.056
12/5/2017	9:44:39	0.057
12/5/2017	9:45:39	0.057
12/5/2017	9:46:39	0.056
12/5/2017	9:47:39	0.055
12/5/2017	9:48:39	0.054
12/5/2017	9:49:39	0.054



Upwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
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12/5/2017	9:50:39	0.052
12/5/2017	9:51:39	0.049

Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

TrakPro            Version                            4.7 ASCII            Data            File

Model:            DustTrak            II  
Model            Number:                            8530  
Serial            Number:                            8530130715  
Test            ID:                                    1  
Test            Abbreviation:        MANUAL\_001  
Start            Date:                                11/27/2017  
Start            Time:                                9:09:43  
Duration        (dd:hh:mm:ss):    0:01:04:00  
Log            Interval            (mm:ss):                            1:00  
Number        of                            points:                            64  
Notes:

Statistics        Channel:            AEROSOL  
                  Units:                mg/m<sup>3</sup>  
                  Average:                            0.018  
                  Minimum:                            0.009  
                  Time                of                            Minimum:                            9:14:43  
                  Date                of                            Minimum:                            11/27/2017  
                  Maximum:                            0.045  
                  Time                of                            Maximum:                            9:47:43  
                  Date                of                            Maximum:                            11/27/2017

Calibration     Sensor:            AEROSOL  
                  Cal.                date                            8/22/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/27/2017	9:10:43	0.041
11/27/2017	9:11:43	0.016
11/27/2017	9:12:43	0.016
11/27/2017	9:13:43	0.012
11/27/2017	9:14:43	0.009
11/27/2017	9:15:43	0.01
11/27/2017	9:16:43	0.01
11/27/2017	9:17:43	0.012
11/27/2017	9:18:43	0.013
11/27/2017	9:19:43	0.012
11/27/2017	9:20:43	0.013

11/27/2017	9:21:43	0.015
11/27/2017	9:22:43	0.01
11/27/2017	9:23:43	0.016
11/27/2017	9:24:43	0.017
11/27/2017	9:25:43	0.013
11/27/2017	9:26:43	0.016
11/27/2017	9:27:43	0.013
11/27/2017	9:28:43	0.011
11/27/2017	9:29:43	0.01
11/27/2017	9:30:43	0.013
11/27/2017	9:31:43	0.01
11/27/2017	9:32:43	0.011
11/27/2017	9:33:43	0.013
11/27/2017	9:34:43	0.015
11/27/2017	9:35:43	0.042
11/27/2017	9:36:43	0.015
11/27/2017	9:37:43	0.018
11/27/2017	9:38:43	0.017
11/27/2017	9:39:43	0.012
11/27/2017	9:40:43	0.016
11/27/2017	9:41:43	0.029
11/27/2017	9:42:43	0.023
11/27/2017	9:43:43	0.015
11/27/2017	9:44:43	0.013
11/27/2017	9:45:43	0.02
11/27/2017	9:46:43	0.032
11/27/2017	9:47:43	0.045
11/27/2017	9:48:43	0.023
11/27/2017	9:49:43	0.026
11/27/2017	9:50:43	0.022
11/27/2017	9:51:43	0.02
11/27/2017	9:52:43	0.028
11/27/2017	9:53:43	0.024
11/27/2017	9:54:43	0.014
11/27/2017	9:55:43	0.012
11/27/2017	9:56:43	0.016
11/27/2017	9:57:43	0.016
11/27/2017	9:58:43	0.012
11/27/2017	9:59:43	0.012
11/27/2017	10:00:43	0.043





Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
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11/27/2017	10:01:43	0.042
11/27/2017	10:02:43	0.015
11/27/2017	10:03:43	0.015
11/27/2017	10:04:43	0.012
11/27/2017	10:05:43	0.02
11/27/2017	10:06:43	0.012
11/27/2017	10:07:43	0.037
11/27/2017	10:08:43	0.012
11/27/2017	10:09:43	0.015
11/27/2017	10:10:43	0.015
11/27/2017	10:11:43	0.011
11/27/2017	10:12:43	0.012
11/27/2017	10:13:43	0.014

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530130715  
Test ID: 2  
Test Abbreviation: MANUAL\_002  
Start Date: 11/27/2017  
Start Time: 10:41:05  
Duration (dd:hh:mm:ss): 0:02:15:00  
Log Interval (mm:ss): 1:00  
Number of points: 135  
Notes:

Statistics Channel: AEROSOL  
Units: mg/m<sup>3</sup>  
Average: 0.014  
Minimum: 0.007  
Time of Minimum: 11:45:05  
Date of Minimum: 11/27/2017  
Maximum: 0.12  
Time of Maximum: 11:10:05  
Date of Maximum: 11/27/2017

Calibration Sensor: AEROSOL  
Cal. date: 8/22/2017

Date Time AEROSOL

MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/27/2017	10:42:05	0.064
11/27/2017	10:43:05	0.019
11/27/2017	10:44:05	0.022
11/27/2017	10:45:05	0.012
11/27/2017	10:46:05	0.014
11/27/2017	10:47:05	0.015
11/27/2017	10:48:05	0.015
11/27/2017	10:49:05	0.012
11/27/2017	10:50:05	0.022
11/27/2017	10:51:05	0.014
11/27/2017	10:52:05	0.016
11/27/2017	10:53:05	0.016
11/27/2017	10:54:05	0.022
11/27/2017	10:55:05	0.022
11/27/2017	10:56:05	0.019
11/27/2017	10:57:05	0.025
11/27/2017	10:58:05	0.038
11/27/2017	10:59:05	0.027
11/27/2017	11:00:05	0.024
11/27/2017	11:01:05	0.024
11/27/2017	11:02:05	0.024
11/27/2017	11:03:05	0.026
11/27/2017	11:04:05	0.018
11/27/2017	11:05:05	0.015
11/27/2017	11:06:05	0.014
11/27/2017	11:07:05	0.011
11/27/2017	11:08:05	0.017
11/27/2017	11:09:05	0.107
11/27/2017	11:10:05	0.12
11/27/2017	11:11:05	0.032
11/27/2017	11:12:05	0.014
11/27/2017	11:13:05	0.011
11/27/2017	11:14:05	0.014
11/27/2017	11:15:05	0.012
11/27/2017	11:16:05	0.011
11/27/2017	11:17:05	0.014
11/27/2017	11:18:05	0.015
11/27/2017	11:19:05	0.015
11/27/2017	11:20:05	0.015

11/27/2017	11:21:05	0.013
11/27/2017	11:22:05	0.011
11/27/2017	11:23:05	0.012
11/27/2017	11:24:05	0.012
11/27/2017	11:25:05	0.018
11/27/2017	11:26:05	0.021
11/27/2017	11:27:05	0.009
11/27/2017	11:28:05	0.008
11/27/2017	11:29:05	0.008
11/27/2017	11:30:05	0.008
11/27/2017	11:31:05	0.008
11/27/2017	11:32:05	0.009
11/27/2017	11:33:05	0.01
11/27/2017	11:34:05	0.012
11/27/2017	11:35:05	0.026
11/27/2017	11:36:05	0.022
11/27/2017	11:37:05	0.014
11/27/2017	11:38:05	0.011
11/27/2017	11:39:05	0.009
11/27/2017	11:40:05	0.009
11/27/2017	11:41:05	0.008
11/27/2017	11:42:05	0.008
11/27/2017	11:43:05	0.008
11/27/2017	11:44:05	0.008
11/27/2017	11:45:05	0.007
11/27/2017	11:46:05	0.007
11/27/2017	11:47:05	0.007
11/27/2017	11:48:05	0.007
11/27/2017	11:49:05	0.007
11/27/2017	11:50:05	0.007
11/27/2017	11:51:05	0.009
11/27/2017	11:52:05	0.007
11/27/2017	11:53:05	0.007
11/27/2017	11:54:05	0.007
11/27/2017	11:55:05	0.008
11/27/2017	11:56:05	0.008
11/27/2017	11:57:05	0.008
11/27/2017	11:58:05	0.008
11/27/2017	11:59:05	0.008
11/27/2017	12:00:05	0.008

11/27/2017	12:01:05	0.008
11/27/2017	12:02:05	0.008
11/27/2017	12:03:05	0.008
11/27/2017	12:04:05	0.008
11/27/2017	12:05:05	0.008
11/27/2017	12:06:05	0.009
11/27/2017	12:07:05	0.008
11/27/2017	12:08:05	0.009
11/27/2017	12:09:05	0.008
11/27/2017	12:10:05	0.008
11/27/2017	12:11:05	0.008
11/27/2017	12:12:05	0.008
11/27/2017	12:13:05	0.008
11/27/2017	12:14:05	0.008
11/27/2017	12:15:05	0.008
11/27/2017	12:16:05	0.009
11/27/2017	12:17:05	0.008
11/27/2017	12:18:05	0.009
11/27/2017	12:19:05	0.008
11/27/2017	12:20:05	0.008
11/27/2017	12:21:05	0.008
11/27/2017	12:22:05	0.009
11/27/2017	12:23:05	0.009
11/27/2017	12:24:05	0.008
11/27/2017	12:25:05	0.008
11/27/2017	12:26:05	0.009
11/27/2017	12:27:05	0.009
11/27/2017	12:28:05	0.009
11/27/2017	12:29:05	0.009
11/27/2017	12:30:05	0.009
11/27/2017	12:31:05	0.009
11/27/2017	12:32:05	0.008
11/27/2017	12:33:05	0.009
11/27/2017	12:34:05	0.009
11/27/2017	12:35:05	0.008
11/27/2017	12:36:05	0.008
11/27/2017	12:37:05	0.008
11/27/2017	12:38:05	0.008
11/27/2017	12:39:05	0.009
11/27/2017	12:40:05	0.009

Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
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11/27/2017	12:41:05	0.009
11/27/2017	12:42:05	0.009
11/27/2017	12:43:05	0.01
11/27/2017	12:44:05	0.01
11/27/2017	12:45:05	0.01
11/27/2017	12:46:05	0.01
11/27/2017	12:47:05	0.009
11/27/2017	12:48:05	0.009
11/27/2017	12:49:05	0.009
11/27/2017	12:50:05	0.009
11/27/2017	12:51:05	0.008
11/27/2017	12:52:05	0.009
11/27/2017	12:53:05	0.01
11/27/2017	12:54:05	0.009
11/27/2017	12:55:05	0.011
11/27/2017	12:56:05	0.013

Model: DustTrak II  
 Model Number: 8530  
 Serial Number: 8530130715  
 Test ID: 3  
 Test Abbreviation: MANUAL\_003  
 Start Date: 11/27/2017  
 Start Time: 13:13:48  
 Duration (dd:hh:mm:ss): 0:02:15:00  
 Log Interval (mm:ss): 1:00  
 Number of points: 135  
 Notes:

Statistics Channel: AEROSOL  
 Units: mg/m<sup>3</sup>  
 Average: 0.026  
 Minimum: 0.009  
 Time of Minimum: 13:20:48  
 Date of Minimum: 11/27/2017  
 Maximum: 0.392  
 Time of Maximum: 14:11:48  
 Date of Maximum: 11/27/2017

Calibration Sensor: AEROSOL

Cal.                      date                      8/22/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/27/2017	13:14:48	0.356
11/27/2017	13:15:48	0.011
11/27/2017	13:16:48	0.015
11/27/2017	13:17:48	0.018
11/27/2017	13:18:48	0.011
11/27/2017	13:19:48	0.011
11/27/2017	13:20:48	0.009
11/27/2017	13:21:48	0.009
11/27/2017	13:22:48	0.009
11/27/2017	13:23:48	0.009
11/27/2017	13:24:48	0.009
11/27/2017	13:25:48	0.01
11/27/2017	13:26:48	0.017
11/27/2017	13:27:48	0.012
11/27/2017	13:28:48	0.011
11/27/2017	13:29:48	0.016
11/27/2017	13:30:48	0.031
11/27/2017	13:31:48	0.025
11/27/2017	13:32:48	0.012
11/27/2017	13:33:48	0.015
11/27/2017	13:34:48	0.015
11/27/2017	13:35:48	0.02
11/27/2017	13:36:48	0.024
11/27/2017	13:37:48	0.014
11/27/2017	13:38:48	0.011
11/27/2017	13:39:48	0.014
11/27/2017	13:40:48	0.019
11/27/2017	13:41:48	0.016
11/27/2017	13:42:48	0.023
11/27/2017	13:43:48	0.025
11/27/2017	13:44:48	0.018
11/27/2017	13:45:48	0.013
11/27/2017	13:46:48	0.013
11/27/2017	13:47:48	0.014
11/27/2017	13:48:48	0.032
11/27/2017	13:49:48	0.034

11/27/2017	13:50:48	0.02
11/27/2017	13:51:48	0.024
11/27/2017	13:52:48	0.026
11/27/2017	13:53:48	0.027
11/27/2017	13:54:48	0.01
11/27/2017	13:55:48	0.013
11/27/2017	13:56:48	0.011
11/27/2017	13:57:48	0.016
11/27/2017	13:58:48	0.012
11/27/2017	13:59:48	0.017
11/27/2017	14:00:48	0.014
11/27/2017	14:01:48	0.016
11/27/2017	14:02:48	0.012
11/27/2017	14:03:48	0.011
11/27/2017	14:04:48	0.012
11/27/2017	14:05:48	0.013
11/27/2017	14:06:48	0.011
11/27/2017	14:07:48	0.011
11/27/2017	14:08:48	0.01
11/27/2017	14:09:48	0.011
11/27/2017	14:10:48	0.057
11/27/2017	14:11:48	0.392
11/27/2017	14:12:48	0.234
11/27/2017	14:13:48	0.115
11/27/2017	14:14:48	0.011
11/27/2017	14:15:48	0.012
11/27/2017	14:16:48	0.027
11/27/2017	14:17:48	0.015
11/27/2017	14:18:48	0.012
11/27/2017	14:19:48	0.016
11/27/2017	14:20:48	0.013
11/27/2017	14:21:48	0.012
11/27/2017	14:22:48	0.013
11/27/2017	14:23:48	0.018
11/27/2017	14:24:48	0.013
11/27/2017	14:25:48	0.013
11/27/2017	14:26:48	0.011
11/27/2017	14:27:48	0.014
11/27/2017	14:28:48	0.013
11/27/2017	14:29:48	0.014



11/27/2017	14:30:48	0.03
11/27/2017	14:31:48	0.014
11/27/2017	14:32:48	0.023
11/27/2017	14:33:48	0.015
11/27/2017	14:34:48	0.024
11/27/2017	14:35:48	0.012
11/27/2017	14:36:48	0.012
11/27/2017	14:37:48	0.013
11/27/2017	14:38:48	0.013
11/27/2017	14:39:48	0.013
11/27/2017	14:40:48	0.014
11/27/2017	14:41:48	0.012
11/27/2017	14:42:48	0.014
11/27/2017	14:43:48	0.014
11/27/2017	14:44:48	0.018
11/27/2017	14:45:48	0.015
11/27/2017	14:46:48	0.019
11/27/2017	14:47:48	0.021
11/27/2017	14:48:48	0.015
11/27/2017	14:49:48	0.019
11/27/2017	14:50:48	0.018
11/27/2017	14:51:48	0.016
11/27/2017	14:52:48	0.015
11/27/2017	14:53:48	0.018
11/27/2017	14:54:48	0.017
11/27/2017	14:55:48	0.023
11/27/2017	14:56:48	0.015
11/27/2017	14:57:48	0.016
11/27/2017	14:58:48	0.014
11/27/2017	14:59:48	0.017
11/27/2017	15:00:48	0.022
11/27/2017	15:01:48	0.02
11/27/2017	15:02:48	0.027
11/27/2017	15:03:48	0.028
11/27/2017	15:04:48	0.025
11/27/2017	15:05:48	0.02
11/27/2017	15:06:48	0.018
11/27/2017	15:07:48	0.026
11/27/2017	15:08:48	0.022
11/27/2017	15:09:48	0.023

Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
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11/27/2017	15:10:48	0.031
11/27/2017	15:11:48	0.018
11/27/2017	15:12:48	0.018
11/27/2017	15:13:48	0.02
11/27/2017	15:14:48	0.021
11/27/2017	15:15:48	0.033
11/27/2017	15:16:48	0.114
11/27/2017	15:17:48	0.067
11/27/2017	15:18:48	0.016
11/27/2017	15:19:48	0.02
11/27/2017	15:20:48	0.021
11/27/2017	15:21:48	0.022
11/27/2017	15:22:48	0.018
11/27/2017	15:23:48	0.017
11/27/2017	15:24:48	0.015
11/27/2017	15:25:48	0.015
11/27/2017	15:26:48	0.017
11/27/2017	15:27:48	0.018
11/27/2017	15:28:48	0.016

Model: DustTrak II  
 Model Number: 8530  
 Serial Number: 8530130715  
 Test ID: 4  
 Test Abbreviation: MANUAL\_004  
 Start Date: 11/28/2017  
 Start Time: 9:07:31  
 Duration (dd:hh:mm:ss): 0:05:36:00  
 Log Interval (mm:ss): 1:00  
 Number of points: 336  
 Notes:

Statistics Channel: AEROSOL  
 Units: mg/m<sup>3</sup>  
 Average: 0.013  
 Minimum: 0.004  
 Time of Minimum: 12:36:31  
 Date of Minimum: 11/28/2017  
 Maximum: 0.131  
 Time of Maximum: 10:10:31

Date of Maximum: 11/28/2017

Calibration Sensor: AEROSOL  
Cal. date 8/22/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/28/2017	9:08:31	0.026
11/28/2017	9:09:31	0.027
11/28/2017	9:10:31	0.029
11/28/2017	9:11:31	0.023
11/28/2017	9:12:31	0.021
11/28/2017	9:13:31	0.021
11/28/2017	9:14:31	0.022
11/28/2017	9:15:31	0.02
11/28/2017	9:16:31	0.022
11/28/2017	9:17:31	0.023
11/28/2017	9:18:31	0.031
11/28/2017	9:19:31	0.026
11/28/2017	9:20:31	0.026
11/28/2017	9:21:31	0.029
11/28/2017	9:22:31	0.026
11/28/2017	9:23:31	0.031
11/28/2017	9:24:31	0.034
11/28/2017	9:25:31	0.026
11/28/2017	9:26:31	0.024
11/28/2017	9:27:31	0.022
11/28/2017	9:28:31	0.022
11/28/2017	9:29:31	0.025
11/28/2017	9:30:31	0.021
11/28/2017	9:31:31	0.018
11/28/2017	9:32:31	0.02
11/28/2017	9:33:31	0.019
11/28/2017	9:34:31	0.022
11/28/2017	9:35:31	0.026
11/28/2017	9:36:31	0.032
11/28/2017	9:37:31	0.032
11/28/2017	9:38:31	0.03
11/28/2017	9:39:31	0.028
11/28/2017	9:40:31	0.025

11/28/2017	9:41:31	0.026
11/28/2017	9:42:31	0.021
11/28/2017	9:43:31	0.019
11/28/2017	9:44:31	0.018
11/28/2017	9:45:31	0.017
11/28/2017	9:46:31	0.016
11/28/2017	9:47:31	0.016
11/28/2017	9:48:31	0.016
11/28/2017	9:49:31	0.015
11/28/2017	9:50:31	0.015
11/28/2017	9:51:31	0.015
11/28/2017	9:52:31	0.015
11/28/2017	9:53:31	0.015
11/28/2017	9:54:31	0.015
11/28/2017	9:55:31	0.015
11/28/2017	9:56:31	0.018
11/28/2017	9:57:31	0.014
11/28/2017	9:58:31	0.014
11/28/2017	9:59:31	0.014
11/28/2017	10:00:31	0.014
11/28/2017	10:01:31	0.016
11/28/2017	10:02:31	0.014
11/28/2017	10:03:31	0.015
11/28/2017	10:04:31	0.017
11/28/2017	10:05:31	0.015
11/28/2017	10:06:31	0.067
11/28/2017	10:07:31	0.077
11/28/2017	10:08:31	0.047
11/28/2017	10:09:31	0.072
11/28/2017	10:10:31	0.131
11/28/2017	10:11:31	0.02
11/28/2017	10:12:31	0.017
11/28/2017	10:13:31	0.021
11/28/2017	10:14:31	0.015
11/28/2017	10:15:31	0.015
11/28/2017	10:16:31	0.015
11/28/2017	10:17:31	0.016
11/28/2017	10:18:31	0.015
11/28/2017	10:19:31	0.015
11/28/2017	10:20:31	0.014

11/28/2017	10:21:31	0.016
11/28/2017	10:22:31	0.014
11/28/2017	10:23:31	0.012
11/28/2017	10:24:31	0.013
11/28/2017	10:25:31	0.013
11/28/2017	10:26:31	0.013
11/28/2017	10:27:31	0.014
11/28/2017	10:28:31	0.042
11/28/2017	10:29:31	0.023
11/28/2017	10:30:31	0.037
11/28/2017	10:31:31	0.012
11/28/2017	10:32:31	0.011
11/28/2017	10:33:31	0.021
11/28/2017	10:34:31	0.013
11/28/2017	10:35:31	0.012
11/28/2017	10:36:31	0.013
11/28/2017	10:37:31	0.013
11/28/2017	10:38:31	0.012
11/28/2017	10:39:31	0.015
11/28/2017	10:40:31	0.012
11/28/2017	10:41:31	0.022
11/28/2017	10:42:31	0.017
11/28/2017	10:43:31	0.013
11/28/2017	10:44:31	0.011
11/28/2017	10:45:31	0.012
11/28/2017	10:46:31	0.01
11/28/2017	10:47:31	0.01
11/28/2017	10:48:31	0.01
11/28/2017	10:49:31	0.011
11/28/2017	10:50:31	0.011
11/28/2017	10:51:31	0.011
11/28/2017	10:52:31	0.012
11/28/2017	10:53:31	0.01
11/28/2017	10:54:31	0.009
11/28/2017	10:55:31	0.01
11/28/2017	10:56:31	0.013
11/28/2017	10:57:31	0.01
11/28/2017	10:58:31	0.018
11/28/2017	10:59:31	0.011
11/28/2017	11:00:31	0.011

11/28/2017	11:01:31	0.009
11/28/2017	11:02:31	0.011
11/28/2017	11:03:31	0.009
11/28/2017	11:04:31	0.009
11/28/2017	11:05:31	0.012
11/28/2017	11:06:31	0.019
11/28/2017	11:07:31	0.042
11/28/2017	11:08:31	0.045
11/28/2017	11:09:31	0.025
11/28/2017	11:10:31	0.024
11/28/2017	11:11:31	0.022
11/28/2017	11:12:31	0.019
11/28/2017	11:13:31	0.019
11/28/2017	11:14:31	0.012
11/28/2017	11:15:31	0.011
11/28/2017	11:16:31	0.01
11/28/2017	11:17:31	0.012
11/28/2017	11:18:31	0.01
11/28/2017	11:19:31	0.008
11/28/2017	11:20:31	0.009
11/28/2017	11:21:31	0.009
11/28/2017	11:22:31	0.01
11/28/2017	11:23:31	0.008
11/28/2017	11:24:31	0.008
11/28/2017	11:25:31	0.008
11/28/2017	11:26:31	0.009
11/28/2017	11:27:31	0.007
11/28/2017	11:28:31	0.008
11/28/2017	11:29:31	0.008
11/28/2017	11:30:31	0.007
11/28/2017	11:31:31	0.007
11/28/2017	11:32:31	0.007
11/28/2017	11:33:31	0.007
11/28/2017	11:34:31	0.007
11/28/2017	11:35:31	0.007
11/28/2017	11:36:31	0.007
11/28/2017	11:37:31	0.006
11/28/2017	11:38:31	0.006
11/28/2017	11:39:31	0.007
11/28/2017	11:40:31	0.009

11/28/2017	11:41:31	0.009
11/28/2017	11:42:31	0.008
11/28/2017	11:43:31	0.007
11/28/2017	11:44:31	0.01
11/28/2017	11:45:31	0.008
11/28/2017	11:46:31	0.006
11/28/2017	11:47:31	0.006
11/28/2017	11:48:31	0.008
11/28/2017	11:49:31	0.007
11/28/2017	11:50:31	0.007
11/28/2017	11:51:31	0.007
11/28/2017	11:52:31	0.009
11/28/2017	11:53:31	0.008
11/28/2017	11:54:31	0.007
11/28/2017	11:55:31	0.007
11/28/2017	11:56:31	0.007
11/28/2017	11:57:31	0.007
11/28/2017	11:58:31	0.006
11/28/2017	11:59:31	0.006
11/28/2017	12:00:31	0.006
11/28/2017	12:01:31	0.007
11/28/2017	12:02:31	0.006
11/28/2017	12:03:31	0.006
11/28/2017	12:04:31	0.006
11/28/2017	12:05:31	0.006
11/28/2017	12:06:31	0.006
11/28/2017	12:07:31	0.006
11/28/2017	12:08:31	0.006
11/28/2017	12:09:31	0.005
11/28/2017	12:10:31	0.006
11/28/2017	12:11:31	0.006
11/28/2017	12:12:31	0.005
11/28/2017	12:13:31	0.005
11/28/2017	12:14:31	0.006
11/28/2017	12:15:31	0.005
11/28/2017	12:16:31	0.006
11/28/2017	12:17:31	0.006
11/28/2017	12:18:31	0.006
11/28/2017	12:19:31	0.005
11/28/2017	12:20:31	0.005



11/28/2017	12:21:31	0.005
11/28/2017	12:22:31	0.005
11/28/2017	12:23:31	0.005
11/28/2017	12:24:31	0.005
11/28/2017	12:25:31	0.005
11/28/2017	12:26:31	0.005
11/28/2017	12:27:31	0.005
11/28/2017	12:28:31	0.007
11/28/2017	12:29:31	0.005
11/28/2017	12:30:31	0.005
11/28/2017	12:31:31	0.005
11/28/2017	12:32:31	0.006
11/28/2017	12:33:31	0.005
11/28/2017	12:34:31	0.005
11/28/2017	12:35:31	0.005
11/28/2017	12:36:31	0.004
11/28/2017	12:37:31	0.005
11/28/2017	12:38:31	0.005
11/28/2017	12:39:31	0.006
11/28/2017	12:40:31	0.006
11/28/2017	12:41:31	0.005
11/28/2017	12:42:31	0.005
11/28/2017	12:43:31	0.005
11/28/2017	12:44:31	0.005
11/28/2017	12:45:31	0.005
11/28/2017	12:46:31	0.005
11/28/2017	12:47:31	0.005
11/28/2017	12:48:31	0.004
11/28/2017	12:49:31	0.005
11/28/2017	12:50:31	0.004
11/28/2017	12:51:31	0.004
11/28/2017	12:52:31	0.005
11/28/2017	12:53:31	0.005
11/28/2017	12:54:31	0.005
11/28/2017	12:55:31	0.005
11/28/2017	12:56:31	0.007
11/28/2017	12:57:31	0.006
11/28/2017	12:58:31	0.006
11/28/2017	12:59:31	0.016
11/28/2017	13:00:31	0.006

11/28/2017	13:01:31	0.005
11/28/2017	13:02:31	0.006
11/28/2017	13:03:31	0.006
11/28/2017	13:04:31	0.005
11/28/2017	13:05:31	0.004
11/28/2017	13:06:31	0.005
11/28/2017	13:07:31	0.005
11/28/2017	13:08:31	0.005
11/28/2017	13:09:31	0.008
11/28/2017	13:10:31	0.015
11/28/2017	13:11:31	0.008
11/28/2017	13:12:31	0.008
11/28/2017	13:13:31	0.013
11/28/2017	13:14:31	0.01
11/28/2017	13:15:31	0.01
11/28/2017	13:16:31	0.03
11/28/2017	13:17:31	0.016
11/28/2017	13:18:31	0.015
11/28/2017	13:19:31	0.026
11/28/2017	13:20:31	0.01
11/28/2017	13:21:31	0.024
11/28/2017	13:22:31	0.016
11/28/2017	13:23:31	0.032
11/28/2017	13:24:31	0.013
11/28/2017	13:25:31	0.026
11/28/2017	13:26:31	0.015
11/28/2017	13:27:31	0.013
11/28/2017	13:28:31	0.022
11/28/2017	13:29:31	0.01
11/28/2017	13:30:31	0.012
11/28/2017	13:31:31	0.017
11/28/2017	13:32:31	0.016
11/28/2017	13:33:31	0.021
11/28/2017	13:34:31	0.024
11/28/2017	13:35:31	0.04
11/28/2017	13:36:31	0.019
11/28/2017	13:37:31	0.012
11/28/2017	13:38:31	0.008
11/28/2017	13:39:31	0.006
11/28/2017	13:40:31	0.005

11/28/2017	13:41:31	0.007
11/28/2017	13:42:31	0.006
11/28/2017	13:43:31	0.006
11/28/2017	13:44:31	0.008
11/28/2017	13:45:31	0.006
11/28/2017	13:46:31	0.006
11/28/2017	13:47:31	0.006
11/28/2017	13:48:31	0.007
11/28/2017	13:49:31	0.005
11/28/2017	13:50:31	0.006
11/28/2017	13:51:31	0.007
11/28/2017	13:52:31	0.005
11/28/2017	13:53:31	0.006
11/28/2017	13:54:31	0.005
11/28/2017	13:55:31	0.006
11/28/2017	13:56:31	0.007
11/28/2017	13:57:31	0.043
11/28/2017	13:58:31	0.008
11/28/2017	13:59:31	0.006
11/28/2017	14:00:31	0.008
11/28/2017	14:01:31	0.061
11/28/2017	14:02:31	0.057
11/28/2017	14:03:31	0.031
11/28/2017	14:04:31	0.018
11/28/2017	14:05:31	0.01
11/28/2017	14:06:31	0.012
11/28/2017	14:07:31	0.012
11/28/2017	14:08:31	0.013
11/28/2017	14:09:31	0.008
11/28/2017	14:10:31	0.012
11/28/2017	14:11:31	0.013
11/28/2017	14:12:31	0.008
11/28/2017	14:13:31	0.008
11/28/2017	14:14:31	0.006
11/28/2017	14:15:31	0.004
11/28/2017	14:16:31	0.004
11/28/2017	14:17:31	0.004
11/28/2017	14:18:31	0.005
11/28/2017	14:19:31	0.005
11/28/2017	14:20:31	0.004

11/28/2017	14:21:31	0.005
11/28/2017	14:22:31	0.005
11/28/2017	14:23:31	0.005
11/28/2017	14:24:31	0.006
11/28/2017	14:25:31	0.005
11/28/2017	14:26:31	0.006
11/28/2017	14:27:31	0.008
11/28/2017	14:28:31	0.006
11/28/2017	14:29:31	0.005
11/28/2017	14:30:31	0.005
11/28/2017	14:31:31	0.006
11/28/2017	14:32:31	0.005
11/28/2017	14:33:31	0.009
11/28/2017	14:34:31	0.006
11/28/2017	14:35:31	0.008
11/28/2017	14:36:31	0.005
11/28/2017	14:37:31	0.004
11/28/2017	14:38:31	0.004
11/28/2017	14:39:31	0.006
11/28/2017	14:40:31	0.006
11/28/2017	14:41:31	0.006
11/28/2017	14:42:31	0.007
11/28/2017	14:43:31	0.005

Model: DustTrak II  
 Model Number: 8530  
 Serial Number: 8530130715  
 Test ID: 5  
 Test Abbreviation: MANUAL\_005  
 Start Date: 11/29/2017  
 Start Time: 8:26:17  
 Duration (dd:hh:mm:ss): 0:04:21:00  
 Log Interval (mm:ss): 1:00  
 Number of points: 261  
 Notes:

Statistics Channel: AEROSOL  
 Units: mg/m<sup>3</sup>  
 Average: 0.065  
 Minimum: 0.006

Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

Time	of	Minimum:	11:35:17
Date	of	Minimum:	11/29/2017
Maximum:		3.18	
Time	of	Maximum:	9:57:17
Date	of	Maximum:	11/29/2017

Calibration	Sensor:	AEROSOL	
	Cal.	date	8/22/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/29/2017	8:27:17	0.025
11/29/2017	8:28:17	0.025
11/29/2017	8:29:17	0.023
11/29/2017	8:30:17	0.025
11/29/2017	8:31:17	0.025
11/29/2017	8:32:17	0.024
11/29/2017	8:33:17	0.023
11/29/2017	8:34:17	0.021
11/29/2017	8:35:17	0.019
11/29/2017	8:36:17	0.022
11/29/2017	8:37:17	0.018
11/29/2017	8:38:17	0.018
11/29/2017	8:39:17	0.028
11/29/2017	8:40:17	0.016
11/29/2017	8:41:17	0.021
11/29/2017	8:42:17	0.019
11/29/2017	8:43:17	0.017
11/29/2017	8:44:17	0.022
11/29/2017	8:45:17	0.018
11/29/2017	8:46:17	0.025
11/29/2017	8:47:17	0.028
11/29/2017	8:48:17	0.022
11/29/2017	8:49:17	0.03
11/29/2017	8:50:17	0.016
11/29/2017	8:51:17	0.023
11/29/2017	8:52:17	0.02
11/29/2017	8:53:17	0.025
11/29/2017	8:54:17	0.021
11/29/2017	8:55:17	0.028

11/29/2017	8:56:17	0.016
11/29/2017	8:57:17	0.035
11/29/2017	8:58:17	0.036
11/29/2017	8:59:17	0.037
11/29/2017	9:00:17	0.023
11/29/2017	9:01:17	0.013
11/29/2017	9:02:17	0.031
11/29/2017	9:03:17	0.028
11/29/2017	9:04:17	0.025
11/29/2017	9:05:17	0.029
11/29/2017	9:06:17	0.032
11/29/2017	9:07:17	0.034
11/29/2017	9:08:17	0.023
11/29/2017	9:09:17	0.025
11/29/2017	9:10:17	0.024
11/29/2017	9:11:17	0.029
11/29/2017	9:12:17	0.04
11/29/2017	9:13:17	0.015
11/29/2017	9:14:17	0.023
11/29/2017	9:15:17	0.022
11/29/2017	9:16:17	0.033
11/29/2017	9:17:17	0.358
11/29/2017	9:18:17	0.197
11/29/2017	9:19:17	0.07
11/29/2017	9:20:17	0.507
11/29/2017	9:21:17	0.215
11/29/2017	9:22:17	0.026
11/29/2017	9:23:17	0.016
11/29/2017	9:24:17	0.01
11/29/2017	9:25:17	0.013
11/29/2017	9:26:17	0.015
11/29/2017	9:27:17	0.015
11/29/2017	9:28:17	0.021
11/29/2017	9:29:17	0.012
11/29/2017	9:30:17	0.019
11/29/2017	9:31:17	0.011
11/29/2017	9:32:17	0.02
11/29/2017	9:33:17	0.027
11/29/2017	9:34:17	0.019
11/29/2017	9:35:17	0.019

11/29/2017	9:36:17	0.01
11/29/2017	9:37:17	0.022
11/29/2017	9:38:17	0.02
11/29/2017	9:39:17	0.018
11/29/2017	9:40:17	0.021
11/29/2017	9:41:17	0.023
11/29/2017	9:42:17	0.075
11/29/2017	9:43:17	0.425
11/29/2017	9:44:17	0.749
11/29/2017	9:45:17	0.163
11/29/2017	9:46:17	0.041
11/29/2017	9:47:17	0.033
11/29/2017	9:48:17	0.033
11/29/2017	9:49:17	0.03
11/29/2017	9:50:17	0.033
11/29/2017	9:51:17	0.031
11/29/2017	9:52:17	0.04
11/29/2017	9:53:17	0.354
11/29/2017	9:54:17	0.897
11/29/2017	9:55:17	1.23
11/29/2017	9:56:17	1.32
11/29/2017	9:57:17	3.18
11/29/2017	9:58:17	1.19
11/29/2017	9:59:17	0.057
11/29/2017	10:00:17	0.088
11/29/2017	10:01:17	0.038
11/29/2017	10:02:17	0.023
11/29/2017	10:03:17	0.031
11/29/2017	10:04:17	0.023
11/29/2017	10:05:17	0.012
11/29/2017	10:06:17	0.013
11/29/2017	10:07:17	0.01
11/29/2017	10:08:17	0.017
11/29/2017	10:09:17	0.012
11/29/2017	10:10:17	0.014
11/29/2017	10:11:17	0.018
11/29/2017	10:12:17	0.018
11/29/2017	10:13:17	0.014
11/29/2017	10:14:17	0.017
11/29/2017	10:15:17	0.03



11/29/2017	10:16:17	0.043
11/29/2017	10:17:17	0.026
11/29/2017	10:18:17	0.012
11/29/2017	10:19:17	0.014
11/29/2017	10:20:17	0.012
11/29/2017	10:21:17	0.021
11/29/2017	10:22:17	0.021
11/29/2017	10:23:17	0.025
11/29/2017	10:24:17	0.078
11/29/2017	10:25:17	0.154
11/29/2017	10:26:17	0.023
11/29/2017	10:27:17	0.026
11/29/2017	10:28:17	0.017
11/29/2017	10:29:17	0.047
11/29/2017	10:30:17	0.031
11/29/2017	10:31:17	0.02
11/29/2017	10:32:17	0.074
11/29/2017	10:33:17	0.145
11/29/2017	10:34:17	0.217
11/29/2017	10:35:17	0.101
11/29/2017	10:36:17	0.087
11/29/2017	10:37:17	0.117
11/29/2017	10:38:17	0.023
11/29/2017	10:39:17	0.019
11/29/2017	10:40:17	0.036
11/29/2017	10:41:17	0.018
11/29/2017	10:42:17	0.025
11/29/2017	10:43:17	0.044
11/29/2017	10:44:17	0.059
11/29/2017	10:45:17	0.036
11/29/2017	10:46:17	0.036
11/29/2017	10:47:17	0.032
11/29/2017	10:48:17	0.03
11/29/2017	10:49:17	0.044
11/29/2017	10:50:17	0.075
11/29/2017	10:51:17	0.13
11/29/2017	10:52:17	0.103
11/29/2017	10:53:17	0.03
11/29/2017	10:54:17	0.03
11/29/2017	10:55:17	0.029

11/29/2017	10:56:17	0.022
11/29/2017	10:57:17	0.021
11/29/2017	10:58:17	0.019
11/29/2017	10:59:17	0.014
11/29/2017	11:00:17	0.014
11/29/2017	11:01:17	0.013
11/29/2017	11:02:17	0.022
11/29/2017	11:03:17	0.014
11/29/2017	11:04:17	0.014
11/29/2017	11:05:17	0.021
11/29/2017	11:06:17	0.025
11/29/2017	11:07:17	0.03
11/29/2017	11:08:17	0.026
11/29/2017	11:09:17	0.021
11/29/2017	11:10:17	0.035
11/29/2017	11:11:17	0.051
11/29/2017	11:12:17	0.041
11/29/2017	11:13:17	0.034
11/29/2017	11:14:17	0.082
11/29/2017	11:15:17	0.028
11/29/2017	11:16:17	0.029
11/29/2017	11:17:17	0.026
11/29/2017	11:18:17	0.014
11/29/2017	11:19:17	0.014
11/29/2017	11:20:17	0.013
11/29/2017	11:21:17	0.017
11/29/2017	11:22:17	0.017
11/29/2017	11:23:17	0.015
11/29/2017	11:24:17	0.016
11/29/2017	11:25:17	0.024
11/29/2017	11:26:17	0.019
11/29/2017	11:27:17	0.021
11/29/2017	11:28:17	0.026
11/29/2017	11:29:17	0.015
11/29/2017	11:30:17	0.017
11/29/2017	11:31:17	0.015
11/29/2017	11:32:17	0.007
11/29/2017	11:33:17	0.007
11/29/2017	11:34:17	0.007
11/29/2017	11:35:17	0.006

11/29/2017	11:36:17	0.007
11/29/2017	11:37:17	0.006
11/29/2017	11:38:17	0.007
11/29/2017	11:39:17	0.006
11/29/2017	11:40:17	0.007
11/29/2017	11:41:17	0.007
11/29/2017	11:42:17	0.006
11/29/2017	11:43:17	0.007
11/29/2017	11:44:17	0.007
11/29/2017	11:45:17	0.007
11/29/2017	11:46:17	0.007
11/29/2017	11:47:17	0.007
11/29/2017	11:48:17	0.006
11/29/2017	11:49:17	0.007
11/29/2017	11:50:17	0.007
11/29/2017	11:51:17	0.007
11/29/2017	11:52:17	0.007
11/29/2017	11:53:17	0.008
11/29/2017	11:54:17	0.007
11/29/2017	11:55:17	0.007
11/29/2017	11:56:17	0.007
11/29/2017	11:57:17	0.007
11/29/2017	11:58:17	0.007
11/29/2017	11:59:17	0.007
11/29/2017	12:00:17	0.007
11/29/2017	12:01:17	0.007
11/29/2017	12:02:17	0.007
11/29/2017	12:03:17	0.007
11/29/2017	12:04:17	0.007
11/29/2017	12:05:17	0.006
11/29/2017	12:06:17	0.006
11/29/2017	12:07:17	0.006
11/29/2017	12:08:17	0.006
11/29/2017	12:09:17	0.007
11/29/2017	12:10:17	0.006
11/29/2017	12:11:17	0.006
11/29/2017	12:12:17	0.007
11/29/2017	12:13:17	0.007
11/29/2017	12:14:17	0.009
11/29/2017	12:15:17	0.008



Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

11/29/2017	12:16:17	0.009
11/29/2017	12:17:17	0.007
11/29/2017	12:18:17	0.007
11/29/2017	12:19:17	0.008
11/29/2017	12:20:17	0.008
11/29/2017	12:21:17	0.008
11/29/2017	12:22:17	0.008
11/29/2017	12:23:17	0.011
11/29/2017	12:24:17	0.008
11/29/2017	12:25:17	0.009
11/29/2017	12:26:17	0.009
11/29/2017	12:27:17	0.006
11/29/2017	12:28:17	0.007
11/29/2017	12:29:17	0.007
11/29/2017	12:30:17	0.008
11/29/2017	12:31:17	0.008
11/29/2017	12:32:17	0.007
11/29/2017	12:33:17	0.007
11/29/2017	12:34:17	0.006
11/29/2017	12:35:17	0.007
11/29/2017	12:36:17	0.006
11/29/2017	12:37:17	0.006
11/29/2017	12:38:17	0.006
11/29/2017	12:39:17	0.006
11/29/2017	12:40:17	0.007
11/29/2017	12:41:17	0.007
11/29/2017	12:42:17	0.006
11/29/2017	12:43:17	0.007
11/29/2017	12:44:17	0.008
11/29/2017	12:45:17	0.018
11/29/2017	12:46:17	0.013
11/29/2017	12:47:17	0.146

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530130715  
Test ID: 6  
Test Abbreviation: MANUAL\_006  
Start Date: 11/29/2017  
Start Time: 13:09:31

**Downwind CAMP Data**  
**Bullshead Plaza Phase II ESA**  
**835-855 West Main Street, Rochester, NY**  
**2172124**

Duration (dd:hh:mm:ss): 0:02:41:00  
 Log Interval (mm:ss): 1:00  
 Number of points: 161  
 Notes:

Statistics Channel: AEROSOL  
 Units: mg/m<sup>3</sup>  
 Average: 0.013  
 Minimum: 0.005  
 Time of Minimum: 15:24:31  
 Date of Minimum: 11/29/2017  
 Maximum: 0.109  
 Time of Maximum: 14:50:31  
 Date of Maximum: 11/29/2017

Calibration Sensor: AEROSOL  
 Cal. date 8/22/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/29/2017	13:10:31	0.03
11/29/2017	13:11:31	0.007
11/29/2017	13:12:31	0.006
11/29/2017	13:13:31	0.007
11/29/2017	13:14:31	0.006
11/29/2017	13:15:31	0.007
11/29/2017	13:16:31	0.007
11/29/2017	13:17:31	0.007
11/29/2017	13:18:31	0.006
11/29/2017	13:19:31	0.006
11/29/2017	13:20:31	0.007
11/29/2017	13:21:31	0.007
11/29/2017	13:22:31	0.007
11/29/2017	13:23:31	0.006
11/29/2017	13:24:31	0.012
11/29/2017	13:25:31	0.016
11/29/2017	13:26:31	0.017
11/29/2017	13:27:31	0.018
11/29/2017	13:28:31	0.014
11/29/2017	13:29:31	0.013

11/29/2017	13:30:31	0.015
11/29/2017	13:31:31	0.017
11/29/2017	13:32:31	0.014
11/29/2017	13:33:31	0.024
11/29/2017	13:34:31	0.017
11/29/2017	13:35:31	0.039
11/29/2017	13:36:31	0.025
11/29/2017	13:37:31	0.021
11/29/2017	13:38:31	0.011
11/29/2017	13:39:31	0.018
11/29/2017	13:40:31	0.019
11/29/2017	13:41:31	0.024
11/29/2017	13:42:31	0.026
11/29/2017	13:43:31	0.027
11/29/2017	13:44:31	0.02
11/29/2017	13:45:31	0.014
11/29/2017	13:46:31	0.013
11/29/2017	13:47:31	0.022
11/29/2017	13:48:31	0.025
11/29/2017	13:49:31	0.019
11/29/2017	13:50:31	0.022
11/29/2017	13:51:31	0.027
11/29/2017	13:52:31	0.019
11/29/2017	13:53:31	0.034
11/29/2017	13:54:31	0.025
11/29/2017	13:55:31	0.016
11/29/2017	13:56:31	0.01
11/29/2017	13:57:31	0.01
11/29/2017	13:58:31	0.013
11/29/2017	13:59:31	0.008
11/29/2017	14:00:31	0.012
11/29/2017	14:01:31	0.008
11/29/2017	14:02:31	0.006
11/29/2017	14:03:31	0.006
11/29/2017	14:04:31	0.006
11/29/2017	14:05:31	0.006
11/29/2017	14:06:31	0.007
11/29/2017	14:07:31	0.006
11/29/2017	14:08:31	0.006
11/29/2017	14:09:31	0.006

11/29/2017	14:10:31	0.006
11/29/2017	14:11:31	0.007
11/29/2017	14:12:31	0.006
11/29/2017	14:13:31	0.007
11/29/2017	14:14:31	0.007
11/29/2017	14:15:31	0.006
11/29/2017	14:16:31	0.006
11/29/2017	14:17:31	0.006
11/29/2017	14:18:31	0.006
11/29/2017	14:19:31	0.009
11/29/2017	14:20:31	0.006
11/29/2017	14:21:31	0.006
11/29/2017	14:22:31	0.006
11/29/2017	14:23:31	0.006
11/29/2017	14:24:31	0.006
11/29/2017	14:25:31	0.006
11/29/2017	14:26:31	0.006
11/29/2017	14:27:31	0.006
11/29/2017	14:28:31	0.007
11/29/2017	14:29:31	0.006
11/29/2017	14:30:31	0.006
11/29/2017	14:31:31	0.006
11/29/2017	14:32:31	0.006
11/29/2017	14:33:31	0.006
11/29/2017	14:34:31	0.006
11/29/2017	14:35:31	0.008
11/29/2017	14:36:31	0.006
11/29/2017	14:37:31	0.006
11/29/2017	14:38:31	0.006
11/29/2017	14:39:31	0.006
11/29/2017	14:40:31	0.006
11/29/2017	14:41:31	0.008
11/29/2017	14:42:31	0.007
11/29/2017	14:43:31	0.006
11/29/2017	14:44:31	0.008
11/29/2017	14:45:31	0.008
11/29/2017	14:46:31	0.006
11/29/2017	14:47:31	0.007
11/29/2017	14:48:31	0.007
11/29/2017	14:49:31	0.007



11/29/2017	14:50:31	0.109
11/29/2017	14:51:31	0.019
11/29/2017	14:52:31	0.062
11/29/2017	14:53:31	0.05
11/29/2017	14:54:31	0.042
11/29/2017	14:55:31	0.034
11/29/2017	14:56:31	0.029
11/29/2017	14:57:31	0.025
11/29/2017	14:58:31	0.021
11/29/2017	14:59:31	0.018
11/29/2017	15:00:31	0.016
11/29/2017	15:01:31	0.035
11/29/2017	15:02:31	0.027
11/29/2017	15:03:31	0.062
11/29/2017	15:04:31	0.037
11/29/2017	15:05:31	0.02
11/29/2017	15:06:31	0.018
11/29/2017	15:07:31	0.013
11/29/2017	15:08:31	0.011
11/29/2017	15:09:31	0.009
11/29/2017	15:10:31	0.012
11/29/2017	15:11:31	0.012
11/29/2017	15:12:31	0.012
11/29/2017	15:13:31	0.009
11/29/2017	15:14:31	0.008
11/29/2017	15:15:31	0.013
11/29/2017	15:16:31	0.01
11/29/2017	15:17:31	0.007
11/29/2017	15:18:31	0.01
11/29/2017	15:19:31	0.009
11/29/2017	15:20:31	0.008
11/29/2017	15:21:31	0.007
11/29/2017	15:22:31	0.008
11/29/2017	15:23:31	0.006
11/29/2017	15:24:31	0.005
11/29/2017	15:25:31	0.008
11/29/2017	15:26:31	0.008
11/29/2017	15:27:31	0.007
11/29/2017	15:28:31	0.006
11/29/2017	15:29:31	0.007

11/29/2017	15:30:31	0.008
11/29/2017	15:31:31	0.008
11/29/2017	15:32:31	0.008
11/29/2017	15:33:31	0.012
11/29/2017	15:34:31	0.015
11/29/2017	15:35:31	0.014
11/29/2017	15:36:31	0.012
11/29/2017	15:37:31	0.01
11/29/2017	15:38:31	0.008
11/29/2017	15:39:31	0.007
11/29/2017	15:40:31	0.007
11/29/2017	15:41:31	0.013
11/29/2017	15:42:31	0.016
11/29/2017	15:43:31	0.015
11/29/2017	15:44:31	0.015
11/29/2017	15:45:31	0.01
11/29/2017	15:46:31	0.006
11/29/2017	15:47:31	0.005
11/29/2017	15:48:31	0.006
11/29/2017	15:49:31	0.007
11/29/2017	15:50:31	0.009

Model: DustTrak II  
 Model Number: 8530  
 Serial Number: 8530130715  
 Test ID: 7  
 Test Abbreviation: MANUAL\_007  
 Start Date: 11/30/2017  
 Start Time: 8:06:37  
 Duration (dd:hh:mm:ss): 0:06:51:00  
 Log Interval (mm:ss): 1:00  
 Number of points: 411  
 Notes:

Statistics Channel: AEROSOL  
 Units: mg/m<sup>3</sup>  
 Average: 0.035  
 Minimum: 0.008  
 Time of Minimum: 9:37:37  
 Date of Minimum: 11/30/2017

Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

Maximum: 0.346  
 Time of Maximum: 9:00:37  
 Date of Maximum: 11/30/2017

Calibration Sensor: AEROSOL  
 Cal. date 8/22/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
11/30/2017	8:07:37	0.069
11/30/2017	8:08:37	0.052
11/30/2017	8:09:37	0.057
11/30/2017	8:10:37	0.059
11/30/2017	8:11:37	0.06
11/30/2017	8:12:37	0.061
11/30/2017	8:13:37	0.06
11/30/2017	8:14:37	0.058
11/30/2017	8:15:37	0.055
11/30/2017	8:16:37	0.05
11/30/2017	8:17:37	0.046
11/30/2017	8:18:37	0.039
11/30/2017	8:19:37	0.037
11/30/2017	8:20:37	0.036
11/30/2017	8:21:37	0.036
11/30/2017	8:22:37	0.208
11/30/2017	8:23:37	0.295
11/30/2017	8:24:37	0.121
11/30/2017	8:25:37	0.084
11/30/2017	8:26:37	0.085
11/30/2017	8:27:37	0.082
11/30/2017	8:28:37	0.104
11/30/2017	8:29:37	0.081
11/30/2017	8:30:37	0.05
11/30/2017	8:31:37	0.072
11/30/2017	8:32:37	0.063
11/30/2017	8:33:37	0.072
11/30/2017	8:34:37	0.173
11/30/2017	8:35:37	0.217
11/30/2017	8:36:37	0.145
11/30/2017	8:37:37	0.097

11/30/2017	8:38:37	0.061
11/30/2017	8:39:37	0.061
11/30/2017	8:40:37	0.177
11/30/2017	8:41:37	0.132
11/30/2017	8:42:37	0.231
11/30/2017	8:43:37	0.117
11/30/2017	8:44:37	0.088
11/30/2017	8:45:37	0.124
11/30/2017	8:46:37	0.099
11/30/2017	8:47:37	0.097
11/30/2017	8:48:37	0.115
11/30/2017	8:49:37	0.116
11/30/2017	8:50:37	0.1
11/30/2017	8:51:37	0.15
11/30/2017	8:52:37	0.136
11/30/2017	8:53:37	0.105
11/30/2017	8:54:37	0.164
11/30/2017	8:55:37	0.134
11/30/2017	8:56:37	0.091
11/30/2017	8:57:37	0.081
11/30/2017	8:58:37	0.068
11/30/2017	8:59:37	0.102
11/30/2017	9:00:37	0.346
11/30/2017	9:01:37	0.189
11/30/2017	9:02:37	0.152
11/30/2017	9:03:37	0.108
11/30/2017	9:04:37	0.156
11/30/2017	9:05:37	0.112
11/30/2017	9:06:37	0.159
11/30/2017	9:07:37	0.1
11/30/2017	9:08:37	0.161
11/30/2017	9:09:37	0.073
11/30/2017	9:10:37	0.092
11/30/2017	9:11:37	0.085
11/30/2017	9:12:37	0.028
11/30/2017	9:13:37	0.021
11/30/2017	9:14:37	0.023
11/30/2017	9:15:37	0.03
11/30/2017	9:16:37	0.068
11/30/2017	9:17:37	0.032

11/30/2017	9:18:37	0.021
11/30/2017	9:19:37	0.027
11/30/2017	9:20:37	0.02
11/30/2017	9:21:37	0.017
11/30/2017	9:22:37	0.015
11/30/2017	9:23:37	0.014
11/30/2017	9:24:37	0.014
11/30/2017	9:25:37	0.016
11/30/2017	9:26:37	0.026
11/30/2017	9:27:37	0.016
11/30/2017	9:28:37	0.014
11/30/2017	9:29:37	0.014
11/30/2017	9:30:37	0.012
11/30/2017	9:31:37	0.011
11/30/2017	9:32:37	0.011
11/30/2017	9:33:37	0.01
11/30/2017	9:34:37	0.009
11/30/2017	9:35:37	0.009
11/30/2017	9:36:37	0.009
11/30/2017	9:37:37	0.008
11/30/2017	9:38:37	0.008
11/30/2017	9:39:37	0.01
11/30/2017	9:40:37	0.014
11/30/2017	9:41:37	0.012
11/30/2017	9:42:37	0.012
11/30/2017	9:43:37	0.011
11/30/2017	9:44:37	0.019
11/30/2017	9:45:37	0.017
11/30/2017	9:46:37	0.014
11/30/2017	9:47:37	0.014
11/30/2017	9:48:37	0.014
11/30/2017	9:49:37	0.015
11/30/2017	9:50:37	0.016
11/30/2017	9:51:37	0.012
11/30/2017	9:52:37	0.012
11/30/2017	9:53:37	0.011
11/30/2017	9:54:37	0.012
11/30/2017	9:55:37	0.012
11/30/2017	9:56:37	0.012
11/30/2017	9:57:37	0.011

11/30/2017	9:58:37	0.011
11/30/2017	9:59:37	0.012
11/30/2017	10:00:37	0.013
11/30/2017	10:01:37	0.011
11/30/2017	10:02:37	0.015
11/30/2017	10:03:37	0.014
11/30/2017	10:04:37	0.019
11/30/2017	10:05:37	0.019
11/30/2017	10:06:37	0.016
11/30/2017	10:07:37	0.031
11/30/2017	10:08:37	0.28
11/30/2017	10:09:37	0.049
11/30/2017	10:10:37	0.028
11/30/2017	10:11:37	0.044
11/30/2017	10:12:37	0.019
11/30/2017	10:13:37	0.022
11/30/2017	10:14:37	0.018
11/30/2017	10:15:37	0.028
11/30/2017	10:16:37	0.083
11/30/2017	10:17:37	0.058
11/30/2017	10:18:37	0.035
11/30/2017	10:19:37	0.019
11/30/2017	10:20:37	0.05
11/30/2017	10:21:37	0.047
11/30/2017	10:22:37	0.024
11/30/2017	10:23:37	0.044
11/30/2017	10:24:37	0.061
11/30/2017	10:25:37	0.026
11/30/2017	10:26:37	0.027
11/30/2017	10:27:37	0.053
11/30/2017	10:28:37	0.056
11/30/2017	10:29:37	0.066
11/30/2017	10:30:37	0.032
11/30/2017	10:31:37	0.028
11/30/2017	10:32:37	0.034
11/30/2017	10:33:37	0.031
11/30/2017	10:34:37	0.022
11/30/2017	10:35:37	0.016
11/30/2017	10:36:37	0.028
11/30/2017	10:37:37	0.015

11/30/2017	10:38:37	0.015
11/30/2017	10:39:37	0.018
11/30/2017	10:40:37	0.024
11/30/2017	10:41:37	0.02
11/30/2017	10:42:37	0.015
11/30/2017	10:43:37	0.015
11/30/2017	10:44:37	0.015
11/30/2017	10:45:37	0.015
11/30/2017	10:46:37	0.015
11/30/2017	10:47:37	0.015
11/30/2017	10:48:37	0.015
11/30/2017	10:49:37	0.015
11/30/2017	10:50:37	0.015
11/30/2017	10:51:37	0.015
11/30/2017	10:52:37	0.016
11/30/2017	10:53:37	0.015
11/30/2017	10:54:37	0.015
11/30/2017	10:55:37	0.015
11/30/2017	10:56:37	0.014
11/30/2017	10:57:37	0.015
11/30/2017	10:58:37	0.015
11/30/2017	10:59:37	0.014
11/30/2017	11:00:37	0.015
11/30/2017	11:01:37	0.015
11/30/2017	11:02:37	0.015
11/30/2017	11:03:37	0.016
11/30/2017	11:04:37	0.017
11/30/2017	11:05:37	0.016
11/30/2017	11:06:37	0.016
11/30/2017	11:07:37	0.016
11/30/2017	11:08:37	0.015
11/30/2017	11:09:37	0.015
11/30/2017	11:10:37	0.016
11/30/2017	11:11:37	0.016
11/30/2017	11:12:37	0.016
11/30/2017	11:13:37	0.017
11/30/2017	11:14:37	0.024
11/30/2017	11:15:37	0.029
11/30/2017	11:16:37	0.028
11/30/2017	11:17:37	0.016



11/30/2017	11:18:37	0.017
11/30/2017	11:19:37	0.017
11/30/2017	11:20:37	0.017
11/30/2017	11:21:37	0.016
11/30/2017	11:22:37	0.017
11/30/2017	11:23:37	0.017
11/30/2017	11:24:37	0.017
11/30/2017	11:25:37	0.017
11/30/2017	11:26:37	0.017
11/30/2017	11:27:37	0.022
11/30/2017	11:28:37	0.018
11/30/2017	11:29:37	0.019
11/30/2017	11:30:37	0.019
11/30/2017	11:31:37	0.018
11/30/2017	11:32:37	0.019
11/30/2017	11:33:37	0.019
11/30/2017	11:34:37	0.018
11/30/2017	11:35:37	0.017
11/30/2017	11:36:37	0.017
11/30/2017	11:37:37	0.017
11/30/2017	11:38:37	0.017
11/30/2017	11:39:37	0.089
11/30/2017	11:40:37	0.019
11/30/2017	11:41:37	0.017
11/30/2017	11:42:37	0.017
11/30/2017	11:43:37	0.017
11/30/2017	11:44:37	0.017
11/30/2017	11:45:37	0.017
11/30/2017	11:46:37	0.016
11/30/2017	11:47:37	0.016
11/30/2017	11:48:37	0.016
11/30/2017	11:49:37	0.016
11/30/2017	11:50:37	0.016
11/30/2017	11:51:37	0.016
11/30/2017	11:52:37	0.016
11/30/2017	11:53:37	0.016
11/30/2017	11:54:37	0.016
11/30/2017	11:55:37	0.015
11/30/2017	11:56:37	0.015
11/30/2017	11:57:37	0.015

11/30/2017	11:58:37	0.015
11/30/2017	11:59:37	0.015
11/30/2017	12:00:37	0.015
11/30/2017	12:01:37	0.015
11/30/2017	12:02:37	0.015
11/30/2017	12:03:37	0.016
11/30/2017	12:04:37	0.015
11/30/2017	12:05:37	0.016
11/30/2017	12:06:37	0.016
11/30/2017	12:07:37	0.016
11/30/2017	12:08:37	0.015
11/30/2017	12:09:37	0.016
11/30/2017	12:10:37	0.016
11/30/2017	12:11:37	0.016
11/30/2017	12:12:37	0.016
11/30/2017	12:13:37	0.016
11/30/2017	12:14:37	0.016
11/30/2017	12:15:37	0.016
11/30/2017	12:16:37	0.016
11/30/2017	12:17:37	0.016
11/30/2017	12:18:37	0.016
11/30/2017	12:19:37	0.017
11/30/2017	12:20:37	0.017
11/30/2017	12:21:37	0.017
11/30/2017	12:22:37	0.017
11/30/2017	12:23:37	0.017
11/30/2017	12:24:37	0.017
11/30/2017	12:25:37	0.017
11/30/2017	12:26:37	0.017
11/30/2017	12:27:37	0.018
11/30/2017	12:28:37	0.017
11/30/2017	12:29:37	0.017
11/30/2017	12:30:37	0.017
11/30/2017	12:31:37	0.017
11/30/2017	12:32:37	0.018
11/30/2017	12:33:37	0.018
11/30/2017	12:34:37	0.018
11/30/2017	12:35:37	0.018
11/30/2017	12:36:37	0.023
11/30/2017	12:37:37	0.019

11/30/2017	12:38:37	0.018
11/30/2017	12:39:37	0.018
11/30/2017	12:40:37	0.018
11/30/2017	12:41:37	0.017
11/30/2017	12:42:37	0.018
11/30/2017	12:43:37	0.033
11/30/2017	12:44:37	0.029
11/30/2017	12:45:37	0.018
11/30/2017	12:46:37	0.019
11/30/2017	12:47:37	0.019
11/30/2017	12:48:37	0.018
11/30/2017	12:49:37	0.019
11/30/2017	12:50:37	0.018
11/30/2017	12:51:37	0.019
11/30/2017	12:52:37	0.018
11/30/2017	12:53:37	0.019
11/30/2017	12:54:37	0.019
11/30/2017	12:55:37	0.019
11/30/2017	12:56:37	0.019
11/30/2017	12:57:37	0.02
11/30/2017	12:58:37	0.019
11/30/2017	12:59:37	0.019
11/30/2017	13:00:37	0.018
11/30/2017	13:01:37	0.018
11/30/2017	13:02:37	0.018
11/30/2017	13:03:37	0.017
11/30/2017	13:04:37	0.018
11/30/2017	13:05:37	0.019
11/30/2017	13:06:37	0.018
11/30/2017	13:07:37	0.019
11/30/2017	13:08:37	0.018
11/30/2017	13:09:37	0.017
11/30/2017	13:10:37	0.017
11/30/2017	13:11:37	0.018
11/30/2017	13:12:37	0.019
11/30/2017	13:13:37	0.018
11/30/2017	13:14:37	0.018
11/30/2017	13:15:37	0.018
11/30/2017	13:16:37	0.019
11/30/2017	13:17:37	0.019

11/30/2017	13:18:37	0.018
11/30/2017	13:19:37	0.019
11/30/2017	13:20:37	0.018
11/30/2017	13:21:37	0.019
11/30/2017	13:22:37	0.019
11/30/2017	13:23:37	0.018
11/30/2017	13:24:37	0.018
11/30/2017	13:25:37	0.018
11/30/2017	13:26:37	0.018
11/30/2017	13:27:37	0.018
11/30/2017	13:28:37	0.019
11/30/2017	13:29:37	0.019
11/30/2017	13:30:37	0.02
11/30/2017	13:31:37	0.019
11/30/2017	13:32:37	0.02
11/30/2017	13:33:37	0.02
11/30/2017	13:34:37	0.02
11/30/2017	13:35:37	0.02
11/30/2017	13:36:37	0.02
11/30/2017	13:37:37	0.02
11/30/2017	13:38:37	0.02
11/30/2017	13:39:37	0.02
11/30/2017	13:40:37	0.02
11/30/2017	13:41:37	0.021
11/30/2017	13:42:37	0.021
11/30/2017	13:43:37	0.021
11/30/2017	13:44:37	0.021
11/30/2017	13:45:37	0.021
11/30/2017	13:46:37	0.021
11/30/2017	13:47:37	0.021
11/30/2017	13:48:37	0.021
11/30/2017	13:49:37	0.021
11/30/2017	13:50:37	0.022
11/30/2017	13:51:37	0.022
11/30/2017	13:52:37	0.024
11/30/2017	13:53:37	0.025
11/30/2017	13:54:37	0.024
11/30/2017	13:55:37	0.023
11/30/2017	13:56:37	0.022
11/30/2017	13:57:37	0.022

11/30/2017	13:58:37	0.022
11/30/2017	13:59:37	0.022
11/30/2017	14:00:37	0.022
11/30/2017	14:01:37	0.021
11/30/2017	14:02:37	0.022
11/30/2017	14:03:37	0.021
11/30/2017	14:04:37	0.021
11/30/2017	14:05:37	0.022
11/30/2017	14:06:37	0.022
11/30/2017	14:07:37	0.021
11/30/2017	14:08:37	0.021
11/30/2017	14:09:37	0.021
11/30/2017	14:10:37	0.021
11/30/2017	14:11:37	0.021
11/30/2017	14:12:37	0.022
11/30/2017	14:13:37	0.02
11/30/2017	14:14:37	0.02
11/30/2017	14:15:37	0.02
11/30/2017	14:16:37	0.02
11/30/2017	14:17:37	0.02
11/30/2017	14:18:37	0.02
11/30/2017	14:19:37	0.02
11/30/2017	14:20:37	0.02
11/30/2017	14:21:37	0.023
11/30/2017	14:22:37	0.02
11/30/2017	14:23:37	0.021
11/30/2017	14:24:37	0.02
11/30/2017	14:25:37	0.021
11/30/2017	14:26:37	0.022
11/30/2017	14:27:37	0.022
11/30/2017	14:28:37	0.026
11/30/2017	14:29:37	0.028
11/30/2017	14:30:37	0.027
11/30/2017	14:31:37	0.023
11/30/2017	14:32:37	0.022
11/30/2017	14:33:37	0.022
11/30/2017	14:34:37	0.023
11/30/2017	14:35:37	0.022
11/30/2017	14:36:37	0.021
11/30/2017	14:37:37	0.021

11/30/2017	14:38:37	0.021
11/30/2017	14:39:37	0.023
11/30/2017	14:40:37	0.022
11/30/2017	14:41:37	0.022
11/30/2017	14:42:37	0.023
11/30/2017	14:43:37	0.023
11/30/2017	14:44:37	0.024
11/30/2017	14:45:37	0.025
11/30/2017	14:46:37	0.025
11/30/2017	14:47:37	0.025
11/30/2017	14:48:37	0.023
11/30/2017	14:49:37	0.023
11/30/2017	14:50:37	0.025
11/30/2017	14:51:37	0.023
11/30/2017	14:52:37	0.025
11/30/2017	14:53:37	0.025
11/30/2017	14:54:37	0.025
11/30/2017	14:55:37	0.025
11/30/2017	14:56:37	0.03
11/30/2017	14:57:37	0.03

Model:	DustTrak	II	
Model	Number:	8530	
Serial	Number:	8530130715	
Test	ID:	8	
Test	Abbreviation:	MANUAL_008	
Start	Date:	12/1/2017	
Start	Time:	8:48:55	
Duration	(dd:hh:mm:ss):	0:06:45:00	
Log	Interval	(mm:ss):	1:00
Number	of	points:	405
Notes:			

Statistics	Channel:	AEROSOL	
	Units:	mg/m <sup>3</sup>	
	Average:	0.025	
	Minimum:	0.004	
	Time	of	Minimum: 11:01:55
	Date	of	Minimum: 12/1/2017
	Maximum:	2.88	

Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

Time	of	Maximum:	9:20:55
Date	of	Maximum:	12/1/2017

Calibration	Sensor:	AEROSOL	
	Cal.	date	8/22/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
12/1/2017	8:49:55	0.069
12/1/2017	8:50:55	0.007
12/1/2017	8:51:55	0.008
12/1/2017	8:52:55	0.007
12/1/2017	8:53:55	0.006
12/1/2017	8:54:55	0.006
12/1/2017	8:55:55	0.006
12/1/2017	8:56:55	0.006
12/1/2017	8:57:55	0.006
12/1/2017	8:58:55	0.007
12/1/2017	8:59:55	0.007
12/1/2017	9:00:55	0.007
12/1/2017	9:01:55	0.008
12/1/2017	9:02:55	0.008
12/1/2017	9:03:55	0.008
12/1/2017	9:04:55	0.008
12/1/2017	9:05:55	0.013
12/1/2017	9:06:55	0.014
12/1/2017	9:07:55	0.017
12/1/2017	9:08:55	0.016
12/1/2017	9:09:55	0.011
12/1/2017	9:10:55	0.024
12/1/2017	9:11:55	0.014
12/1/2017	9:12:55	0.009
12/1/2017	9:13:55	0.009
12/1/2017	9:14:55	0.008
12/1/2017	9:15:55	0.007
12/1/2017	9:16:55	0.007
12/1/2017	9:17:55	0.016
12/1/2017	9:18:55	0.04
12/1/2017	9:19:55	0.033
12/1/2017	9:20:55	2.88



12/1/2017	9:21:55	0.866
12/1/2017	9:22:55	0.037
12/1/2017	9:23:55	0.016
12/1/2017	9:24:55	0.017
12/1/2017	9:25:55	0.021
12/1/2017	9:26:55	0.023
12/1/2017	9:27:55	0.018
12/1/2017	9:28:55	0.033
12/1/2017	9:29:55	0.016
12/1/2017	9:30:55	0.022
12/1/2017	9:31:55	0.038
12/1/2017	9:32:55	0.021
12/1/2017	9:33:55	0.078
12/1/2017	9:34:55	0.052
12/1/2017	9:35:55	0.047
12/1/2017	9:36:55	0.049
12/1/2017	9:37:55	0.03
12/1/2017	9:38:55	0.045
12/1/2017	9:39:55	0.038
12/1/2017	9:40:55	0.026
12/1/2017	9:41:55	0.065
12/1/2017	9:42:55	0.087
12/1/2017	9:43:55	0.061
12/1/2017	9:44:55	0.062
12/1/2017	9:45:55	0.07
12/1/2017	9:46:55	0.11
12/1/2017	9:47:55	0.088
12/1/2017	9:48:55	0.059
12/1/2017	9:49:55	0.065
12/1/2017	9:50:55	0.047
12/1/2017	9:51:55	0.05
12/1/2017	9:52:55	0.044
12/1/2017	9:53:55	0.093
12/1/2017	9:54:55	0.037
12/1/2017	9:55:55	0.062
12/1/2017	9:56:55	0.038
12/1/2017	9:57:55	0.022
12/1/2017	9:58:55	0.025
12/1/2017	9:59:55	0.023
12/1/2017	10:00:55	0.037

12/1/2017	10:01:55	0.026
12/1/2017	10:02:55	0.02
12/1/2017	10:03:55	0.026
12/1/2017	10:04:55	0.032
12/1/2017	10:05:55	0.035
12/1/2017	10:06:55	0.024
12/1/2017	10:07:55	0.023
12/1/2017	10:08:55	0.023
12/1/2017	10:09:55	0.03
12/1/2017	10:10:55	0.024
12/1/2017	10:11:55	0.023
12/1/2017	10:12:55	0.017
12/1/2017	10:13:55	0.031
12/1/2017	10:14:55	0.022
12/1/2017	10:15:55	0.025
12/1/2017	10:16:55	0.019
12/1/2017	10:17:55	0.018
12/1/2017	10:18:55	0.011
12/1/2017	10:19:55	0.014
12/1/2017	10:20:55	0.009
12/1/2017	10:21:55	0.013
12/1/2017	10:22:55	0.009
12/1/2017	10:23:55	0.006
12/1/2017	10:24:55	0.006
12/1/2017	10:25:55	0.006
12/1/2017	10:26:55	0.006
12/1/2017	10:27:55	0.006
12/1/2017	10:28:55	0.006
12/1/2017	10:29:55	0.008
12/1/2017	10:30:55	0.01
12/1/2017	10:31:55	0.008
12/1/2017	10:32:55	0.008
12/1/2017	10:33:55	0.008
12/1/2017	10:34:55	0.013
12/1/2017	10:35:55	0.008
12/1/2017	10:36:55	0.008
12/1/2017	10:37:55	0.007
12/1/2017	10:38:55	0.006
12/1/2017	10:39:55	0.007
12/1/2017	10:40:55	0.009

12/1/2017	10:41:55	0.016
12/1/2017	10:42:55	0.009
12/1/2017	10:43:55	0.007
12/1/2017	10:44:55	0.006
12/1/2017	10:45:55	0.007
12/1/2017	10:46:55	0.006
12/1/2017	10:47:55	0.012
12/1/2017	10:48:55	0.009
12/1/2017	10:49:55	0.007
12/1/2017	10:50:55	0.007
12/1/2017	10:51:55	0.009
12/1/2017	10:52:55	0.008
12/1/2017	10:53:55	0.007
12/1/2017	10:54:55	0.007
12/1/2017	10:55:55	0.005
12/1/2017	10:56:55	0.005
12/1/2017	10:57:55	0.005
12/1/2017	10:58:55	0.006
12/1/2017	10:59:55	0.005
12/1/2017	11:00:55	0.006
12/1/2017	11:01:55	0.004
12/1/2017	11:02:55	0.004
12/1/2017	11:03:55	0.004
12/1/2017	11:04:55	0.004
12/1/2017	11:05:55	0.006
12/1/2017	11:06:55	0.016
12/1/2017	11:07:55	0.009
12/1/2017	11:08:55	0.005
12/1/2017	11:09:55	0.004
12/1/2017	11:10:55	0.006
12/1/2017	11:11:55	0.005
12/1/2017	11:12:55	0.004
12/1/2017	11:13:55	0.006
12/1/2017	11:14:55	0.005
12/1/2017	11:15:55	0.006
12/1/2017	11:16:55	0.005
12/1/2017	11:17:55	0.005
12/1/2017	11:18:55	0.006
12/1/2017	11:19:55	0.006
12/1/2017	11:20:55	0.005

12/1/2017	11:21:55	0.005
12/1/2017	11:22:55	0.004
12/1/2017	11:23:55	0.005
12/1/2017	11:24:55	0.004
12/1/2017	11:25:55	0.004
12/1/2017	11:26:55	0.004
12/1/2017	11:27:55	0.004
12/1/2017	11:28:55	0.004
12/1/2017	11:29:55	0.006
12/1/2017	11:30:55	0.006
12/1/2017	11:31:55	0.013
12/1/2017	11:32:55	0.008
12/1/2017	11:33:55	0.005
12/1/2017	11:34:55	0.006
12/1/2017	11:35:55	0.007
12/1/2017	11:36:55	0.012
12/1/2017	11:37:55	0.01
12/1/2017	11:38:55	0.009
12/1/2017	11:39:55	0.014
12/1/2017	11:40:55	0.013
12/1/2017	11:41:55	0.016
12/1/2017	11:42:55	0.008
12/1/2017	11:43:55	0.009
12/1/2017	11:44:55	0.015
12/1/2017	11:45:55	0.014
12/1/2017	11:46:55	0.009
12/1/2017	11:47:55	0.014
12/1/2017	11:48:55	0.009
12/1/2017	11:49:55	0.006
12/1/2017	11:50:55	0.005
12/1/2017	11:51:55	0.005
12/1/2017	11:52:55	0.005
12/1/2017	11:53:55	0.011
12/1/2017	11:54:55	0.027
12/1/2017	11:55:55	0.023
12/1/2017	11:56:55	0.059
12/1/2017	11:57:55	0.023
12/1/2017	11:58:55	0.027
12/1/2017	11:59:55	0.022
12/1/2017	12:00:55	0.031

12/1/2017	12:01:55	0.027
12/1/2017	12:02:55	0.025
12/1/2017	12:03:55	0.015
12/1/2017	12:04:55	0.091
12/1/2017	12:05:55	0.081
12/1/2017	12:06:55	0.027
12/1/2017	12:07:55	0.022
12/1/2017	12:08:55	0.018
12/1/2017	12:09:55	0.017
12/1/2017	12:10:55	0.045
12/1/2017	12:11:55	0.031
12/1/2017	12:12:55	0.025
12/1/2017	12:13:55	0.016
12/1/2017	12:14:55	0.018
12/1/2017	12:15:55	0.018
12/1/2017	12:16:55	0.018
12/1/2017	12:17:55	0.011
12/1/2017	12:18:55	0.008
12/1/2017	12:19:55	0.009
12/1/2017	12:20:55	0.009
12/1/2017	12:21:55	0.012
12/1/2017	12:22:55	0.011
12/1/2017	12:23:55	0.01
12/1/2017	12:24:55	0.008
12/1/2017	12:25:55	0.008
12/1/2017	12:26:55	0.008
12/1/2017	12:27:55	0.008
12/1/2017	12:28:55	0.017
12/1/2017	12:29:55	0.057
12/1/2017	12:30:55	0.064
12/1/2017	12:31:55	0.016
12/1/2017	12:32:55	0.01
12/1/2017	12:33:55	0.009
12/1/2017	12:34:55	0.008
12/1/2017	12:35:55	0.02
12/1/2017	12:36:55	0.046
12/1/2017	12:37:55	0.036
12/1/2017	12:38:55	0.02
12/1/2017	12:39:55	0.014
12/1/2017	12:40:55	0.032

12/1/2017	12:41:55	0.028
12/1/2017	12:42:55	0.03
12/1/2017	12:43:55	0.036
12/1/2017	12:44:55	0.019
12/1/2017	12:45:55	0.019
12/1/2017	12:46:55	0.015
12/1/2017	12:47:55	0.023
12/1/2017	12:48:55	0.013
12/1/2017	12:49:55	0.009
12/1/2017	12:50:55	0.011
12/1/2017	12:51:55	0.017
12/1/2017	12:52:55	0.02
12/1/2017	12:53:55	0.015
12/1/2017	12:54:55	0.01
12/1/2017	12:55:55	0.006
12/1/2017	12:56:55	0.011
12/1/2017	12:57:55	0.013
12/1/2017	12:58:55	0.013
12/1/2017	12:59:55	0.014
12/1/2017	13:00:55	0.005
12/1/2017	13:01:55	0.004
12/1/2017	13:02:55	0.005
12/1/2017	13:03:55	0.005
12/1/2017	13:04:55	0.007
12/1/2017	13:05:55	0.004
12/1/2017	13:06:55	0.004
12/1/2017	13:07:55	0.004
12/1/2017	13:08:55	0.005
12/1/2017	13:09:55	0.006
12/1/2017	13:10:55	0.008
12/1/2017	13:11:55	0.006
12/1/2017	13:12:55	0.006
12/1/2017	13:13:55	0.007
12/1/2017	13:14:55	0.008
12/1/2017	13:15:55	0.011
12/1/2017	13:16:55	0.007
12/1/2017	13:17:55	0.011
12/1/2017	13:18:55	0.014
12/1/2017	13:19:55	0.018
12/1/2017	13:20:55	0.011

12/1/2017	13:21:55	0.009
12/1/2017	13:22:55	0.007
12/1/2017	13:23:55	0.009
12/1/2017	13:24:55	0.007
12/1/2017	13:25:55	0.006
12/1/2017	13:26:55	0.006
12/1/2017	13:27:55	0.008
12/1/2017	13:28:55	0.006
12/1/2017	13:29:55	0.008
12/1/2017	13:30:55	0.01
12/1/2017	13:31:55	0.009
12/1/2017	13:32:55	0.013
12/1/2017	13:33:55	0.007
12/1/2017	13:34:55	0.009
12/1/2017	13:35:55	0.008
12/1/2017	13:36:55	0.008
12/1/2017	13:37:55	0.01
12/1/2017	13:38:55	0.009
12/1/2017	13:39:55	0.007
12/1/2017	13:40:55	0.008
12/1/2017	13:41:55	0.01
12/1/2017	13:42:55	0.007
12/1/2017	13:43:55	0.007
12/1/2017	13:44:55	0.007
12/1/2017	13:45:55	0.007
12/1/2017	13:46:55	0.008
12/1/2017	13:47:55	0.007
12/1/2017	13:48:55	0.008
12/1/2017	13:49:55	0.021
12/1/2017	13:50:55	0.015
12/1/2017	13:51:55	0.008
12/1/2017	13:52:55	0.009
12/1/2017	13:53:55	0.008
12/1/2017	13:54:55	0.009
12/1/2017	13:55:55	0.008
12/1/2017	13:56:55	0.008
12/1/2017	13:57:55	0.007
12/1/2017	13:58:55	0.007
12/1/2017	13:59:55	0.007
12/1/2017	14:00:55	0.007



12/1/2017	14:01:55	0.007
12/1/2017	14:02:55	0.007
12/1/2017	14:03:55	0.007
12/1/2017	14:04:55	0.008
12/1/2017	14:05:55	0.007
12/1/2017	14:06:55	0.007
12/1/2017	14:07:55	0.01
12/1/2017	14:08:55	0.008
12/1/2017	14:09:55	0.008
12/1/2017	14:10:55	0.007
12/1/2017	14:11:55	0.007
12/1/2017	14:12:55	0.008
12/1/2017	14:13:55	0.009
12/1/2017	14:14:55	0.008
12/1/2017	14:15:55	0.009
12/1/2017	14:16:55	0.009
12/1/2017	14:17:55	0.008
12/1/2017	14:18:55	0.008
12/1/2017	14:19:55	0.103
12/1/2017	14:20:55	0.218
12/1/2017	14:21:55	0.034
12/1/2017	14:22:55	0.01
12/1/2017	14:23:55	0.013
12/1/2017	14:24:55	0.017
12/1/2017	14:25:55	0.008
12/1/2017	14:26:55	0.008
12/1/2017	14:27:55	0.007
12/1/2017	14:28:55	0.007
12/1/2017	14:29:55	0.005
12/1/2017	14:30:55	0.005
12/1/2017	14:31:55	0.007
12/1/2017	14:32:55	0.006
12/1/2017	14:33:55	0.006
12/1/2017	14:34:55	0.008
12/1/2017	14:35:55	0.006
12/1/2017	14:36:55	0.006
12/1/2017	14:37:55	0.007
12/1/2017	14:38:55	0.006
12/1/2017	14:39:55	0.006
12/1/2017	14:40:55	0.006

12/1/2017	14:41:55	0.006
12/1/2017	14:42:55	0.008
12/1/2017	14:43:55	0.007
12/1/2017	14:44:55	0.007
12/1/2017	14:45:55	0.006
12/1/2017	14:46:55	0.005
12/1/2017	14:47:55	0.007
12/1/2017	14:48:55	0.01
12/1/2017	14:49:55	0.006
12/1/2017	14:50:55	0.008
12/1/2017	14:51:55	0.006
12/1/2017	14:52:55	0.005
12/1/2017	14:53:55	0.005
12/1/2017	14:54:55	0.005
12/1/2017	14:55:55	0.011
12/1/2017	14:56:55	0.006
12/1/2017	14:57:55	0.005
12/1/2017	14:58:55	0.005
12/1/2017	14:59:55	0.006
12/1/2017	15:00:55	0.006
12/1/2017	15:01:55	0.007
12/1/2017	15:02:55	0.009
12/1/2017	15:03:55	0.007
12/1/2017	15:04:55	0.006
12/1/2017	15:05:55	0.006
12/1/2017	15:06:55	0.007
12/1/2017	15:07:55	0.005
12/1/2017	15:08:55	0.005
12/1/2017	15:09:55	0.005
12/1/2017	15:10:55	0.006
12/1/2017	15:11:55	0.006
12/1/2017	15:12:55	0.007
12/1/2017	15:13:55	0.008
12/1/2017	15:14:55	0.007
12/1/2017	15:15:55	0.008
12/1/2017	15:16:55	0.01
12/1/2017	15:17:55	0.011
12/1/2017	15:18:55	0.01
12/1/2017	15:19:55	0.009
12/1/2017	15:20:55	0.008



Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

12/1/2017	15:21:55	0.009
12/1/2017	15:22:55	0.007
12/1/2017	15:23:55	0.006
12/1/2017	15:24:55	0.008
12/1/2017	15:25:55	0.006
12/1/2017	15:26:55	0.007
12/1/2017	15:27:55	0.006
12/1/2017	15:28:55	0.006
12/1/2017	15:29:55	0.006
12/1/2017	15:30:55	0.007
12/1/2017	15:31:55	0.008
12/1/2017	15:32:55	0.005
12/1/2017	15:33:55	0.005

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530130715  
Test ID: 9  
Test Abbreviation: MANUAL\_009  
Start Date: 12/4/2017  
Start Time: 9:15:27  
Duration (dd:hh:mm:ss): 0:00:01:00  
Number of points: 1  
Notes:

Statistics Channel: AEROSOL  
Units: mg/m<sup>3</sup>  
Average: 0.112  
Minimum: 0.112  
Time of Minimum: 9:16:27  
Date of Minimum: 12/4/2017  
Maximum: 0.112  
Time of Maximum: 9:16:27  
Date of Maximum: 12/4/2017

Calibration Sensor: AEROSOL  
Cal. date: 8/22/2017

Date Time AEROSOL  
MM/dd/yyyy hh:mm:ss mg/m<sup>3</sup>



Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

12/4/2017 9:16:27 0.112

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530130715  
Test ID: 10  
Test Abbreviation: MANUAL\_010  
Start Date: 12/4/2017  
Start Time: 9:17:25  
Duration (dd:hh:mm:ss): 0:05:26:00  
Log Interval (mm:ss): 1:00  
Number of points: 326  
Notes:

Statistics Channel: AEROSOL  
Units: mg/m<sup>3</sup>  
Average: 0.087  
Minimum: 0.033  
Time of Minimum: 14:42:25  
Date of Minimum: 12/4/2017  
Maximum: 0.154  
Time of Maximum: 10:08:25  
Date of Maximum: 12/4/2017

Calibration Sensor: AEROSOL  
Cal. date 8/22/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
12/4/2017	9:18:25	0.11
12/4/2017	9:19:25	0.106
12/4/2017	9:20:25	0.102
12/4/2017	9:21:25	0.101
12/4/2017	9:22:25	0.105
12/4/2017	9:23:25	0.107
12/4/2017	9:24:25	0.104
12/4/2017	9:25:25	0.102
12/4/2017	9:26:25	0.101
12/4/2017	9:27:25	0.101
12/4/2017	9:28:25	0.102

12/4/2017	9:29:25	0.103
12/4/2017	9:30:25	0.105
12/4/2017	9:31:25	0.1
12/4/2017	9:32:25	0.103
12/4/2017	9:33:25	0.119
12/4/2017	9:34:25	0.115
12/4/2017	9:35:25	0.103
12/4/2017	9:36:25	0.102
12/4/2017	9:37:25	0.105
12/4/2017	9:38:25	0.103
12/4/2017	9:39:25	0.108
12/4/2017	9:40:25	0.109
12/4/2017	9:41:25	0.126
12/4/2017	9:42:25	0.112
12/4/2017	9:43:25	0.121
12/4/2017	9:44:25	0.111
12/4/2017	9:45:25	0.111
12/4/2017	9:46:25	0.108
12/4/2017	9:47:25	0.107
12/4/2017	9:48:25	0.104
12/4/2017	9:49:25	0.118
12/4/2017	9:50:25	0.117
12/4/2017	9:51:25	0.116
12/4/2017	9:52:25	0.128
12/4/2017	9:53:25	0.109
12/4/2017	9:54:25	0.113
12/4/2017	9:55:25	0.119
12/4/2017	9:56:25	0.134
12/4/2017	9:57:25	0.118
12/4/2017	9:58:25	0.112
12/4/2017	9:59:25	0.117
12/4/2017	10:00:25	0.112
12/4/2017	10:01:25	0.124
12/4/2017	10:02:25	0.11
12/4/2017	10:03:25	0.103
12/4/2017	10:04:25	0.104
12/4/2017	10:05:25	0.118
12/4/2017	10:06:25	0.115
12/4/2017	10:07:25	0.125
12/4/2017	10:08:25	0.154

12/4/2017	10:09:25	0.129
12/4/2017	10:10:25	0.123
12/4/2017	10:11:25	0.116
12/4/2017	10:12:25	0.106
12/4/2017	10:13:25	0.104
12/4/2017	10:14:25	0.114
12/4/2017	10:15:25	0.112
12/4/2017	10:16:25	0.123
12/4/2017	10:17:25	0.123
12/4/2017	10:18:25	0.114
12/4/2017	10:19:25	0.114
12/4/2017	10:20:25	0.105
12/4/2017	10:21:25	0.104
12/4/2017	10:22:25	0.103
12/4/2017	10:23:25	0.103
12/4/2017	10:24:25	0.1
12/4/2017	10:25:25	0.097
12/4/2017	10:26:25	0.098
12/4/2017	10:27:25	0.097
12/4/2017	10:28:25	0.098
12/4/2017	10:29:25	0.097
12/4/2017	10:30:25	0.1
12/4/2017	10:31:25	0.101
12/4/2017	10:32:25	0.099
12/4/2017	10:33:25	0.103
12/4/2017	10:34:25	0.103
12/4/2017	10:35:25	0.104
12/4/2017	10:36:25	0.101
12/4/2017	10:37:25	0.101
12/4/2017	10:38:25	0.1
12/4/2017	10:39:25	0.1
12/4/2017	10:40:25	0.099
12/4/2017	10:41:25	0.098
12/4/2017	10:42:25	0.098
12/4/2017	10:43:25	0.099
12/4/2017	10:44:25	0.098
12/4/2017	10:45:25	0.098
12/4/2017	10:46:25	0.096
12/4/2017	10:47:25	0.096
12/4/2017	10:48:25	0.098

Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

12/4/2017	10:49:25	0.097
12/4/2017	10:50:25	0.097
12/4/2017	10:51:25	0.096
12/4/2017	10:52:25	0.097
12/4/2017	10:53:25	0.097
12/4/2017	10:54:25	0.095
12/4/2017	10:55:25	0.096
12/4/2017	10:56:25	0.095
12/4/2017	10:57:25	0.094
12/4/2017	10:58:25	0.094
12/4/2017	10:59:25	0.093
12/4/2017	11:00:25	0.092
12/4/2017	11:01:25	0.093
12/4/2017	11:02:25	0.094
12/4/2017	11:03:25	0.092
12/4/2017	11:04:25	0.092
12/4/2017	11:05:25	0.093
12/4/2017	11:06:25	0.093
12/4/2017	11:07:25	0.096
12/4/2017	11:08:25	0.093
12/4/2017	11:09:25	0.093
12/4/2017	11:10:25	0.105
12/4/2017	11:11:25	0.096
12/4/2017	11:12:25	0.095
12/4/2017	11:13:25	0.092
12/4/2017	11:14:25	0.092
12/4/2017	11:15:25	0.091
12/4/2017	11:16:25	0.09
12/4/2017	11:17:25	0.091
12/4/2017	11:18:25	0.09
12/4/2017	11:19:25	0.091
12/4/2017	11:20:25	0.091
12/4/2017	11:21:25	0.091
12/4/2017	11:22:25	0.092
12/4/2017	11:23:25	0.093
12/4/2017	11:24:25	0.091
12/4/2017	11:25:25	0.091
12/4/2017	11:26:25	0.091
12/4/2017	11:27:25	0.091
12/4/2017	11:28:25	0.093



12/4/2017	11:29:25	0.093
12/4/2017	11:30:25	0.092
12/4/2017	11:31:25	0.093
12/4/2017	11:32:25	0.095
12/4/2017	11:33:25	0.1
12/4/2017	11:34:25	0.102
12/4/2017	11:35:25	0.109
12/4/2017	11:36:25	0.1
12/4/2017	11:37:25	0.099
12/4/2017	11:38:25	0.131
12/4/2017	11:39:25	0.128
12/4/2017	11:40:25	0.107
12/4/2017	11:41:25	0.1
12/4/2017	11:42:25	0.105
12/4/2017	11:43:25	0.109
12/4/2017	11:44:25	0.113
12/4/2017	11:45:25	0.102
12/4/2017	11:46:25	0.103
12/4/2017	11:47:25	0.102
12/4/2017	11:48:25	0.1
12/4/2017	11:49:25	0.098
12/4/2017	11:50:25	0.109
12/4/2017	11:51:25	0.122
12/4/2017	11:52:25	0.114
12/4/2017	11:53:25	0.123
12/4/2017	11:54:25	0.101
12/4/2017	11:55:25	0.097
12/4/2017	11:56:25	0.094
12/4/2017	11:57:25	0.093
12/4/2017	11:58:25	0.097
12/4/2017	11:59:25	0.095
12/4/2017	12:00:25	0.093
12/4/2017	12:01:25	0.092
12/4/2017	12:02:25	0.091
12/4/2017	12:03:25	0.092
12/4/2017	12:04:25	0.091
12/4/2017	12:05:25	0.091
12/4/2017	12:06:25	0.09
12/4/2017	12:07:25	0.09
12/4/2017	12:08:25	0.09

12/4/2017	12:09:25	0.089
12/4/2017	12:10:25	0.09
12/4/2017	12:11:25	0.091
12/4/2017	12:12:25	0.089
12/4/2017	12:13:25	0.087
12/4/2017	12:14:25	0.087
12/4/2017	12:15:25	0.087
12/4/2017	12:16:25	0.087
12/4/2017	12:17:25	0.087
12/4/2017	12:18:25	0.086
12/4/2017	12:19:25	0.086
12/4/2017	12:20:25	0.086
12/4/2017	12:21:25	0.085
12/4/2017	12:22:25	0.086
12/4/2017	12:23:25	0.087
12/4/2017	12:24:25	0.088
12/4/2017	12:25:25	0.086
12/4/2017	12:26:25	0.085
12/4/2017	12:27:25	0.086
12/4/2017	12:28:25	0.086
12/4/2017	12:29:25	0.086
12/4/2017	12:30:25	0.085
12/4/2017	12:31:25	0.085
12/4/2017	12:32:25	0.085
12/4/2017	12:33:25	0.085
12/4/2017	12:34:25	0.086
12/4/2017	12:35:25	0.085
12/4/2017	12:36:25	0.084
12/4/2017	12:37:25	0.084
12/4/2017	12:38:25	0.085
12/4/2017	12:39:25	0.085
12/4/2017	12:40:25	0.084
12/4/2017	12:41:25	0.084
12/4/2017	12:42:25	0.082
12/4/2017	12:43:25	0.085
12/4/2017	12:44:25	0.083
12/4/2017	12:45:25	0.082
12/4/2017	12:46:25	0.08
12/4/2017	12:47:25	0.079
12/4/2017	12:48:25	0.078

12/4/2017	12:49:25	0.078
12/4/2017	12:50:25	0.078
12/4/2017	12:51:25	0.078
12/4/2017	12:52:25	0.076
12/4/2017	12:53:25	0.076
12/4/2017	12:54:25	0.077
12/4/2017	12:55:25	0.077
12/4/2017	12:56:25	0.077
12/4/2017	12:57:25	0.076
12/4/2017	12:58:25	0.078
12/4/2017	12:59:25	0.076
12/4/2017	13:00:25	0.076
12/4/2017	13:01:25	0.076
12/4/2017	13:02:25	0.075
12/4/2017	13:03:25	0.075
12/4/2017	13:04:25	0.075
12/4/2017	13:05:25	0.075
12/4/2017	13:06:25	0.076
12/4/2017	13:07:25	0.078
12/4/2017	13:08:25	0.078
12/4/2017	13:09:25	0.076
12/4/2017	13:10:25	0.076
12/4/2017	13:11:25	0.075
12/4/2017	13:12:25	0.075
12/4/2017	13:13:25	0.074
12/4/2017	13:14:25	0.074
12/4/2017	13:15:25	0.074
12/4/2017	13:16:25	0.074
12/4/2017	13:17:25	0.074
12/4/2017	13:18:25	0.073
12/4/2017	13:19:25	0.073
12/4/2017	13:20:25	0.071
12/4/2017	13:21:25	0.071
12/4/2017	13:22:25	0.07
12/4/2017	13:23:25	0.07
12/4/2017	13:24:25	0.07
12/4/2017	13:25:25	0.07
12/4/2017	13:26:25	0.069
12/4/2017	13:27:25	0.07
12/4/2017	13:28:25	0.071

12/4/2017	13:29:25	0.07
12/4/2017	13:30:25	0.077
12/4/2017	13:31:25	0.075
12/4/2017	13:32:25	0.07
12/4/2017	13:33:25	0.068
12/4/2017	13:34:25	0.067
12/4/2017	13:35:25	0.067
12/4/2017	13:36:25	0.066
12/4/2017	13:37:25	0.066
12/4/2017	13:38:25	0.07
12/4/2017	13:39:25	0.072
12/4/2017	13:40:25	0.067
12/4/2017	13:41:25	0.065
12/4/2017	13:42:25	0.07
12/4/2017	13:43:25	0.067
12/4/2017	13:44:25	0.068
12/4/2017	13:45:25	0.069
12/4/2017	13:46:25	0.066
12/4/2017	13:47:25	0.066
12/4/2017	13:48:25	0.065
12/4/2017	13:49:25	0.064
12/4/2017	13:50:25	0.063
12/4/2017	13:51:25	0.064
12/4/2017	13:52:25	0.065
12/4/2017	13:53:25	0.066
12/4/2017	13:54:25	0.064
12/4/2017	13:55:25	0.063
12/4/2017	13:56:25	0.062
12/4/2017	13:57:25	0.062
12/4/2017	13:58:25	0.063
12/4/2017	13:59:25	0.064
12/4/2017	14:00:25	0.063
12/4/2017	14:01:25	0.062
12/4/2017	14:02:25	0.063
12/4/2017	14:03:25	0.063
12/4/2017	14:04:25	0.063
12/4/2017	14:05:25	0.063
12/4/2017	14:06:25	0.063
12/4/2017	14:07:25	0.061
12/4/2017	14:08:25	0.06



Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

12/4/2017	14:09:25	0.062
12/4/2017	14:10:25	0.062
12/4/2017	14:11:25	0.062
12/4/2017	14:12:25	0.062
12/4/2017	14:13:25	0.061
12/4/2017	14:14:25	0.062
12/4/2017	14:15:25	0.061
12/4/2017	14:16:25	0.06
12/4/2017	14:17:25	0.061
12/4/2017	14:18:25	0.064
12/4/2017	14:19:25	0.059
12/4/2017	14:20:25	0.059
12/4/2017	14:21:25	0.057
12/4/2017	14:22:25	0.057
12/4/2017	14:23:25	0.056
12/4/2017	14:24:25	0.057
12/4/2017	14:25:25	0.057
12/4/2017	14:26:25	0.055
12/4/2017	14:27:25	0.055
12/4/2017	14:28:25	0.055
12/4/2017	14:29:25	0.051
12/4/2017	14:30:25	0.048
12/4/2017	14:31:25	0.044
12/4/2017	14:32:25	0.041
12/4/2017	14:33:25	0.042
12/4/2017	14:34:25	0.045
12/4/2017	14:35:25	0.044
12/4/2017	14:36:25	0.04
12/4/2017	14:37:25	0.037
12/4/2017	14:38:25	0.036
12/4/2017	14:39:25	0.035
12/4/2017	14:40:25	0.035
12/4/2017	14:41:25	0.034
12/4/2017	14:42:25	0.033
12/4/2017	14:43:25	0.038

Model: DustTrak II  
Model Number: 8530  
Serial Number: 8530130715  
Test ID: 11

Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

Test Abbreviation: MANUAL\_011  
 Start Date: 12/5/2017  
 Start Time: 8:53:33  
 Duration (dd:hh:mm:ss): 0:00:55:00  
 Log Interval (mm:ss): 1:00  
 Number of points: 55  
 Notes:

Statistics Channel: AEROSOL  
 Units: mg/m<sup>3</sup>  
 Average: 0.102  
 Minimum: 0.047  
 Time of Minimum: 9:47:33  
 Date of Minimum: 12/5/2017  
 Maximum: 0.204  
 Time of Maximum: 9:23:33  
 Date of Maximum: 12/5/2017

Calibration Sensor: AEROSOL  
 Cal. date 8/22/2017

Date	Time	AEROSOL
MM/dd/yyyy	hh:mm:ss	mg/m <sup>3</sup>
12/5/2017	8:54:33	0.099
12/5/2017	8:55:33	0.064
12/5/2017	8:56:33	0.065
12/5/2017	8:57:33	0.067
12/5/2017	8:58:33	0.07
12/5/2017	8:59:33	0.079
12/5/2017	9:00:33	0.067
12/5/2017	9:01:33	0.075
12/5/2017	9:02:33	0.068
12/5/2017	9:03:33	0.069
12/5/2017	9:04:33	0.074
12/5/2017	9:05:33	0.091
12/5/2017	9:06:33	0.07
12/5/2017	9:07:33	0.066
12/5/2017	9:08:33	0.071
12/5/2017	9:09:33	0.071
12/5/2017	9:10:33	0.077

Downwind CAMP Data  
Bullshead Plaza Phase II ESA  
835-855 West Main Street, Rochester, NY  
2172124

12/5/2017	9:11:33	0.16
12/5/2017	9:12:33	0.074
12/5/2017	9:13:33	0.096
12/5/2017	9:14:33	0.091
12/5/2017	9:15:33	0.078
12/5/2017	9:16:33	0.078
12/5/2017	9:17:33	0.079
12/5/2017	9:18:33	0.091
12/5/2017	9:19:33	0.108
12/5/2017	9:20:33	0.129
12/5/2017	9:21:33	0.164
12/5/2017	9:22:33	0.153
12/5/2017	9:23:33	0.204
12/5/2017	9:24:33	0.127
12/5/2017	9:25:33	0.167
12/5/2017	9:26:33	0.138
12/5/2017	9:27:33	0.109
12/5/2017	9:28:33	0.136
12/5/2017	9:29:33	0.142
12/5/2017	9:30:33	0.15
12/5/2017	9:31:33	0.132
12/5/2017	9:32:33	0.175
12/5/2017	9:33:33	0.079
12/5/2017	9:34:33	0.137
12/5/2017	9:35:33	0.121
12/5/2017	9:36:33	0.113
12/5/2017	9:37:33	0.147
12/5/2017	9:38:33	0.176
12/5/2017	9:39:33	0.162
12/5/2017	9:40:33	0.108
12/5/2017	9:41:33	0.068
12/5/2017	9:42:33	0.052
12/5/2017	9:43:33	0.098
12/5/2017	9:44:33	0.084
12/5/2017	9:45:33	0.074
12/5/2017	9:46:33	0.054
12/5/2017	9:47:33	0.047
12/5/2017	9:48:33	0.048





# APPENDIX 5

## Waste Manifests

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number NYR000234567		2. Page 1 of 1		3. Emergency Response Phone 800-807-7456		4. Manifest Tracking Number 007931885 JJK							
5. Generator's Name and Mailing Address CITY OF ROCHESTER 30 CHURCH ST., ROOM 300B ROCHESTER NY 14614 Generator's Phone: 585 428.7474						Generator's Site Address (if different than mailing address) CITY OF ROCHESTER 855 WEST MAIN ST. ROCHESTER NY 14611									
6. Transporter 1 Company Name SUN ENVIRONMENTAL CORP.						U.S. EPA ID Number NYR000170958									
7. Transporter 2 Company Name						U.S. EPA ID Number									
8. Designated Facility Name and Site Address CYCLE OPER. INC. 550 INDUSTRIAL DR. LEWISBERRY PA 17336 Facility's Phone: 717 938-4700						U.S. EPA ID Number PAD067098822									
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))				10. Containers		11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes					
	X	1. HAZARDOUS WASTE LIQUID, N.O.S. (TETRACHLOROETHYLENE, 2%) 9, PGIII ERG171				No.	Type	02283	F	D039					
		2.													
		3.													
		4.													
14. Special Handling Instructions and Additional Information JOB # LAB. 1023 LABELLA PO# R39183 1. SUN112-WR3-A (55 GAL / HANDLING CODE B / SIGNED PROFILE & LDR ATTACHED)															
15. 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. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.															
Generator's/Offeror's Printed/Typed Name JANE MH FORBES								Signature 		Month 11		Day 17		Year 18	
TRANSPORTER INTL	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____														
	17. Transporter Acknowledgment of Receipt of Materials														
	Transporter 1 Printed/Typed Name Michael Simmons								Signature 		Month 11		Day 17		Year 18
Transporter 2 Printed/Typed Name								Signature		Month		Day		Year	
DESIGNATED FACILITY	18. Discrepancy														
	18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection														
	18b. Alternate Facility (or Generator) U.S. EPA ID Number														
	Facility's Phone:														
	18c. Signature of Alternate Facility (or Generator)								Month		Day		Year		
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)															
1. 41111			2.			3.			4.						
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a															
Printed/Typed Name Steph Heckley								Signature 		Month 11		Day 17		Year 18	

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Bureau of Program Management

625 Broadway, 12th Floor, Albany, NY 12233-7012

P: (518) 402-9764 | F: (518) 402-9722

[www.dec.ny.gov](http://www.dec.ny.gov)

January 8, 2018

Ms. Ann Aquilina  
Environmental Engineer  
LABELLA ASSOCIATES, D.P.C.  
300 State Street, Rochester, NY 14614

Re: Contained-In Determination Request  
Bullshead Plaza  
835 West Main Street Rochester

Dear Ms. Aquilina:

The New York State Department of Environmental Conservation has reviewed the analytical soil data (Lab report ID: L956583 and L958404) submitted with your January 8, 2018 request, via e-mail, for a “contained-in” determination for the referenced project. Concentrations detected for individual VOCs and SVOCs were all significantly less than their current “contained-in” soil and groundwater action levels, and Land Disposal Restriction (LDR) concentrations. No hazardous constituents exhibited a hazardous waste characteristic by exceeding their TCLP regulatory level.

Concentrations for tetrachloroethene were below the soil “contained-in” action level and the Land Disposal Restriction concentration. Therefore, approximately 3 cubic yards of staged soil generated during drilling and test pit activities as part of a Phase II ESA at the referenced project, do not have to be managed as hazardous waste and can be transported off-site to permitted solid waste landfill with a liner and a leachate collection system. Please provide the Department the name and address of the facility that will receive it.

Should you have any questions regarding the content of this letter, please do not hesitate to contact me at (518) 402-9611 or email me at [henry.wilkie@dec.ny.gov](mailto:henry.wilkie@dec.ny.gov).

Sincerely,



Henry Wilkie  
Environmental Engineer 1  
Resource Management Section



High Acres LF  
 425 Perinton Pkwy  
 Fairport, NY, 14450  
 Ph: (585) 223-6132

Original  
 Ticket# 1199591

Customer Name LABELAPC-118721NY LABELLA AS Carrier SIL SILVAROLE TRUCKING, INC.  
 Ticket Date 02/01/2018 Vehicle# S9 Volume  
 Payment Type Credit Account Container  
 Manual Ticket# Driver  
 Hauling Ticket# Check#  
 Route Billing # 0007339  
 State Waste Code Gen EPA ID  
 Manifest 020118 Grid CELL 11  
 Destination  
 PO  
 Profile 118721NY (CONTAMINATED DRILL CUTTINGS & TEST PIT SPOILS)  
 Generator 190-CITYOFROCHESTERWESTMAIN CITY OF ROCHESTER

	Time	Scale	Operator	Inbound	Gross	
In	02/01/2018 09:52	A_Scale_1	JF #600676		Tare	39960 lb
Out	02/01/2018 10:18	A_Scale_2	JF #600676		Net	32860 lb
					Tons	7100 lb
						3.55

Comments

Product	LD%	Qty	UOM	Rate	Fee	Amount	Origin
1 Special Misc-Tons-	100	3.55	Tons				MON
2 EVF-P-Standard Env	100		%				MON
3 RCR-P-Regulatory C	100		%				MON
4 LFS4-LANDFILL FIXE	100		%				MON

Total Fees  
 Total Ticket

Driver's Signature \_\_\_\_\_



39

T 46-42-2-2-2-2

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of 1

3. Emergency Response Phone

4. Waste Tracking Number

505-454-6110 070118

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

Bulls Head Plaza  
835 W. Main St  
Rochester NY  
Generator's Phone:

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

High across Landfill  
425 Perinton Pkwy  
Fairport NY 14450  
Facility's Phone: 800-963-4776

9. Waste Shipping Name and Description

10. Containers

11. Total Quantity

12. Unit Wt./Vol.

No.

Type

1 non RCRA non DOT solids, nos  
(contaminated soil)

001

T

10

T

13. Special Handling Instructions and Additional Information

Proble  
# 118721NY

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/Offero's Printed/Typed Name

Signature

Month Day Year

on behalf of Generator Kevin Michol

Kevin Michol

02 01 18

15. International Shipments

Import to U.S.

Export from U.S.

Port of entry/exit:

Date leaving U.S.:

Transporter Signature (for exports only):

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

Month Day Year

DAVID MARRESE

David Marrese

02 01 18

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

Quantity

Type

Residue

Partial Rejection

Full Rejection

Manifest Reference Number:

U.S. EPA ID Number

17b. Alternate Facility (or Generator)

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

J. Mutchay

J. Mutchay

02 01 18

GENERATOR

INT'L

TRANSPORTER

DESIGNATED FACILITY



# APPENDIX 6

Photo Log



# Test Pitting Study



TP-01



TP-02



# Test Pitting Study



TP-03



TP-04 post excavation. Filled with crushed stone to prepare for repaving.



# Test Pitting Study



TP-05



TP-06



## Test Pit Study



TP-07

## Bedrock Drilling



Dust Suppression during bedrock drilling.

## Bedrock Drilling



BW-01 Bedrock Core from 6-ft to 16-ft bgs (top left is 6-ft bgs, bottom right is 16-ft bgs).



BW-05 Bedrock Core from 7-ft to 17-ft bgs (top left is 7-ft bgs, bottom right is 17-ft bgs).



## Soil Borings



White fibrous material in SB-02.

## Catch Basin



Catch basin in bedrock in northwest corner of the Site.