

March 22, 2023

Zack Phillips  
Phillips Real Estate LLC  
40 Greenleaf Street  
City of Rochester, New York 14609

**RE: Phase II Environmental Site Assessment  
91 Leighton Avenue  
City of Rochester, New York 14609**

Dear Mr. Phillips,

Lu Engineers is pleased to submit this Phase II Environmental Site Assessment (ESA) summary letter to present findings of a recent subsurface investigation completed at 91 Leighton Avenue (the Site), located in the City of Rochester, New York (Figure 1). This report provides a brief description of soil borings, associated soil sampling, and groundwater sampling completed as part of the investigation on March 3 & 6, 2023.

#### **Background**

The Site is currently unoccupied. A Phase I ESA conducted by LaBella Associates D.P.C. dated January 24, 2023, identified the following Recognized Environmental Conditions (RECs):

- Between at least 1938 and 1955, the Site was occupied by a can manufacturing facility with a metal lacquer spray booth and die storage area.
- The City of Rochester issued a permit to remove one 550-gallon tank from the Site in 1982. No closure documentation was provided.
- In October 2022, a fire destroyed the on-site building. According to the City of Rochester Fire Report, the former 55,925 square-foot storage building was utilized to store automobiles.
- Areas of solid waste (including automotive parts, glass, bricks, ash, concrete, asphalt, and household debris) were observed on-Site. The solid waste appears to be associated with the 2022 fire and associated demolition residues.

This investigation was conducted to evaluate subsurface environmental conditions at the Site associated with past use and the historical fire. Work was performed in accordance with Lu Engineers' proposal, dated February 17, 2023. The following sections summarize the activities and findings of the subsurface investigation.

#### **Ground Penetrating Radar Survey**

Prior to implementing the subsurface investigation, a geophysical survey of proposed soil boring locations and other areas of the property was completed utilizing ground penetrating radar (GPR). GPR was used to verify completeness of the Underground Facilities Protection Organization (UFPO) utility line stake-out. The GPR survey was also intended to verify the location of drainage systems and/or other buried features of potential environmental significance prior to intrusive subsurface work.

No anomalous features of potential environmental concern were observed during the GPR survey across the remainder of the Site.

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It is noted that due to snow cover, presence of demolition debris, and remaining concrete building slabs, a comprehensive GPR survey of the entire Site could not be performed. During the visual Site inspection, multiple subsurface voids and holes in the former building floor slab were observed. The voids appear to be associated with former floor drains and/or crawlspaces and have been partially filled in with building debris. A detailed inspection of the voids was not feasible.

### **Soil Borings**

On March 3, 2023, Trec Environmental Inc. mobilized a 54LT direct-push Geoprobe® to the Site to implement the soil boring program. In accordance with the proposed scope of services for this project, 12 soil borings were advanced to refusal, with oversight from Lu Engineers. Boring locations and associated soil sampling results are indicated on Figure 2.

Soils were logged using the Burmister Classification System and screened for volatile organic compounds (VOCs) by qualified Lu Engineers personnel. Several methods were utilized to detect impacted soil including the use of a MiniRAE 3000® Photoionization Detector (PID) for screening, as well as visual and olfactory observations. Site soils consisted primarily of silt and fine sand, with lesser portions of gravel and clay. Groundwater was generally encountered at depths ranging from 6 to 8-feet below ground surface (bgs). Bedrock was observed at an average depth of 12.5-feet bgs.

Three (3) temporary monitoring wells, GPMW-01, GPMW-05, and GPMW-10, were installed as part of the soil boring program. The wells were constructed using 5-feet of 0.010-slotted well screen and completed with a quartz sand pack. A minimum of 2-foot thick bentonite seal was used to finish the wells up to ground surface.

Descriptions and observations of each boring are provided in the attached soil boring logs (Attachment B).

### **Investigation Findings & Sampling**

As noted in the boring logs, screening of soils during the subsurface investigation identified widespread urban fill and limited evidence of degraded VOCs. Soils located in southeast corner of the property along the former rail alignment exhibited synthetic (possible solvent) odors and discoloration at depths ranging from 8 to 12-feet bgs. PID screening of these soils indicated maximum reading of 0.4 ppm.

PID screening throughout the soil boring program detected a volatile organic vapor concentrations ranging from 0 to 21.4 parts per million (ppm); the peak reading being associated with shallow soils exhibiting faint gasoline-like odors at GP-04.

Representative soil samples were collected for the following laboratory analyses:

- TCL VOCs by Environmental Protection Agency (EPA) Method 8260;
- Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270;
- Resource Conservation and Recovery Act (RCRA) Metals by EPA Methods 6010/7471;
- TCLP Lead; and
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082.

Refer to the following table for information regarding sample depths and analytical methods:



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| Sample ID    | Depth (feet bgs)            | Peak PID Readings | Analyses           |
|--------------|-----------------------------|-------------------|--------------------|
| GP-02        | 4-6'                        | 0.0               | PCBs               |
| GP-04        | 1-3'                        | 21.4              | VOCs               |
| GPMW-05      | 9-11'                       | 0.4               | VOCs               |
| GP-08        | 8-9'                        | 0.0               | VOCs, PCBs         |
| Composite-01 | 1-2' (GP-02) & 1-3' (GP-03) | 0.0               | SVOCs, RCRA Metals |
| Composite-02 | 2-6' (GP-07) & 2-4' (GP-08) | 0.0               | SVOCs, RCRA Metals |

Additionally, three (3) groundwater samples were collected for the following laboratory analysis:

- TCL VOCs by EPA Method 8260;
- Resource Conservation and Recovery Act (RCRA) Metals by EPA Methods 6010/7471; and
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082.

Refer to the following table for information regarding sample depths and analytical methods:

| Sample ID | Groundwater Elevation* | Analyses                |
|-----------|------------------------|-------------------------|
| GPMW-01   | 91.51'                 | VOCs                    |
| GPMW-05   | 91.9'                  | VOCs, RCRA Metals, PCBs |
| GPMW-10   | 93.6'                  | VOCs, RCRA Metals, PCBs |

\*Based on arbitrary benchmark of 100-feet

In accordance with applicable New York State Department of Environmental Conservation (NYSDEC) protocols, all samples were stored on ice until relinquished for laboratory analysis at Alpha Analytical Inc., a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) analytical laboratory.

### **Soil Sample Results**

Soil sample analytical results were compared to 6 New York Codes, Rules, and Regulations (6 NYCRR) Part 375-6.8(b) Commercial Use Soil Cleanup Objectives (SCOs) and Part 375-6.8(c) Industrial SCOS:

#### VOC Results

- Soil samples from GP-04 and GPMW-05 identified multiple VOCs at concentrations exceeding applicable regulatory criteria:
  - 1,2,4-Trimethylbenzene detected at GP-04 (53.0 ppm) exceeds Unrestricted/Protection of Groundwater and Residential Use criteria.
  - Naphthalene, 1,3,5-trimethylbenzene, xylenes, detected at GP-04 and acetone detected at GPMW-05 exceed Unrestricted/Protection of Groundwater Use criteria.

#### SVOC Results

- Soil sample Composite-02 identified multiple SVOCs, specifically polycyclic aromatic hydrocarbons (PAHs) at concentrations exceeding applicable regulatory criteria:
  - Benzo(a)pyrene detected at a concentration of 1.60 ppm exceeds Industrial Use criteria.
  - Benzo(b)fluoranthene, benzo(a)anthracene, chrysene, and indeno(1,2,3-cd)pyrene were detected at concentrations exceeding Unrestricted and Residential Use criteria.



#### Metals Results

- Soil sample Composite-02 identified multiple metals at concentrations exceeding applicable regulatory criteria:
  - Chromium detected at a concentration of 37.1 ppm exceeds Unrestricted and Residential Use criteria. It is noted that guidance values for trivalent chromium outlined in 6 NYCRR Part 375-6.8 were used for purposes of comparison. Sample analytical results are indicative of total chromium concentrations (the sum of hexavalent and trivalent chromium concentrations). Additional testing would be required to distinguish the specific concentrations of chromium valences within the analyzed sample.
  - Lead detected at a concentration of 130 ppm exceeds Unrestricted and Residential Use criteria. Based on analytical results, additional TCLP lead analysis was performed on sample Composite-02, which indicated results below applicable regulatory criteria.

#### PCB Results

- No detectable concentrations of PCBs were observed in the analyzed soil samples.

#### **Groundwater Sample Results**

Groundwater sample analytical results were compared to the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 class GA Ambient Groundwater standards:

#### VOC Results

- Groundwater sampling identified several VOCs at concentrations exceeding applicable regulatory criteria:
  - Trichloroethene (TCE) was detected in exceedance of Class GA standards at concentrations of 220 and 13.0 parts per billion (ppb) (GPMW-01 and GPMW-10, respectively).
  - Tetrachloroethene (PCE) was detected in exceedance of Class GA standards at a concentration of 5.60 ppb at GPMW-01.
  - Acetone was detected in exceedance of Class GA standards at a concentration of 54.0 ppb at GPMW-01.
  - Benzene was detected in exceedance of Class GA standards at a concentration of 2.70 ppb at GPMW-05.

#### Metals Results

- Groundwater sample GPMW-05 identified several metals at concentrations exceeding applicable regulatory criteria:
  - Lead and selenium were detected in exceedance of Class GA standards. It is noted that groundwater exhibited high turbidity at the time of sampling. Results of detected metals may be inflated.

#### PCB Results

- No detectable concentrations of PCBs were identified in the laboratory analyzed groundwater samples.

Refer to the attached Tables and Figures for a summary of analytical results; a copy of the laboratory analytical report is included as Attachment C.

#### **Conclusions & Recommendations**

Evidence of widespread subsurface environmental impairment as a result of the 2022 fire was not identified during this investigation. Analytical results indicating exceedances of applicable NYSDEC regulatory criteria are associated with historical use of the Site.



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Industrial exceedances of PAHs identified in shallow fill during this assessment are commonly observed at elevated concentrations in urban environments and do not present a significant environmental risk at this time. VOCs and metals identified in subsurface soils that exceed Unrestricted and Residential Use criteria and are likely attributable to historical industrial operations on the property and surrounding area.

Groundwater analytical results identified chlorinated solvents in exceedance of applicable regulatory criteria. Based on inferred groundwater flow pathways observed during the investigation, it is suspected that elevated concentrations of TCE observed at GPMW-10 may be originating from the northern end of the subject property, or a potential off-Site source to the north. Lu Engineers recommends that additional monitoring wells be installed to further characterize Site flow patterns and more precisely characterize the nature and extent of documented exceedances.

No evidence of the 500-gallon tank (i.e. fill ports, conduits, etc.) was observed; however, due to the limitations encountered during the GPR survey, the potential for the presence of a tank remains. Lu Engineers recommends the development of an Environmental Management Plan (EMP) for Site. The EMP would provide guidance for a contractor on the handling and disposition of soils exceeding regulatory criteria, as well as the various piles of soils and solid wastes, and outline necessary procedures for closure of a potential tank in accordance with applicable regulatory criteria during future redevelopment.

Please contact us with any questions or comments you may have.

Respectfully Submitted,



Gregory L. Andrus, P.G.  
Group Leader  
Environmental Investigation/Remediation Group



Benjamin Seifert  
Geologist; GIS Specialist  
Environmental Investigation/Remediation Group

Enclosure(s):

Figures:

- Figure 1 – Site Location Map  
Figure 2 – Analytical Results Map

Tables:

- Table 1 – Soil Sample Analytical Results  
Table 2 – Groundwater Sample Analytical Results

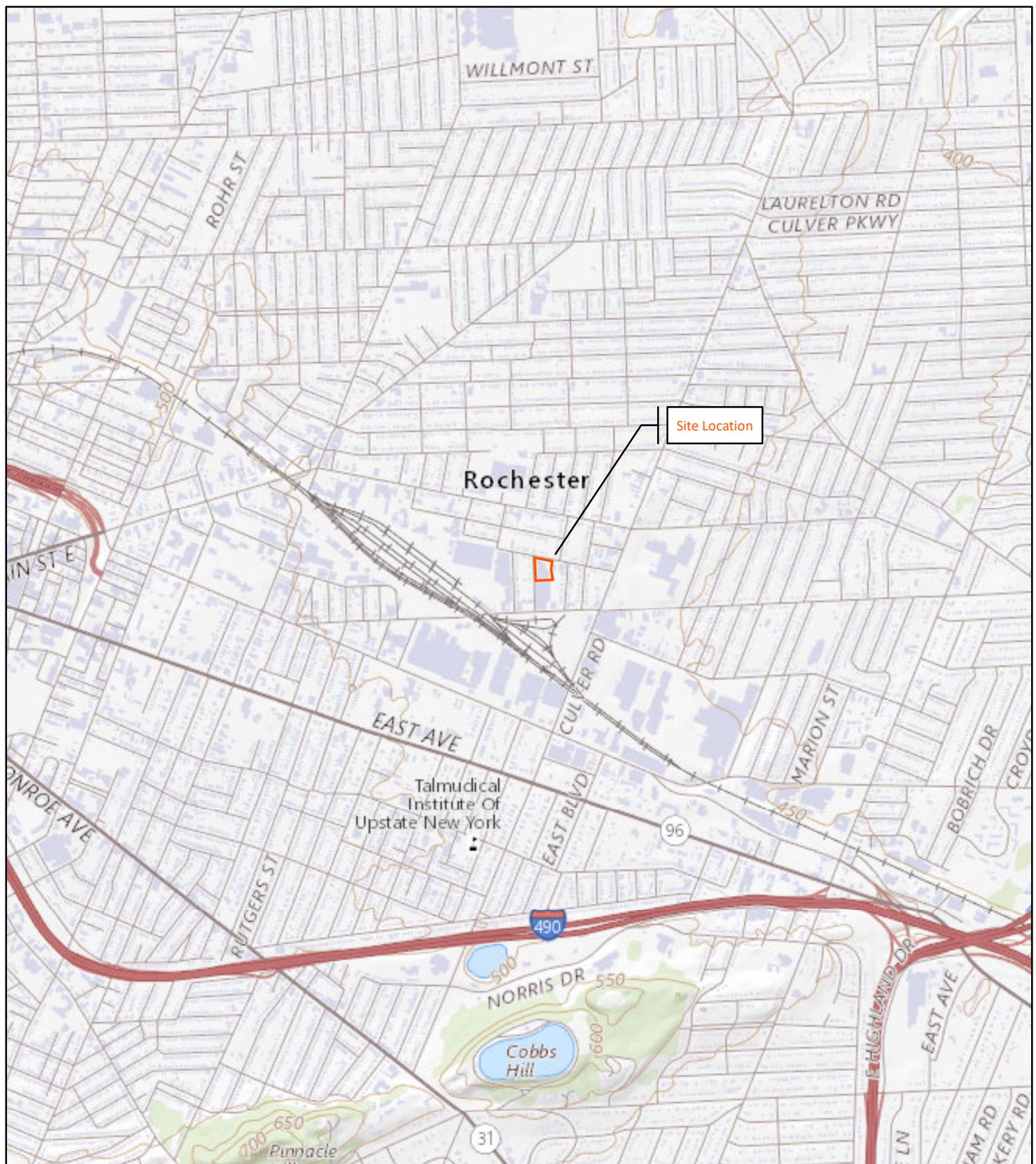
Attachments:

- Attachment A – Photos  
Attachment B – Soil Boring Logs  
Attachment C – Laboratory Report



## Figures

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Scale 1: 24,000

Contour Interval: 20-feet

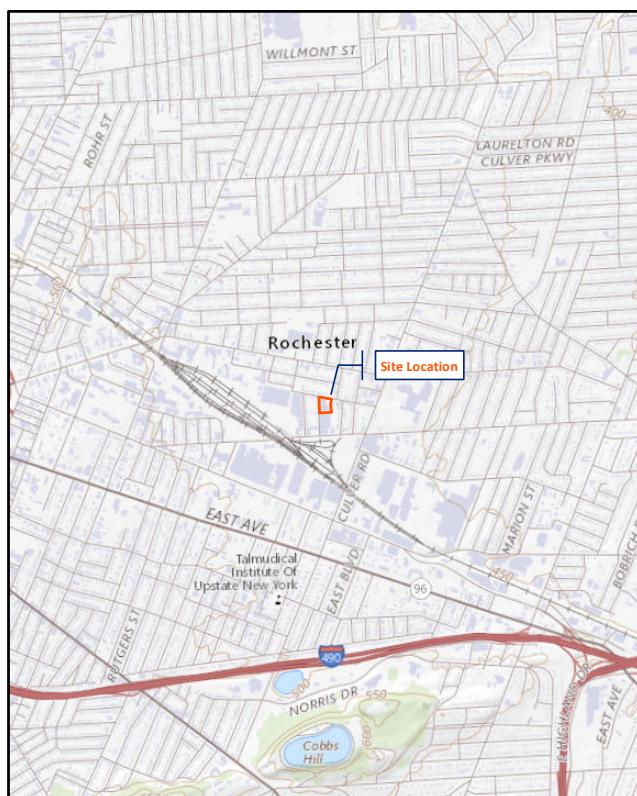
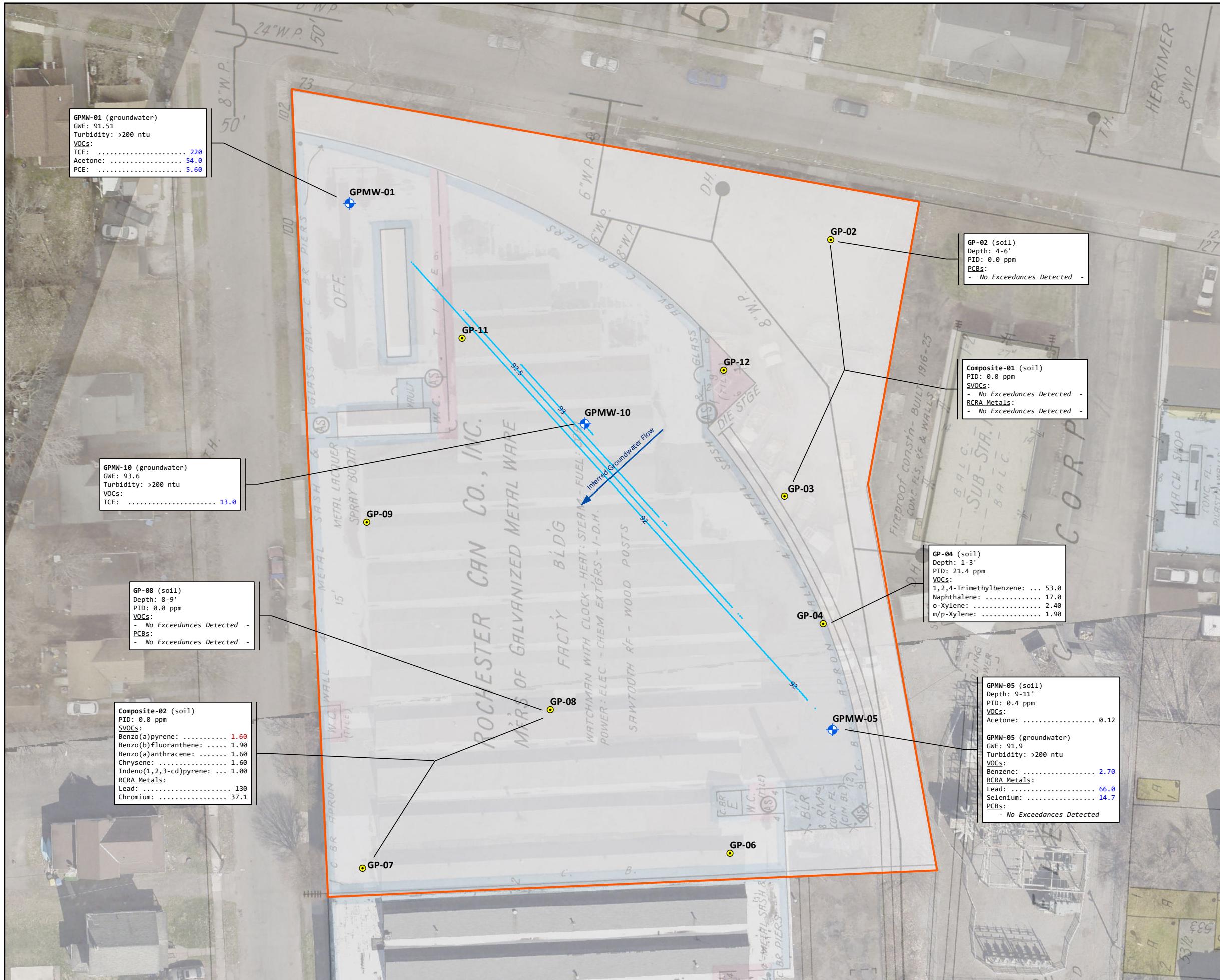
0 800 1,600 3,200 4,800 6,400 Feet

N



Figure 1. Site Location Map  
91 Leighton Ave, City of Rochester NY  
Phase II Environmental Site Assessment  
Phillips Real Estate, LLC

|                                     |
|-------------------------------------|
| DATE: March 2023                    |
| PROJECT #: 50527-01                 |
| DRAWN/CHECKED: MGA/GLA              |
| DATA SOURCE:<br>ESRI Online Basemap |



**Figure 2:**  
Sample Analytical Results Map

**Project:**  
Mr. Zack Phillips  
Phase II Environmental Site Assessment

**Location:**  
91 Leighton Avenue  
City of Rochester, Monroe County, NY

**Legend**

- Site Boundary
- Soil Boring
- ◆ Soil Boring/Monitoring Well

**Note(s):**  
 - Soil sample results presented in parts per million (ppm)  
 - Groundwater sample results presented in parts per billion (ppb)  
**TEXT:** Indicates exceedance of Unrestricted Use SCOS  
**TEXT:** Indicates exceedance of Industrial SCOS  
**TEXT:** Indicates exceedance of groundwater standards

N  
 1 inch = 40 feet  
 0 20 40 80 Feet

Drawn/Checked By: BGS/GLA

Lu Project Number: 50527-01

Date: March 2023

**Notes:**  
 1. Coordinate System: NAD 1983 (2011) State Plane NY Central FIPS 3102 Feet  
 2. Orthoimagery (October 2021) downloaded from Picometry  
 3. Scale: 1:480 (original document size 11"x17")

## Tables

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**Table 1 – 91 Leighton Avenue**

Soil Sample Analytical Results

| Soil Sample Analytical Results<br>Detected Parameters: | Sample ID:                        |                 |                 | GP-02    | GP-04    | GPMW-05                | GP-08                  | COMPOSITE-01 | COMPOSITE-02 |
|--|-----------------------------------|-----------------|-----------------|----------|----------|------------------------|------------------------|--------------|--------------|
|  | Date Sampled:                     | 3/3/2023        | 3/3/2023        | 3/3/2023 | 3/3/2023 | 3/3/2023               | 3/3/2023               | 3/3/2023     | 3/3/2023     |
|  | Sample Matrix:                    | Soil            | Soil            | Soil     | Soil     | Soil                   | Soil                   | Soil         | Soil         |
|  | Sample Depth:                     | 4'-6'           | 1'-3'           | 9'-11'   | 8'-9'    | GP-02 1-2', GP-08 2-4' | GP-07 2-6', GP-08 2-4' |              |              |
| EPA 8260-VOCs  | NYSDEC Part 375 SCOs <sup>x</sup> |                 |                 | Result   | Q        | Result                 | Q                      | Result       | Q            |
|  | Unrestricted Use                  | Commercial Soil | Industrial Soil |          |          |                        |                        |              |              |
| 1,1,1-Trichloroethane                                  | 0.68                              | 500             | 1000            | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,1,2,2-Tetrachloroethane                              | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,1,2-Trichloroethane                                  | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,1-Dichloroethane                                     | 0.27                              | 240             | 480             | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,1-Dichloroethene                                     | 0.33                              | 500             | 1,000           | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,2,4-Trichlorobenzene                                 | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,2,4-Trimethylbenzene                                 | 3.6                               | 190             | 380             | --       | 53.0 D   | 0.0062                 | 0.0072                 | --           | --           |
| 1,2-Dibromo-3-chloropropane                            | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,2-Dibromoethane                                      | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,2-Dichlorobenzene                                    | 1.1                               | 500             | 1000            | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,2-Dichloroethane                                     | 0.02                              | 30              | 60              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,2-Dichloropropane                                    | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,3,5-Trimethylbenzene                                 | 8.4                               | 190             | 380             | --       | 12.0     | 0.0014 J               | 0.0110                 | --           | --           |
| 1,3-Dichlorobenzene                                    | 2.4                               | 280             | 560             | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 1,4-Dichlorobenzene                                    | 1.8                               | 130             | 250             | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 2-Butanone   | 0.12                              | 500             | 1000            | --       | < ND     | 0.0190                 | < ND                   | --           | --           |
| 2-Hexanone   | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| 4-Methyl-2-pentanone                                   | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Acetone  | 0.05                              | 500             | 1000            | --       | < ND     | 0.12                   | 0.0063 J               | --           | --           |
| Benzene  | 0.06                              | 44              | 89              | --       | < ND     | 0.0003 J               | < ND                   | --           | --           |
| Bromodichloromethane                                   | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Bromoform  | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Bromomethane   | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Carbon disulfide                                       | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Carbon tetrachloride                                   | 0.76                              | 22              | 44              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Chlorobenzene  | 1.1                               | 500             | 1000            | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Chloroethane   | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Chloroform   | 0.37                              | 350             | 700             | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Chloromethane  | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| cis-1,2-Dichloroethene                                 | 0.25                              | 500             | 1000            | --       | < ND     | < ND                   | < ND                   | --           | --           |
| cis-1,3-Dichloropropene                                | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Cyclohexane  | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Dibromochloromethane                                   | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Dichlorodifluoromethane                                | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Ethylbenzene   | 1.0                               | 390             | 780             | --       | 0.18     | 0.0003 J               | 0.0005 J               | --           | --           |
| Freon-113  | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Isopropylbenzene                                       | --                                | --              | --              | --       | 0.35     | < ND                   | < ND                   | --           | --           |
| Methyl Acetate   | --                                | --              | --              | --       | 0.14 J   | < ND                   | < ND                   | --           | --           |
| Methyl cyclohexane                                     | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Methyl tert butyl ether                                | 0.93                              | 500             | 1000            | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Methylene chloride                                     | 0.05                              | 500             | 1000            | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Naphthalene  | 12                                | 500             | 1000            | --       | 17.0     | 0.0010 J               | 0.0008 J               | --           | --           |
| n-Butylbenzene   | 12                                | --              | --              | --       | 2.30     | < ND                   | 0.0004 J               | --           | --           |
| n-Propylbenzene  | 3.9                               | 500             | 1000            | --       | 1.90     | 0.0004 J               | 0.0008 J               | --           | --           |
| o-Xylene   | 0.26                              | 500             | 1000            | --       | 2.40     | 0.0016                 | 0.0092                 | --           | --           |
| p/m-Xylene   | 0.26                              | 500             | 1000            | --       | 1.90     | 0.0014 J               | 0.0012 J               | --           | --           |
| p-Isopropyltoluene                                     | --                                | --              | --              | --       | 0.41     | < ND                   | 0.0002 J               | --           | --           |
| sec-Butylbenzene                                       | 11                                | 500             | 1000            | --       | 0.58     | < ND                   | < ND                   | --           | --           |
| Styrene  | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| tert-Butylbenzene                                      | 5.9                               | 500             | 1000            | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Tetrachloroethene                                      | 1.3                               | 150             | 300             | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Toluene  | 0.7                               | 500             | 1000            | --       | < ND     | < ND                   | < ND                   | --           | --           |
| trans-1,2-Dichloroethene                               | 0.19                              | 500             | 1000            | --       | < ND     | < ND                   | < ND                   | --           | --           |
| trans-1,3-Dichloropropene                              | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Trichloroethene  | 0.47                              | 200             | 400             | --       | 0.10     | < ND                   | 0.0043                 | --           | --           |
| Trichlorofluoromethane                                 | --                                | --              | --              | --       | < ND     | < ND                   | < ND                   | --           | --           |
| Vinyl chloride   | 0.02                              | 27              | 2.0             | --       | < ND     | < ND                   | < ND                   | --           | --           |

Notes:

X - All soil results presented in parts per million (ppm)

< ND: Substance not identified above the minimum laboratory quantitation limit (non-detect)

- Sample not analyzed for referenced parameter

Value exceeds Unrestricted Use SCOs

Value exceeds Commercial Use SCOs

Value exceeds Industrial Use SCOs

J: The target analyte concentration is below the quantitation limit, but above the method detection limit or estimated detection limit

D: Concentration of analyte was quantified from diluted analysis.

**Table 1 – 91 Leighton Avenue**

Soil Sample Analytical Results

| Soil Sample Analytical Results<br>Detected Parameters: | Sample ID:                        |       | GP-02    | GP-04    | GPMW-05  | GP-08    | COMPOSITE-01           |        | COMPOSITE-02           |        |    |
|--|-----------------------------------|-------|----------|----------|----------|----------|------------------------|--------|------------------------|--------|----|
|  | Date Sampled:                     |       | 3/3/2023 | 3/3/2023 | 3/3/2023 | 3/3/2023 | 3/3/2023               |        | 3/3/2023               |        |    |
|  | Sample Matrix:                    |       | Soil     | Soil     | Soil     | Soil     | Soil                   |        | Soil                   |        |    |
|  | Sample Depth:                     |       | 4-6'     | 1-3'     | 9-11'    | 8-9'     | GP-02 1-2', GP-08 2-4' |        | GP-07 2-6', GP-08 2-4' |        |    |
| EPA 8270-SVOCs   | NYSDEC Part 375 SCOs <sup>a</sup> |       |          | Result   | Q        | Result   | Q                      | Result | Q                      | Result | Q  |
| 1,2,4,5-Tetrachlorobenzene                             | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 1,2,4-Trichlorobenzene                                 | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 1,2-Dichlorobenzene                                    | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 1,3-Dichlorobenzene                                    | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 1,4-Dichlorobenzene                                    | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 2,4-Dinitrotoluene                                     | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 2,6-Dinitrotoluene                                     | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 2-Chloronaphthalene                                    | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 2-Methylnaphthalene                                    | --                                | --    | --       | --       | --       | --       | --                     | --     | 0.07 J                 | 0.26   |    |
| 2-Nitroaniline   | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 3,3'-Dichlorobenzidine                                 | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 3-Nitroaniline   | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 4-Bromophenyl phenyl ether                             | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 4-Chloroaniline  | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 4-Chlorophenyl phenyl ether                            | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| 4-Nitroaniline   | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Acenaphthene   | 20                                | 500   | 1,000    | --       | --       | --       | --                     | --     | 0.130 J                | 0.380  |    |
| Acenaphthylene   | 100                               | 500   | 1,000    | --       | --       | --       | --                     | <      | ND                     | 0.03 J |    |
| Acetophenone   | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Anthracene   | 100                               | 500   | 1,000    | --       | --       | --       | --                     | --     | 0.55                   | 0.97   |    |
| Benz(a)anthracene                                      | 1.0                               | 5.6   | 11       | --       | --       | --       | --                     | --     | 0.75                   | 1.60   |    |
| Benz(a)pyrene  | 1.0                               | 1.0   | 1.1      | --       | --       | --       | --                     | --     | 0.66                   | 1.60   |    |
| Benz(b)fluoranthene                                    | 1.0                               | 5.6   | 11       | --       | --       | --       | --                     | --     | 0.91                   | 1.90   |    |
| Benz(g/h)perylene                                      | 100                               | 500   | 1,000    | --       | --       | --       | --                     | --     | 0.41                   | 0.94   |    |
| Benz(k)fluoranthene                                    | 0.8                               | 56    | 110      | --       | --       | --       | --                     | --     | 0.27                   | 0.71   |    |
| Benzyl Alcohol   | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Biphenyl   | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | 0.05 J |    |
| Bis(2-chloroethoxy)methane                             | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Bis(2-chloroethyl)ether                                | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Bis(2-chloroisopropyl)ether                            | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Bis(2-ethylhexyl)phthalate                             | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Butyl benzyl phthalate                                 | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Carbazole  | --                                | --    | --       | --       | --       | --       | --                     | --     | 0.27                   | 0.35   |    |
| Chrysene   | 1.0                               | 56    | 110      | --       | --       | --       | --                     | --     | 0.78                   | 1.60   |    |
| Dibenz(a,h)anthracene                                  | 0.33                              | 0.56  | 1.1      | --       | --       | --       | --                     | --     | 0.10 J                 | 0.22   |    |
| Dibenzofuran   | --                                | --    | --       | --       | --       | --       | --                     | --     | 0.20                   | 0.34   |    |
| Diethyl phthalate                                      | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Dimethyl phthalate                                     | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Di-n-butylphthalate                                    | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Di-n-octylphthalate                                    | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Fluoranthene   | 100                               | 500   | 1,000    | --       | --       | --       | --                     | --     | 2.20                   | 3.70   |    |
| Fluorene   | 30                                | 500   | 1,000    | --       | --       | --       | --                     | --     | 0.20                   | 0.42   |    |
| Hexachlorobenzene                                      | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Hexachlorobutadiene                                    | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Hexachlorocyclopentadiene                              | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Hexachloroethane                                       | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Indeno(1,2,3-cd)pyrene                                 | 0.5                               | 56    | 11       | --       | --       | --       | --                     | --     | 0.47                   | 1.00   |    |
| Isophorone   | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Naphthalene  | 12                                | 1,000 | --       | --       | --       | --       | --                     | --     | 0.14 J                 | 0.50   |    |
| NDPA/DPA   | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Nitrobenzene   | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| n-Nitrosodi-n-propylamine                              | --                                | --    | --       | --       | --       | --       | --                     | <      | ND                     | <      | ND |
| Phenanthrene   | 100                               | 1,000 | --       | --       | --       | --       | --                     | --     | 2.30                   | 3.60   |    |
| Pyrene   | 100                               | 1,000 | --       | --       | --       | --       | --                     | --     | 1.60                   | 3.00   |    |

Notes:

X - All soil results presented in parts per million (ppm)

< ND: Substance not identified above the minimum laboratory quantitation limit (non-detect)

- Sample not analyzed for referenced parameter

Value exceeds Unrestricted Use SCOs

Value exceeds Commercial Use SCOs

Value exceeds Industrial Use SCOs

J: The target analyte concentration is below the quantitation limit, but above the method detection limit or estimated detection limit

D: Concentration of analyte was quantified from diluted analysis.

Table 1 – 91 Leighton Avenue

Soil Sample Analytical Results

| Soil Sample Analytical Results<br>Detected Parameters: | Sample ID:                        |                 |                 | GP-02    | GP-04    | GPMW-05  | GP-08    | COMPOSITE-01           | COMPOSITE-02           |
|--|-----------------------------------|-----------------|-----------------|----------|----------|----------|----------|------------------------|------------------------|
|  | Date Sampled:                     |                 |                 | 3/3/2023 | 3/3/2023 | 3/3/2023 | 3/3/2023 | 3/3/2023               | 3/3/2023               |
|  | Sample Matrix:                    |                 |                 | Soil     | Soil     | Soil     | Soil     | Soil                   | Soil                   |
|  | Sample Depth:                     |                 |                 | 4-6'     | 1-3'     | 9-11'    | 8-9'     | GP-02 1-2', GP-08 2-4' | GP-07 2-6', GP-08 2-4' |
| EPA 6010-RCRA Metals                                   | NYSDEC Part 375 SCOs <sup>x</sup> |                 |                 | Result   | Q        | Result   | Q        | Result                 | Q                      |
|  | Unrestricted Use                  | Commercial Soil | Industrial Soil |          |          |          |          |                        |                        |
| Arsenic  | 13                                | 16              | 25              | --       | --       | --       | --       | 5.38                   | 6.96                   |
| Barium   | 350                               | 10,000          | 1,000           | --       | --       | --       | --       | 30.1                   | 88.5                   |
| Cadmium  | 2.5                               | 60              | 5.0             | --       | --       | --       | --       | 0.079 J                | 0.329 J                |
| Chromium   | 30                                | 1,500           | 6,800           | --       | --       | --       | --       | 10.3                   | 37.1                   |
| Lead   | 63                                | 1,000           | 3,900           | --       | --       | --       | --       | 16.0                   | 130                    |
| Mercury  | 0.18                              | 2.8             | 5.7             | --       | --       | --       | --       | 0.133                  | 0.064 J                |
| Selenium   | 3.9                               | 1,500           | 6,800           | --       | --       | --       | --       | < ND                   | 0.798 J                |
| Silver   | 2.0                               | 6,800           | 50              | --       | --       | --       | --       | < ND                   | < ND                   |
| EPA 8082-PCBs  | NYSDEC Part 375 SCOs <sup>x</sup> |                 |                 | Result   | Q        | Result   | Q        | Result                 | Q                      |
|  | Unrestricted Use                  | Commercial Soil | Industrial Soil |          |          |          |          |                        |                        |
| Aroclor 1016   | 0.1                               | 1.0             | 25              | < ND     | --       | --       | < ND     | --                     | --                     |
| Aroclor 1221   | 0.1                               | 1.0             | 25              | < ND     | --       | --       | < ND     | --                     | --                     |
| Aroclor 1232   | 0.1                               | 1.0             | 25              | < ND     | --       | --       | < ND     | --                     | --                     |
| Aroclor 1242   | 0.1                               | 1.0             | 25              | < ND     | --       | --       | < ND     | --                     | --                     |
| Aroclor 1248   | 0.1                               | 1.0             | 25              | < ND     | --       | --       | < ND     | --                     | --                     |
| Aroclor 1254   | 0.1                               | 1.0             | 25              | < ND     | --       | --       | < ND     | --                     | --                     |
| Aroclor 1260   | 0.1                               | 1.0             | 25              | < ND     | --       | --       | < ND     | --                     | --                     |

## Notes:

X - All soil results presented in parts per million (ppm)

&lt; ND: Substance not identified above the minimum laboratory quantitation limit (non-detect)

-- Sample not analyzed for referenced parameter

Value exceeds Unrestricted Use SCOs

Value exceeds Commercial Use SCOs

Value exceeds Industrial Use SCOs

J: The target analyte concentration is below the quantitation limit, but above the method detection limit or estimated detection limit

D: Concentration of analyte was quantified from diluted analysis.

Table 2 – 91 Leighton Avenue

Soil and Groundwater Sample Analytical Results

| Soil Sample Analytical Results<br>Detected Parameters: | Sample ID:                     | GPMW-01       |    | GPMW-05       |    | GPMW-10       |    |
|--|--------------------------------|---------------|----|---------------|----|---------------|----|
|  | Date Sampled:                  | 3/6/2023      |    | 3/6/2023      |    | 3/6/2023      |    |
|  | Sample Matrix                  | Groundwater   |    | Groundwater   |    | Groundwater   |    |
|  | GW Elevation:                  | 91.51'        |    | 91.9'         |    | 93.6'         |    |
| EPA 8260-VOCs  | NYSDEC TOGS 1.1.1 <sup>x</sup> | Result Q      |    | Result Q      |    | Result Q      |    |
| 1,1,1-Trichloroethane                                  | --                             | <             | ND | <             | ND | <             | ND |
| 1,1,2,2-Tetrachloroethane                              | --                             | <             | ND | <             | ND | <             | ND |
| 1,1,2-Trichloroethane                                  | --                             | <             | ND | <             | ND | <             | ND |
| 1,1-Dichloroethane                                     | --                             | <             | ND | <             | ND | <             | ND |
| 1,1-Dichloroethene                                     | --                             | <             | ND | <             | ND | <             | ND |
| 1,2,4-Trichlorobenzene                                 | --                             | <             | ND | <             | ND | <             | ND |
| 1,2,4-Trimethylbenzene                                 | --                             | <             | ND | <             | ND | <             | ND |
| 1,2-Dibromo-3-chloropropane                            | --                             | <             | ND | <             | ND | <             | ND |
| 1,2-Dibromoethane                                      | --                             | <             | ND | <             | ND | <             | ND |
| 1,2-Dichlorobenzene                                    | --                             | <             | ND | <             | ND | <             | ND |
| 1,2-Dichloroethane                                     | --                             | <             | ND | <             | ND | <             | ND |
| 1,2-Dichloropropane                                    | --                             | <             | ND | <             | ND | <             | ND |
| 1,3,5-Trimethylbenzene                                 | --                             | <             | ND | <             | ND | <             | ND |
| 1,3-Dichlorobenzene                                    | --                             | <             | ND | <             | ND | <             | ND |
| 1,4-Dichlorobenzene                                    | --                             | <             | ND | <             | ND | <             | ND |
| 2-Butanone   | 50                             | <b>23.0</b>   |    | <             | ND | <             | ND |
| 2-Hexanone   | --                             | <             | ND | <             | ND | <             | ND |
| 4-Methyl-2-pentanone                                   | --                             | <             | ND | <             | ND | <             | ND |
| Acetone  | 50                             | <b>54.0</b>   |    | <b>2.10 J</b> |    | <b>2.90 J</b> |    |
| Benzene  | 1.0                            | <             | ND | <b>2.70</b>   | <  |               | ND |
| Bromodichloromethane                                   | --                             | <             | ND | <             | ND | <             | ND |
| Bromoform  | --                             | <             | ND | <             | ND | <             | ND |
| Bromomethane   | --                             | <             | ND | <             | ND | <             | ND |
| Carbon disulfide                                       | --                             | <             | ND | <             | ND | <             | ND |
| Carbon tetrachloride                                   | --                             | <             | ND | <             | ND | <             | ND |
| Chlorobenzene  | --                             | <             | ND | <             | ND | <             | ND |
| Chloroethane   | --                             | <             | ND | <             | ND | <             | ND |
| Chloroform   | --                             | <             | ND | <             | ND | <             | ND |
| Chloromethane  | --                             | <             | ND | <             | ND | <             | ND |
| cis-1,2-Dichloroethene                                 | --                             | <             | ND | <             | ND | <             | ND |
| cis-1,3-Dichloropropene                                | --                             | <             | ND | <             | ND | <             | ND |
| Cyclohexane  | --                             | <             | ND | <             | ND | <             | ND |
| Dibromochloromethane                                   | --                             | <             | ND | <             | ND | <             | ND |
| Dichlorodifluoromethane                                | --                             | <             | ND | <             | ND | <             | ND |
| Ethylbenzene   | --                             | <             | ND | <             | ND | <             | ND |
| Freon-113  | --                             | <             | ND | <             | ND | <             | ND |
| Isopropylbenzene                                       | --                             | <             | ND | <             | ND | <             | ND |
| Methyl Acetate   | --                             | <             | ND | <             | ND | <             | ND |
| Methyl cyclohexane                                     | --                             | <             | ND | <             | ND | <             | ND |
| Methyl tert butyl ether                                | --                             | <             | ND | <             | ND | <             | ND |
| Methylene chloride                                     | --                             | <             | ND | <             | ND | <             | ND |
| Naphthalene  | --                             | <             | ND | <             | ND | <             | ND |
| n-Butylbenzene   | --                             | <             | ND | <             | ND | <             | ND |
| n-Propylbenzene  | --                             | <             | ND | <             | ND | <             | ND |
| o-Xylene   | --                             | <             | ND | <             | ND | <             | ND |
| p/m-Xylene   | 5.0                            | <b>2.90 J</b> |    | <             | ND | <             | ND |
| p-Isopropyltoluene                                     | --                             | <             | ND | <             | ND | <             | ND |
| sec-Butylbenzene                                       | --                             | <             | ND | <             | ND | <             | ND |
| Styrene  | --                             | <             | ND | <             | ND | <             | ND |
| tert-Butylbenzene                                      | --                             | <             | ND | <             | ND | <             | ND |
| Tetrachloroethene                                      | 5.0                            | <b>5.60</b>   |    | <             | ND | <             | ND |
| Toluene  | --                             | <             | ND | <             | ND | <             | ND |
| trans-1,2-Dichloroethene                               | --                             | <             | ND | <             | ND | <             | ND |
| trans-1,3-Dichloropropene                              | --                             | <             | ND | <             | ND | <             | ND |
| Trichloroethene  | 5.0                            | <b>220</b>    |    | <b>1.60</b>   |    | <b>13.0</b>   |    |
| Trichlorofluoromethane                                 | --                             | <             | ND | <             | ND | <             | ND |
| Vinyl chloride   | 2.0                            | <             | ND | <             | ND | <             | ND |

## Notes:

x - All groundwater results presented in parts per billion (ppb)

&lt; ND: Substance not identified above the minimum laboratory quantitation limit (non-detect)

-- Sample not analyzed for referenced parameter

Value exceeds Class GA Groundwater Quality Standards

J: The target analyte concentration is below the quantitation limit, but above the method detection limit or estimated detection limit

**Table 2 – 91 Leighton Avenue**

Soil and Groundwater Sample Analytical Results

| Soil Sample Analytical Results<br>Detected Parameters: | Sample ID:   | GPMW-01     |   | GPMW-05     |   | GPMW-10     |   |
|--|--|-------------|---|-------------|---|-------------|---|
|  | Date Sampled:  | 3/6/2023    |   | 3/6/2023    |   | 3/6/2023    |   |
|  | Sample Matrix  | Groundwater |   | Groundwater |   | Groundwater |   |
|  | GW Elevation:  | 91.51'      |   | 91.9'       |   | 93.6'       |   |
| EPA 6010-RCRA Metals                                   | NYSDEC TOGS 1.1.1 <sup>x</sup><br>Class GA Groundwater | Result      | Q | Result      | Q | Result      | Q |
| Arsenic  | 25   | --          |   | 6.72        |   | 2.40        |   |
| Barium   | 1,000  | --          |   | 379         |   | 118         |   |
| Cadmium  | 5.0  | --          |   | 1.26        |   | 0.32        |   |
| Chromium   | 50   | --          |   | 11.8        |   | 4.78        |   |
| Lead   | 25   | --          |   | 66.0        |   | 4.21        |   |
| Mercury  | 0.7  | --          |   | 0.14 J      | < | ND          |   |
| Selenium   | 10   | --          |   | 14.7        |   | 4.96 J      |   |
| Silver   | 50   | --          | < | ND          | < | ND          |   |
| EPA 8082-PCBs  | NYSDEC TOGS 1.1.1 <sup>x</sup><br>Class GA Groundwater | Result      | Q | Result      | Q | Result      | Q |
| Aroclor 1016   | 0.09   | --          | < | ND          | < | ND          |   |
| Aroclor 1221   | 0.09   | --          | < | ND          | < | ND          |   |
| Aroclor 1232   | 0.09   | --          | < | ND          | < | ND          |   |
| Aroclor 1242   | 0.09   | --          | < | ND          | < | ND          |   |
| Aroclor 1248   | 0.09   | --          | < | ND          | < | ND          |   |
| Aroclor 1254   | 0.09   | --          | < | ND          | < | ND          |   |
| Aroclor 1260   | 0.09   | --          | < | ND          | < | ND          |   |

**Notes:**

x - All groundwater results presented in parts per billion (ppb)

&lt; ND: Substance not identified above the minimum laboratory quantitation limit (non-detect)

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Value exceeds Class GA Groundwater Quality Standards

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## Attachment A

Photo Pages

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**Site Photographs**  
91 Leighton Ave – Phase II ESA



**Photo No. 1** View of the site facing north



**Photo No. 2** Western edge of the site facing north



**Photo No. 3** View of the site facing southeast



**Photo No. 4** View of the site facing southwest

**Site Photographs**  
91 Leighton Ave – Phase II ESA



**Photo No. 5** Geoprobe drill rig



**Photo No. 6** Typical soil progression



**Photo No. 7** Suspected former floor drain



**Photo No. 8** Suspect former floor drain inlet



**Photo No. 9** Unknown feature connected to subsurface void space



**Photo No. 10** Subsurface void space



**Photo No. 11** Groundwater sampling setup

## Attachment B

### Soil Boring Logs

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|   |  |                        |      |                      |                |
|---|--|------------------------|------|----------------------|----------------|
|   |  | PROJECT                |      | BORING: GPMW - 01    |                |
| 536 Central Ave<br>City of Rochester NY |  | SHEET 1 OF 1           |      | JOB #                |                |
| JCL PERSONNEL: BGS, MGA                 |  | START DATE: 03/03/2023 |      | END DATE: 03/03/2023 |                |
| TYPE OF DRILL RIG: 54LT Geoprobe        |  |                        |      | WATER LEVEL DATA     |                |
| CASING SIZE AND TYPE:                   |  | DATE                   | TIME | WATER                | CASING REMARKS |
| OVERBURDEN SAMPLING METHOD: Macro Core  |  |                        |      |                      |                |
| ROCK DRILLING METHOD: n/a               |  |                        |      |                      |                |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |          |       |       | SAMPLE DESCRIPTION   | PID (ppm) |
|-----------------------|-------------|----------|-------|-------|--|-----------|
|                       | NO.         | BLOW /6" | RQD % | REC % |  |           |
| 1                     |             | N/A      | N/A   | 20%   | ~ 3" concrete rubble<br>tan mf SAND + mf GRAVEL                              | 0.0       |
| 2                     |             |          |       |       |  |           |
| 3                     |             |          |       |       |  |           |
| 4                     |             |          |       |       |  |           |
| 5                     |             |          |       | 80%   | Similar soils some silt  | 0.0       |
| 6                     |             |          |       |       |  | 0.5       |
| 7                     |             |          |       |       |  |           |
| 8                     |             |          |       |       | Similar soils, moist   | 0.3       |
| 9                     |             |          |       | 75%   | Similar soils, moist, little mf GRAVEL                                       | 0.4       |
| 10                    |             |          |       |       |  |           |
| 11                    |             |          |       |       |  |           |
| 12                    |             |          |       |       |  |           |
| 13                    |             |          |       | 100%  | Similar soils, some clay   | 0.0       |
| 14                    |             |          |       |       | Similar soils, wet, some mf GRAVEL, ground water<br>@ 10.5'<br>Refusal @ 14' |           |
| 15                    |             |          |       |       |  |           |
| 16                    |             |          |       |       |  |           |
| 17                    |             |          |       |       |  |           |
| 18                    |             |          |       |       |  |           |
| 19                    |             |          |       |       |  |           |
| 20                    |             |          |       |       |  |           |
| 21                    |             |          |       |       |  |           |
| 22                    |             |          |       |       |  |           |
| 23                    |             |          |       |       |  |           |
| 24                    |             |          |       |       |  |           |
| 25                    |             |          |       |       |  |           |

#### GENERAL NOTES

- 1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.
- 2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.  
bgs: below ground surface TCR: total core recovery  
ppm: parts per million

BORING# GPMW - 01



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|  |   |  |  |                            |
|--|---|--|--|----------------------------|
| <b>CONTRACTOR:</b> Trec<br><b>DRILLER:</b> Chris<br><b>JCL PERSONNEL:</b> BGS, MGA<br><b>TYPE OF DRILL RIG:</b> 54LT Geoprobe<br><b>CASING SIZE AND TYPE:</b><br><b>OVERBURDEN SAMPLING METHOD:</b> Macro Core<br><b>ROCK DRILLING METHOD:</b> n/a | <b>PROJECT</b>                          |  |  | <b>BORING:</b> GP-02       |
|  | 536 Central Ave<br>City of Rochester NY |  |  | <b>SHEET</b> 1 <b>OF</b> 1 |
|  |   |  |  | <b>JOB #</b>               |
|  |   |  |  | <b>CHECKED BY:</b> GLA     |
| <b>BORING LOCATION:</b> SEE PLAN<br><b>GROUND SURFACE ELEVATION:</b> DATUM:<br><b>START DATE:</b> 03/03/2023 <b>END DATE:</b> 03/03/2023<br><b>WATER LEVEL DATA</b><br><b>DATE</b> <b>TIME</b> <b>WATER</b> <b>CASING</b> <b>REMARKS</b>           |   |  |  |                            |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |             |       |       | SAMPLE DESCRIPTION   | PID<br>(ppm) |
|-----------------------|-------------|-------------|-------|-------|--|--------------|
|                       | NO.         | BLOW<br>/6" | RQD % | REC % |  |              |
| 1                     |             |             |       | 50%   | ~2" asphalt rubble/fill                                    | 0.0          |
| 2                     |             |             |       |       | dark gray mf sand + mf GRAVEL + light brown fine sand/silt |              |
| 3                     |             |             |       |       |  |              |
| 4                     |             |             |       |       |  |              |
| 5                     |             |             |       | 50%   | dark + light brown mf sand, some clay                      | 0.0          |
| 6                     |             |             |       |       |  |              |
| 7                     |             |             |       |       |  |              |
| 8                     |             |             |       |       |  |              |
| 9                     |             |             |       |       |  |              |
| 10                    |             |             |       | 40%   | Similar Soils  | 0.0          |
| 11                    |             |             |       |       |  |              |
| 12                    |             | N/A         | N/A   |       | Similar Soils, wet   | 0.0          |
| 13                    |             |             |       |       |  |              |
| 14                    |             |             |       | 50%   | 14' refusal  |              |
| 15                    |             |             |       |       |  |              |
| 16                    |             |             |       |       |  |              |
| 17                    |             |             |       |       |  |              |
| 18                    |             |             |       |       |  |              |
| 19                    |             |             |       |       |  |              |
| 20                    |             |             |       |       |  |              |
| 21                    |             |             |       |       |  |              |
| 22                    |             |             |       |       |  |              |
| 23                    |             |             |       |       |  |              |
| 24                    |             |             |       |       |  |              |
| 25                    |             |             |       |       |  |              |

#### GENERAL NOTES

- 1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.
- 2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.  
 bgs: below ground surface    TCR: total core recovery  
 ppm: parts per million

BORING# GP-02



ENVIRONMENTAL • TRANSPORTATION • CIVIL

|  |               |   |
|--|---------------|---|
| PROJECT<br>536 Central Ave<br>City of Rochester NY |               | BORING: GP ~ 03                             |
|  |               | SHEET 1 OF 1                                |
|  |               | JOB #                                       |
| CHECKED BY: GLA                                    |               |   |
| CONTRACTOR:  | Trec          | BORING LOCATION: SEE PLAN                   |
| DRILLER:   | Chris         | GROUND SURFACE ELEVATION: DATUM:            |
| JCL PERSONNEL:                                     | BGS, MGA      | START DATE: 03/03/2023 END DATE: 03/03/2023 |
| TYPE OF DRILL RIG:                                 | 54LT Geoprobe | WATER LEVEL DATA                            |
| CASING SIZE AND TYPE:                              |               | DATE TIME WATER Casing REMARKS              |
| OVERBURDEN SAMPLING METHOD:                        | Macro Core    |   |
| ROCK DRILLING METHOD:                              | n/a           |   |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |          |       |       |        | SAMPLE DESCRIPTION                        | PID (ppm) |
|-----------------------|-------------|----------|-------|-------|--------|---|-----------|
|                       | NO.         | BLOW /6" | RQD % | REC % | CHANGE |   |           |
| 1                     |             |          |       |       |        | ~ 2" asphalt rubble                       | 0.0       |
| 2                     |             |          |       |       |        | black mt sand, little silt, no odor       |           |
| 3                     |             |          |       |       |        |   |           |
| 4                     |             |          |       |       |        |   |           |
| 5                     |             |          |       |       |        | brown mt sand, some cm GRAVEL             | 0.0       |
| 6                     |             |          |       |       |        |   |           |
| 7                     |             |          |       |       |        |   |           |
| 8                     |             |          |       |       |        |   |           |
| 9                     |             |          |       |       |        | NO RECOVERY, sleeve stuck in drill barrel | 0.0       |
| 10                    |             |          |       |       |        |   |           |
| 11                    |             |          |       |       |        | refusal @ 11'                             |           |
| 12                    |             |          |       |       |        |   |           |
| 13                    | N/A         | N/A      |       |       |        |   |           |
| 14                    |             |          |       |       |        |   |           |
| 15                    |             |          |       |       |        |   |           |
| 16                    |             |          |       |       |        |   |           |
| 17                    |             |          |       |       |        |   |           |
| 18                    |             |          |       |       |        |   |           |
| 19                    |             |          |       |       |        |   |           |
| 20                    |             |          |       |       |        |   |           |
| 21                    |             |          |       |       |        |   |           |
| 22                    |             |          |       |       |        |   |           |
| 23                    |             |          |       |       |        |   |           |
| 24                    |             |          |       |       |        |   |           |
| 25                    |             |          |       |       |        |   |           |

GENERAL NOTES

1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.

2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.

bgs: below ground surface TCR: total core recovery

ppm: parts per million

BORING# GP - 03



ENVIRONMENTAL • TRANSPORTATION • CIVIL

PROJECT

536 Central Ave  
City of Rochester NY

BORING: GP-04

SHEET 1 OF 1

JOB #

CHECKED BY: GLA

CONTRACTOR: Trec

BORING LOCATION: SEE PLAN

DRILLER: Chris

GROUND SURFACE ELEVATION:

DATUM:

JCL PERSONNEL: BGS, MGA

START DATE: 03/03/2023

END DATE: 03/03/2023

TYPE OF DRILL RIG: 54LT Geoprobe

WATER LEVEL DATA

CASING SIZE AND TYPE:

DATE TIME WATER CASING REMARKS

OVERBURDEN SAMPLING METHOD: Macro Core

ROCK DRILLING METHOD: n/a

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |          |       |       |        | SAMPLE DESCRIPTION   | PID (ppm) |
|-----------------------|-------------|----------|-------|-------|--------|--|-----------|
|                       | NO.         | BLOW /6" | RQD % | REC % | CHANGE |  |           |
| 1                     |             |          |       |       |        | ~ 6" concrete, gasoline odor   | 31.4      |
| 2                     |             |          |       |       | 50%    | brown mt sand, trace slag, trace coal                                | 0.7       |
| 3                     |             |          |       |       |        |  |           |
| 4                     |             |          |       |       |        |  |           |
| 5                     |             |          |       |       | 0%     | similar soils, synthetic odor  | 0.6       |
| 6                     |             |          |       |       |        |  |           |
| 7                     |             |          |       |       |        |  |           |
| 8                     |             |          |       |       |        |  |           |
| 9                     |             |          |       |       |        |  |           |
| 10                    |             |          |       |       | 80%    | similar soils, synthetic odor, wet, some GRAVEL<br>groundwater @ 11' | 0.0       |
| 11                    |             |          |       |       |        |  |           |
| 12                    |             | N/A      | N/A   |       |        | similar soils, wet, no odor, no shear                                |           |
| 13                    |             |          |       |       |        |  |           |
| 14                    |             |          |       |       | 40%    |  |           |
| 15                    |             |          |       |       |        |  |           |
| 16                    |             |          |       |       |        |  |           |
| 17                    |             |          |       |       |        |  |           |
| 18                    |             |          |       |       |        |  |           |
| 19                    |             |          |       |       |        |  |           |
| 20                    |             |          |       |       |        |  |           |
| 21                    |             |          |       |       |        |  |           |
| 22                    |             |          |       |       |        |  |           |
| 23                    |             |          |       |       |        |  |           |
| 24                    |             |          |       |       |        |  |           |
| 25                    |             |          |       |       |        |  |           |

GENERAL NOTES

1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.

2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.

bgs: below ground surface TCR: total core recovery

ppm: parts per million

BORING# GP-04

|  |                           |                      |       |        |         |
|--|---------------------------|----------------------|-------|--------|---------|
| PROJECT<br>536 Central Ave<br>City of Rochester NY | BORING: GPMW-05           |                      |       |        |         |
|  | SHEET                     | 1 OF 1               |       |        |         |
|  | JOB #                     |                      |       |        |         |
|  | CHECKED BY:               | GLA                  |       |        |         |
| CONTRACTOR: Trec                                   | BORING LOCATION: SEE PLAN |                      |       |        |         |
| DRILLER: Chris                                     | GROUND SURFACE ELEVATION: | DATUM:               |       |        |         |
| JCL PERSONNEL: BGS, MGA                            | START DATE: 03/03/2023    | END DATE: 03/03/2023 |       |        |         |
| TYPE OF DRILL RIG: 54LT Geoprobe                   |                           | WATER LEVEL DATA     |       |        |         |
| CASING SIZE AND TYPE:                              | DATE                      | TIME                 | WATER | CASING | REMARKS |
| OVERBURDEN SAMPLING METHOD: Macro Core             |                           |                      |       |        |         |
| ROCK DRILLING METHOD: n/a                          |                           |                      |       |        |         |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |          |       |       |        | SAMPLE DESCRIPTION                                | PID (ppm) |
|-----------------------|-------------|----------|-------|-------|--------|---|-----------|
|                       | NO.         | BLOW /6" | RQD % | REC % | CHANGE |   |           |
| 1                     |             |          |       |       |        | ~3" concrete rubble                               | 0.0       |
| 2                     | /           |          |       |       | 60%    | brown + black mt sand, slight odor                |           |
| 3                     |             |          |       |       |        |   |           |
| 4                     |             |          |       |       |        |   |           |
| 5                     |             |          |       |       |        | Similar soils, synthetic odor                     | 0.0       |
| 6                     |             |          |       |       | 60%    | similar soils, cmt GRAVEL                         | 0.4       |
| 7                     |             |          |       |       |        |   |           |
| 8                     |             |          |       |       |        | degraded petroleum, gray mt sand                  | 0.0       |
| 9                     |             |          |       |       |        | Similar soils, synthetic odor                     | 0.0       |
| 10                    |             |          |       |       | 60%    | brown mt sand, some brick fill, groundwater @ 11' |           |
| 11                    |             |          |       |       |        |   |           |
| 12                    | N/A         | N/A      |       |       |        | Termination @ 12'                                 |           |
| 13                    |             |          |       |       |        |   |           |
| 14                    |             |          |       |       |        |   |           |
| 15                    |             |          |       |       |        |   |           |
| 16                    |             |          |       |       |        |   |           |
| 17                    |             |          |       |       |        |   |           |
| 18                    |             |          |       |       |        |   |           |
| 19                    |             |          |       |       |        |   |           |
| 20                    |             |          |       |       |        |   |           |
| 21                    |             |          |       |       |        |   |           |
| 22                    |             |          |       |       |        |   |           |
| 23                    |             |          |       |       |        |   |           |
| 24                    |             |          |       |       |        |   |           |
| 25                    |             |          |       |       |        |   |           |

**GENERAL NOTES**

1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.

2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.

bgs: below ground surface    TCR: total core recovery

ppm: parts per million

**BORING# GPMW-05**

|  |               |   |
|--|---------------|---|
| PROJECT<br>536 Central Ave<br>City of Rochester NY |               | BORING: GP - 06<br>SHEET 1 OF 1<br>JOB #<br>CHECKED BY: GLA |
| CONTRACTOR:  | Trec          | BORING LOCATION: SEE PLAN                                   |
| DRILLER:   | Chris         | GROUND SURFACE ELEVATION: DATUM:                            |
| JCL PERSONNEL:                                     | BGS, MGA      | START DATE: 03/03/2023 END DATE: 03/03/2023                 |
| TYPE OF DRILL RIG:                                 | 54LT Geoprobe | WATER LEVEL DATA  |
| CASING SIZE AND TYPE:                              |               | DATE TIME WATER CASING REMARKS                              |
| OVERBURDEN SAMPLING METHOD:                        | Macro Core    |   |
| ROCK DRILLING METHOD:                              | n/a           |   |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |          |       |       |        | SAMPLE DESCRIPTION                             | PID (ppm) |
|-----------------------|-------------|----------|-------|-------|--------|--|-----------|
|                       | NO.         | BLOW /6" | RQD % | REC % | CHANGE |  |           |
| 1                     |             |          |       |       |        | dark brown mf sand, some GRAVEL                | 0 . 0     |
| 2                     |             |          |       |       | 30%    | light brown mf sand, slag, fill, no odor       |           |
| 3                     |             |          |       |       |        | gray mf sand                                   |           |
| 4                     |             |          |       |       |        |  |           |
| 5                     |             |          |       |       | 50%    | gray mf sand + silt, some clay, synthetic odor | 0 . 0     |
| 6                     |             |          |       |       |        | ground water @ 7'                              |           |
| 7                     |             |          |       |       |        |  |           |
| 8                     |             |          |       |       |        |  |           |
| 9                     |             |          |       |       |        |  |           |
| 10                    |             |          |       |       | 20%    | similar soils, slag, fill                      | 0 . 0     |
| 11                    |             |          |       |       |        | black mf sand, some cmf GRAVEL, synthetic odor |           |
| 12                    |             | N/A      | N/A   |       |        | refusal @ 12'                                  |           |
| 13                    |             |          |       |       |        |  |           |
| 14                    |             |          |       |       |        |  |           |
| 15                    |             |          |       |       |        |  |           |
| 16                    |             |          |       |       |        |  |           |
| 17                    |             |          |       |       |        |  |           |
| 18                    |             |          |       |       |        |  |           |
| 19                    |             |          |       |       |        |  |           |
| 20                    |             |          |       |       |        |  |           |
| 21                    |             |          |       |       |        |  |           |
| 22                    |             |          |       |       |        |  |           |
| 23                    |             |          |       |       |        |  |           |
| 24                    |             |          |       |       |        |  |           |
| 25                    |             |          |       |       |        |  |           |

GENERAL NOTES

- 1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.
- 2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.  
bgs: below ground surface TCR: total core recovery  
ppm: parts per million

BORING# GP - 06



ENVIRONMENTAL • TRANSPORTATION • CIVIL

|  |   |
|--|---|
| PROJECT<br>536 Central Ave<br>City of Rochester NY | BORING: GP - 07                             |
|  | SHEET 1 OF 1                                |
|  | JOB #                                       |
|  | CHECKED BY: GLA                             |
| CONTRACTOR: Trec                                   | BORING LOCATION: SEE PLAN                   |
| DRILLER: Chris                                     | GROUND SURFACE ELEVATION: DATUM:            |
| JCL PERSONNEL: BGS, MGA                            | START DATE: 03/03/2023 END DATE: 03/03/2023 |
| TYPE OF DRILL RIG: 54LT Geoprobe                   | WATER LEVEL DATA                            |
| CASING SIZE AND TYPE:                              | DATE TIME WATER CASING REMARKS              |
| OVERBURDEN SAMPLING METHOD: Macro Core             |   |
| ROCK DRILLING METHOD: n/a                          |   |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |          |       |       |        | SAMPLE DESCRIPTION                        | PID (ppm) |
|-----------------------|-------------|----------|-------|-------|--------|---|-----------|
|                       | NO.         | BLOW /6" | RQD % | REC % | CHANGE |   |           |
| 1                     | 1           |          |       | 10 %  |        | black + gray cmt sand and GRAVEL, no odor | 0.0       |
| 2                     |             |          |       |       |        |   |           |
| 3                     |             |          |       |       |        |   |           |
| 4                     |             |          |       |       |        |   |           |
| 5                     |             |          |       |       |        | brown mt loamy sand, no odor              | 0.0       |
| 6                     |             |          |       | 20%   |        | gray mt sand + cmt GRAVEL, trace slay     |           |
| 7                     |             |          |       |       |        |   |           |
| 8                     |             |          |       |       |        |   |           |
| 9                     |             |          |       |       |        |   |           |
| 10                    |             |          |       | 20%   |        | brown mt sand, wet, groundwater @ 11'     |           |
| 11                    |             |          |       |       |        | refusal @ 11.5'                           |           |
| 12                    |             |          |       |       |        |   |           |
| 13                    |             |          |       |       |        |   |           |
| 14                    |             |          |       |       |        |   |           |
| 15                    |             |          |       |       |        |   |           |
| 16                    |             |          |       |       |        |   |           |
| 17                    |             |          |       |       |        |   |           |
| 18                    |             |          |       |       |        |   |           |
| 19                    |             |          |       |       |        |   |           |
| 20                    |             |          |       |       |        |   |           |
| 21                    |             |          |       |       |        |   |           |
| 22                    |             |          |       |       |        |   |           |
| 23                    |             |          |       |       |        |   |           |
| 24                    |             |          |       |       |        |   |           |
| 25                    |             |          |       |       |        |   |           |

#### GENERAL NOTES

- 1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.
- 2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.  
bgs: below ground surface TCR: total core recovery  
ppm: parts per million

BORING# GP - 07



ENVIRONMENTAL • TRANSPORTATION • CIVIL

|  |  |   |      |                      |
|--|--|---|------|----------------------|
|  |  | PROJECT                                 |      | BORING: GP-08        |
|  |  | 536 Central Ave<br>City of Rochester NY |      | SHEET 1 OF 1         |
| CONTRACTOR: Trec                       |  | BORING LOCATION: SEE PLAN               |      | JOB #                |
| DRILLER: Chris                         |  | GROUND SURFACE ELEVATION:               |      | DATUM:               |
| JCL PERSONNEL: BGS, MGA                |  | START DATE: 03/03/2023                  |      | END DATE: 03/03/2023 |
| TYPE OF DRILL RIG: 54LT Geoprobe       |  | WATER LEVEL DATA                        |      |                      |
| CASING SIZE AND TYPE:                  |  | DATE                                    | TIME | WATER Casing REMARKS |
| OVERBURDEN SAMPLING METHOD: Macro Core |  |   |      |                      |
| ROCK DRILLING METHOD: n/a              |  |   |      |                      |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |          |       |       | SAMPLE DESCRIPTION                                   | PID (ppm) |
|-----------------------|-------------|----------|-------|-------|--|-----------|
|                       | NO.         | BLOW /6" | RQD % | REC % |  |           |
| 1                     | /           |          |       | 40%   | black mf sand/silt, some slag, slight petroleum odor | 0.0       |
| 2                     |             |          |       |       |  |           |
| 3                     |             |          |       |       |  |           |
| 4                     |             |          |       |       |  |           |
| 5                     |             |          |       | 80%   | similar soils  | 0.0       |
| 6                     |             |          |       |       | light brown mf sand and silt                         |           |
| 7                     |             |          |       |       | ground water @ 7', similar soils, wet.               |           |
| 8                     |             |          |       |       |  |           |
| 9                     |             |          |       |       | similar soils, brown, wet                            | 0.0       |
| 10                    |             |          |       | 20%   | refusal @ 10'  |           |
| 11                    |             |          |       |       |  |           |
| 12                    | N/A         | N/A      |       |       |  |           |
| 13                    |             |          |       |       |  |           |
| 14                    |             |          |       |       |  |           |
| 15                    |             |          |       |       |  |           |
| 16                    |             |          |       |       |  |           |
| 17                    |             |          |       |       |  |           |
| 18                    |             |          |       |       |  |           |
| 19                    |             |          |       |       |  |           |
| 20                    |             |          |       |       |  |           |
| 21                    |             |          |       |       |  |           |
| 22                    |             |          |       |       |  |           |
| 23                    |             |          |       |       |  |           |
| 24                    |             |          |       |       |  |           |
| 25                    |             |          |       |       |  |           |

#### GENERAL NOTES

- 1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.
- 2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.  
bgs: below ground surface    TCR: total core recovery  
ppm: parts per million

BORING# GP-08



ENVIRONMENTAL • TRANSPORTATION • CIVIL

|   |               |   |
|---|---------------|---|
| PROJECT                                 |               | BORING: GP - 09                             |
| 536 Central Ave<br>City of Rochester NY |               | SHEET 1 OF 1                                |
| JOB #                                   |               | CHECKED BY: GLA                             |
| CONTRACTOR: Trec                        |               | BORING LOCATION: SEE PLAN                   |
| DRILLER:                                | Chris         | GROUND SURFACE ELEVATION: DATUM:            |
| JCL PERSONNEL:                          | BGS, MGA      | START DATE: 03/03/2023 END DATE: 03/03/2023 |
| TYPE OF DRILL RIG:                      | 54LT Geoprobe | WATER LEVEL DATA                            |
| CASING SIZE AND TYPE:                   |               | DATE TIME WATER CASING REMARKS              |
| OVERBURDEN SAMPLING METHOD:             | Macro Core    |   |
| ROCK DRILLING METHOD:                   | n/a           |   |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |          |       |       |        | SAMPLE DESCRIPTION                        | PID (ppm) |
|-----------------------|-------------|----------|-------|-------|--------|---|-----------|
|                       | NO.         | BLOW /6" | RQD % | REC % | CHANGE |   |           |
| 1                     |             |          |       | 0%    |        | NO RECOVERY                               |           |
| 2                     |             |          |       |       |        |   |           |
| 3                     |             |          |       |       |        |   |           |
| 4                     |             |          |       |       |        |   |           |
| 5                     |             |          |       |       |        | brown mt sand, trace clay, some mt GRAVEL | 0.0       |
| 6                     |             |          |       | 50%   |        |   |           |
| 7                     |             |          |       |       |        |   |           |
| 8                     |             |          |       |       |        |   |           |
| 9                     |             |          |       |       |        |   |           |
| 10                    |             |          |       | 50%   |        | similar soils, some clay                  | 0.0       |
| 11                    |             |          |       |       |        |   |           |
| 12                    |             | N/A      | N/A   |       |        | refusal @ 10.5'                           |           |
| 13                    |             |          |       |       |        |   |           |
| 14                    |             |          |       |       |        |   |           |
| 15                    |             |          |       |       |        |   |           |
| 16                    |             |          |       |       |        |   |           |
| 17                    |             |          |       |       |        |   |           |
| 18                    |             |          |       |       |        |   |           |
| 19                    |             |          |       |       |        |   |           |
| 20                    |             |          |       |       |        |   |           |
| 21                    |             |          |       |       |        |   |           |
| 22                    |             |          |       |       |        |   |           |
| 23                    |             |          |       |       |        |   |           |
| 24                    |             |          |       |       |        |   |           |
| 25                    |             |          |       |       |        |   |           |

#### GENERAL NOTES

- 1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.
  - 2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.
- bgs: below ground surface    TCR: total core recovery  
 ppm: parts per million

BORING# GP - 09



ENVIRONMENTAL • TRANSPORTATION • CIVIL

|  |                           |                      |       |        |         |
|--|---------------------------|----------------------|-------|--------|---------|
| PROJECT<br>536 Central Ave<br>City of Rochester NY | BORING: GPMW - 10         |                      |       |        |         |
|  | SHEET                     | 1 OF 1               |       |        |         |
|  | JOB #                     |                      |       |        |         |
|  | CHECKED BY:               | GLA                  |       |        |         |
| CONTRACTOR: Trec                                   | BORING LOCATION: SEE PLAN |                      |       |        |         |
| DRILLER: Chris                                     | GROUND SURFACE ELEVATION: | DATUM:               |       |        |         |
| JCL PERSONNEL: BGS, MGA                            | START DATE: 03/03/2023    | END DATE: 03/03/2023 |       |        |         |
| TYPE OF DRILL RIG: 54LT Geoprobe                   |                           | WATER LEVEL DATA     |       |        |         |
| CASING SIZE AND TYPE:                              | DATE                      | TIME                 | WATER | CASING | REMARKS |
| OVERBURDEN SAMPLING METHOD: Macro Core             |                           |                      |       |        |         |
| ROCK DRILLING METHOD: n/a                          |                           |                      |       |        |         |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |             |       |       |        | SAMPLE DESCRIPTION                         | PID<br>(ppm) |
|-----------------------|-------------|-------------|-------|-------|--------|--|--------------|
|                       | NO.         | BLOW<br>/6" | RQD % | REC % | CHANGE |  |              |
| 1                     |             |             |       |       |        | brown mf sand and silt, some clay, no odor | 0.0          |
| 2                     |             |             |       |       |        |  |              |
| 3                     |             |             |       |       |        | brown mf sand, some GRAVEL                 |              |
| 4                     |             |             |       |       |        |  |              |
| 5                     |             |             |       |       |        | Similar soils, some clay + silt, moist     | 0.0          |
| 6                     |             |             |       |       |        |  |              |
| 7                     |             |             |       |       |        |  |              |
| 8                     |             |             |       |       |        |  |              |
| 9                     |             |             |       |       |        |  |              |
| 10                    |             |             |       |       |        |  |              |
| 11                    |             |             |       |       |        |  |              |
| 12                    | N/A         | N/A         |       |       |        |  |              |
| 13                    |             |             |       |       |        | Similar soils, wet, clay                   |              |
| 14                    |             |             |       |       |        | groundwater @ 12'                          |              |
| 15                    |             |             |       |       |        | RPFWL @ 12.5'                              |              |
| 16                    |             |             |       |       |        |  |              |
| 17                    |             |             |       |       |        |  |              |
| 18                    |             |             |       |       |        |  |              |
| 19                    |             |             |       |       |        |  |              |
| 20                    |             |             |       |       |        |  |              |
| 21                    |             |             |       |       |        |  |              |
| 22                    |             |             |       |       |        |  |              |
| 23                    |             |             |       |       |        |  |              |
| 24                    |             |             |       |       |        |  |              |
| 25                    |             |             |       |       |        |  |              |

#### GENERAL NOTES

1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.

2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.

bgs: below ground surface TCR: total core recovery

ppm: parts per million

BORING# GPMW-10

|                             |               |                           |                  |
|-----------------------------|---------------|---------------------------|------------------|
| CONTRACTOR:                 | Trec          | BORING LOCATION:          | SEE PLAN         |
| DRILLER:                    | Chris         | GROUND SURFACE ELEVATION: | DATUM:           |
| JCL PERSONNEL:              | BGS, MGA      | START DATE:               | 03/03/2023       |
| TYPE OF DRILL RIG:          | 54LT Geoprobe | END DATE:                 | 03/03/2023       |
| CASING SIZE AND TYPE:       |               |                           | WATER LEVEL DATA |
| OVERBURDEN SAMPLING METHOD: | Macro Core    | DATE                      | TIME             |
| ROCK DRILLING METHOD:       | n/a           | WATER                     | CASING           |
|                             |               | REMARKS                   |                  |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |             |       |       |        | SAMPLE DESCRIPTION                               | PID<br>(ppm) |
|-----------------------|-------------|-------------|-------|-------|--------|--|--------------|
|                       | NO.         | BLOW<br>/6" | RQD % | REC % | CHANGE |  |              |
| 1                     |             |             |       |       |        | ~3" concrete rubble, slag                        | 0.0          |
| 2                     |             |             |       |       |        | brown mf sand, little silt, trace clays, no odor |              |
| 3                     |             |             |       |       |        |  |              |
| 4                     |             |             |       |       |        |  |              |
| 5                     |             |             |       |       |        |  |              |
| 6                     |             |             |       |       |        |  |              |
| 7                     |             |             |       |       |        |  |              |
| 8                     |             |             |       |       |        |  |              |
| 9                     |             |             |       |       |        |  |              |
| 10                    |             |             |       |       |        |  |              |
| 11                    |             |             |       |       |        |  |              |
| 12                    | N/A         | N/A         |       |       |        |  |              |
| 13                    |             |             |       |       |        |  |              |
| 14                    |             |             |       |       |        |  |              |
| 15                    |             |             |       |       |        |  |              |
| 16                    |             |             |       |       |        |  |              |
| 17                    |             |             |       |       |        |  |              |
| 18                    |             |             |       |       |        |  |              |
| 19                    |             |             |       |       |        |  |              |
| 20                    |             |             |       |       |        |  |              |
| 21                    |             |             |       |       |        |  |              |
| 22                    |             |             |       |       |        |  |              |
| 23                    |             |             |       |       |        |  |              |
| 24                    |             |             |       |       |        |  |              |
| 25                    |             |             |       |       |        |  |              |

GENERAL NOTES

- 1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.
- 2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.  
bgs: below ground surface TCR: total core recovery  
ppm: parts per million

BORING# GP-11

|   |               |                                  |            |
|---|---------------|----------------------------------|------------|
| <b>PROJECT</b><br>536 Central Ave<br>City of Rochester NY |               | <b>BORING:</b> GP-12             |            |
|   |               | SHEET                            | 1 OF 1     |
|   |               | JOB #                            |            |
|   |               | CHECKED BY:                      | GLA        |
| <b>CONTRACTOR:</b>  | Trec          | <b>BORING LOCATION:</b>          | SEE PLAN   |
| <b>DRILLER:</b>   | Chris         | <b>GROUND SURFACE ELEVATION:</b> | DATUM:     |
| <b>JCL PERSONNEL:</b>                                     | BGS, MGA      | <b>START DATE:</b>               | 03/03/2023 |
| <b>TYPE OF DRILL RIG:</b>                                 | 54LT Geoprobe | <b>END DATE:</b>                 | 03/03/2023 |
| <b>CASING SIZE AND TYPE:</b>                              |               | <b>WATER LEVEL DATA</b>          |            |
| <b>OVERBURDEN SAMPLING METHOD:</b>                        | Macro Core    | DATE                             | TIME       |
| <b>ROCK DRILLING METHOD:</b>                              | n/a           | WATER                            | CASING     |
|   |               |                                  | REMARKS    |

| D<br>E<br>P<br>T<br>H | SAMPLE DATA |             |       |       |        | SAMPLE DESCRIPTION                       | PID<br>(ppm) |
|-----------------------|-------------|-------------|-------|-------|--------|--|--------------|
|                       | NO.         | BLOW<br>/6" | RQD % | REC % | CHANGE |  |              |
| 1                     |             |             |       |       |        | brown mf sand, some silt, moist, no odor | 0.0          |
| 2                     |             |             |       |       |        |  |              |
| 3                     |             |             |       |       |        |  |              |
| 4                     |             |             |       |       |        |  |              |
| 5                     |             |             |       |       |        | similar soils, mf GRAVEL                 | 0.0          |
| 6                     |             |             |       |       |        |  |              |
| 7                     |             |             |       |       |        |  |              |
| 8                     |             |             |       |       |        |  |              |
| 9                     |             |             |       |       |        | similar soils, moist                     | 0.0          |
| 10                    |             |             |       |       |        |  |              |
| 11                    |             |             |       |       |        |  |              |
| 12                    | N/A         | N/A         |       |       |        | refusal @ 12'                            |              |
| 13                    |             |             |       |       |        |  |              |
| 14                    |             |             |       |       |        |  |              |
| 15                    |             |             |       |       |        |  |              |
| 16                    |             |             |       |       |        |  |              |
| 17                    |             |             |       |       |        |  |              |
| 18                    |             |             |       |       |        |  |              |
| 19                    |             |             |       |       |        |  |              |
| 20                    |             |             |       |       |        |  |              |
| 21                    |             |             |       |       |        |  |              |
| 22                    |             |             |       |       |        |  |              |
| 23                    |             |             |       |       |        |  |              |
| 24                    |             |             |       |       |        |  |              |
| 25                    |             |             |       |       |        |  |              |

**GENERAL NOTES**

- 1) Stratification Lines represent approximate boundary between soil types; transitions may be gradual.
- 2) PID readings were taken directly on exposed soil in sampler, immediately following retrieval from boring.  
 bgs: below ground surface    TCR: total core recovery  
 ppm: parts per million

BORING# GP-12

## **Low Flow Groundwater Sampling Field Record**



# Lu Engineers

ENVIRONMENTAL • TRANSPORTATION • CIVIL

Project Name 91 Leighton Ave  
Location ID 3rd Well Sample  
Activity Time 11:50

Field Sample ID GIMW-01  
Sample Time 16:20

Job # 50527-01  
Sampling Event #     
Date 03/06/2023

## **SAMPLING NOTES**

|                        |      |         |
|------------------------|------|---------|
| Initial Depth to Water | 5.73 | feet    |
| Final Depth to Water   | 2.61 | feet    |
| Screen Length          | 5    | feet    |
| Total Volume Purged    |      | gallons |

Measurement Point North  
Well Depth 14.44 feet  
Pump Intake Depth \_\_\_\_\_  
PID Well Head \_\_\_\_\_

Well Diameter 1"  
Well Integrity:  
Cap   
Casing   
Locked   
Collar

[purge volume (milliliters per minute) x time duration (minutes) x 0.00026 gal/milliliter]

Volume of Water in casing – 2" diameter = 0.163 gallons per foot of depth, 4" diameter = 0.653 gallons per foot of depth

PURGE DATA

## Purge Observations:

Purge Water Containerized: No

## EQUIPMENT DOCUMENTATION

Type of Pump: Peristaltic Geopump

Type of Tubing: HDPE

Type of Water Quality Meter: YSI Pro Plus Quattro

Calibrated: Yes

## **ANALYTICAL PARAMETERS**

| <u>Parameter</u> | <u>Volumes</u> | <u>Sample Collected</u> |
|------------------|----------------|-------------------------|
| VOCs             |                | ✓                       |
| RCRA Metals      |                |                         |
| PCBs             |                |                         |
| Pesticides       |                |                         |
| SVOCs            |                |                         |

## **LOCATION NOTES**

Purged dry prior to Sampling

## **Low Flow Groundwater Sampling Field Record**



# Lu Engineers

Project Name 91 Leighton Ave  
Location ID 2nd Well Sample  
Activity Time 11:30

Field Sample ID GPMw-05  
Sample Time

Job # 50527-01  
Sampling Event # --  
Date 03/06/2023

## **SAMPLING NOTES**

Initial Depth to Water 5.14 feet  
Final Depth to Water 5.16 feet  
Screen Length 5 feet  
Total Volume Purged ~ 2.5 gallons

Measurement Point North  
Well Depth 11.30 feet  
Pump Intake Depth \_\_\_\_\_  
PID Well Head \_\_\_\_\_

Well Diameter 1"  
Well Integrity:  
Cap   
Casing   
Locked   
Collar

### Volume of Water

## Purge Observations:

Purge Water Containerized: No

## EQUIPMENT DOCUMENTATION

## Type of Pump: Peristaltic Geopump

Type of Tubing: HDPE

Type of Water Quality Meter: YSI Pro Plus Quattro

Calibrated: Yes

## **ANALYTICAL PARAMETERS**

| <u>Parameter</u> | <u>Volumes</u> | <u>Sample Collected</u> |
|------------------|----------------|-------------------------|
| VOCs             |                |                         |
| RCRA Metals      |                |                         |
| PCBs             | •              |                         |
| Pesticides       |                |                         |
| SVOCs            |                |                         |

## **LOCATION NOTES**

~~Prepared~~ dry print to Sampling  
Pnrged



**Attachment C**  
Laboratory Analytical Reports

---



## ANALYTICAL REPORT

|                 |   |
|-----------------|---|
| Lab Number:     | L2311903  |
| Client:         | Lu Engineers<br>280 E Broad St.<br>Suite 170<br>Rochester, NY 14604 |
| ATTN:           | Ben Seifert   |
| Phone:          | (585) 385-7417  |
| Project Name:   | LEIGHTON AVENUE   |
| Project Number: | 50527-01  |
| Report Date:    | 03/14/23  |

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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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:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Alpha Sample ID | Client ID    | Matrix | Sample Location | Collection Date/Time | Receive Date |
|-----------------|--------------|--------|-----------------|----------------------|--------------|
| L2311903-01     | GP-02        | SOIL   | Not Specified   | 03/03/23 10:30       | 03/07/23     |
| L2311903-02     | GP-04        | SOIL   | Not Specified   | 03/03/23 11:15       | 03/07/23     |
| L2311903-03     | GPMW-05      | SOIL   | Not Specified   | 03/03/23 11:45       | 03/07/23     |
| L2311903-04     | GP-08        | SOIL   | Not Specified   | 03/03/23 13:05       | 03/07/23     |
| L2311903-05     | COMPOSITE-01 | SOIL   | Not Specified   | 03/03/23 10:45       | 03/07/23     |
| L2311903-06     | COMPOSITE-02 | SOIL   | Not Specified   | 03/03/23 13:10       | 03/07/23     |
| L2311903-07     | GPMW-01      | WATER  | Not Specified   | 03/06/23 16:20       | 03/07/23     |
| L2311903-08     | GPMW-05      | WATER  | Not Specified   | 03/06/23 15:35       | 03/07/23     |
| L2311903-09     | GPMW-10      | WATER  | Not Specified   | 03/06/23 15:00       | 03/07/23     |
| L2311903-10     | TRIP BLANK   | WATER  | Not Specified   | 03/03/23 00:00       | 03/07/23     |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

### Case Narrative

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

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

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

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

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

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

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**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

### Case Narrative (continued)

#### Report Submission

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

#### Sample Receipt

L2311903-10: A sample identified as "TRIP BLANK" was received, but not listed on the Chain of Custody. This sample was not analyzed.

#### Volatile Organics

L2311903-02, -03 and -04: 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.

L2311903-07D: The pH was greater than two; however, the sample was analyzed within the method required holding time.

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:

*Caitlin Walukevich* Caitlin Walukevich

Title: Technical Director/Representative

Date: 03/14/23

# ORGANICS



# VOLATILES



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |    |                 |                |
|------------------|---------------|----|-----------------|----------------|
| Lab ID:          | L2311903-02   | D2 | Date Collected: | 03/03/23 11:15 |
| Client ID:       | GP-04         |    | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified |    | Field Prep:     | Not Specified  |

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260D  
 Analytical Date: 03/13/23 18:47  
 Analyst: AJK  
 Percent Solids: 90%

| Parameter   | Result | Qualifier | Units | RL  | MDL | Dilution Factor |
|---|--------|-----------|-------|-----|-----|-----------------|
| <b>Volatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |     |                 |
| Methylene chloride                                  | ND     | ug/kg     | 600   | 270 | 2   |                 |
| 1,1-Dichloroethane                                  | ND     | ug/kg     | 120   | 17. | 2   |                 |
| Chloroform  | ND     | ug/kg     | 180   | 17. | 2   |                 |
| Carbon tetrachloride                                | ND     | ug/kg     | 120   | 27. | 2   |                 |
| 1,2-Dichloropropane                                 | ND     | ug/kg     | 120   | 15. | 2   |                 |
| Dibromochloromethane                                | ND     | ug/kg     | 120   | 17. | 2   |                 |
| 1,1,2-Trichloroethane                               | ND     | ug/kg     | 120   | 32. | 2   |                 |
| Tetrachloroethene                                   | ND     | ug/kg     | 60    | 23. | 2   |                 |
| Chlorobenzene                                       | ND     | ug/kg     | 60    | 15. | 2   |                 |
| Trichlorofluoromethane                              | ND     | ug/kg     | 480   | 83. | 2   |                 |
| 1,2-Dichloroethane                                  | ND     | ug/kg     | 120   | 31. | 2   |                 |
| 1,1,1-Trichloroethane                               | ND     | ug/kg     | 60    | 20. | 2   |                 |
| Bromodichloromethane                                | ND     | ug/kg     | 60    | 13. | 2   |                 |
| trans-1,3-Dichloropropene                           | ND     | ug/kg     | 120   | 33. | 2   |                 |
| cis-1,3-Dichloropropene                             | ND     | ug/kg     | 60    | 19. | 2   |                 |
| Bromoform   | ND     | ug/kg     | 480   | 29. | 2   |                 |
| 1,1,2,2-Tetrachloroethane                           | ND     | ug/kg     | 60    | 20. | 2   |                 |
| Benzene   | ND     | ug/kg     | 60    | 20. | 2   |                 |
| Toluene   | ND     | ug/kg     | 120   | 65. | 2   |                 |
| Ethylbenzene  | 180    | ug/kg     | 120   | 17. | 2   |                 |
| Chloromethane                                       | ND     | ug/kg     | 480   | 110 | 2   |                 |
| Bromomethane  | ND     | ug/kg     | 240   | 69. | 2   |                 |
| Vinyl chloride                                      | ND     | ug/kg     | 120   | 40. | 2   |                 |
| Chloroethane  | ND     | ug/kg     | 240   | 54. | 2   |                 |
| 1,1-Dichloroethene                                  | ND     | ug/kg     | 120   | 28. | 2   |                 |
| trans-1,2-Dichloroethene                            | ND     | ug/kg     | 180   | 16. | 2   |                 |
| Trichloroethene                                     | 100    | ug/kg     | 60    | 16. | 2   |                 |
| 1,2-Dichlorobenzene                                 | ND     | ug/kg     | 240   | 17. | 2   |                 |



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |    |                 |                |
|------------------|---------------|----|-----------------|----------------|
| Lab ID:          | L2311903-02   | D2 | Date Collected: | 03/03/23 11:15 |
| Client ID:       | GP-04         |    | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified |    | Field Prep:     | Not Specified  |

Sample Depth:

| Parameter   | Result | Qualifier | Units | RL   | MDL | Dilution Factor |
|---|--------|-----------|-------|------|-----|-----------------|
| <b>Volatile Organics by GC/MS - Westborough Lab</b> |        |           |       |      |     |                 |
| 1,3-Dichlorobenzene                                 | ND     |           | ug/kg | 240  | 18. | 2               |
| 1,4-Dichlorobenzene                                 | ND     |           | ug/kg | 240  | 20. | 2               |
| Methyl tert butyl ether                             | ND     |           | ug/kg | 240  | 24. | 2               |
| p/m-Xylene  | 1900   |           | ug/kg | 240  | 67. | 2               |
| o-Xylene  | 2400   |           | ug/kg | 120  | 35. | 2               |
| cis-1,2-Dichloroethene                              | ND     |           | ug/kg | 120  | 21. | 2               |
| Styrene   | ND     |           | ug/kg | 120  | 23. | 2               |
| Dichlorodifluoromethane                             | ND     |           | ug/kg | 1200 | 110 | 2               |
| Acetone   | ND     |           | ug/kg | 1200 | 580 | 2               |
| Carbon disulfide                                    | ND     |           | ug/kg | 1200 | 540 | 2               |
| 2-Butanone  | ND     |           | ug/kg | 1200 | 260 | 2               |
| 4-Methyl-2-pentanone                                | ND     |           | ug/kg | 1200 | 150 | 2               |
| 2-Hexanone  | ND     |           | ug/kg | 1200 | 140 | 2               |
| 1,2-Dibromoethane                                   | ND     |           | ug/kg | 120  | 33. | 2               |
| n-Butylbenzene                                      | 2300   |           | ug/kg | 120  | 20. | 2               |
| sec-Butylbenzene                                    | 580    |           | ug/kg | 120  | 17. | 2               |
| tert-Butylbenzene                                   | ND     |           | ug/kg | 240  | 14. | 2               |
| 1,2-Dibromo-3-chloropropane                         | ND     |           | ug/kg | 360  | 120 | 2               |
| Isopropylbenzene                                    | 350    |           | ug/kg | 120  | 13. | 2               |
| p-Isopropyltoluene                                  | 410    |           | ug/kg | 120  | 13. | 2               |
| Naphthalene   | 17000  |           | ug/kg | 480  | 78. | 2               |
| n-Propylbenzene                                     | 1900   |           | ug/kg | 120  | 20. | 2               |
| 1,2,4-Trichlorobenzene                              | ND     |           | ug/kg | 240  | 32. | 2               |
| 1,3,5-Trimethylbenzene                              | 12000  |           | ug/kg | 240  | 23. | 2               |
| 1,2,4-Trimethylbenzene                              | 50000  | E         | ug/kg | 240  | 40. | 2               |
| Methyl Acetate                                      | 140    | J         | ug/kg | 480  | 110 | 2               |
| Cyclohexane   | ND     |           | ug/kg | 1200 | 65. | 2               |
| Freon-113   | ND     |           | ug/kg | 480  | 83. | 2               |
| Methyl cyclohexane                                  | ND     |           | ug/kg | 480  | 72. | 2               |

| Surrogate             | % Recovery | Qualifier | Acceptance Criteria |
|-----------------------|------------|-----------|---------------------|
| 1,2-Dichloroethane-d4 | 105        |           | 70-130              |
| Toluene-d8            | 99         |           | 70-130              |
| 4-Bromofluorobenzene  | 103        |           | 70-130              |
| Dibromofluoromethane  | 92         |           | 70-130              |

Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |   |                 |                |
|------------------|---------------|---|-----------------|----------------|
| Lab ID:          | L2311903-02   | D | Date Collected: | 03/03/23 11:15 |
| Client ID:       | GP-04         |   | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified |   | Field Prep:     | Not Specified  |

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260D

Analytical Date: 03/10/23 22:26

Analyst: AJK

Percent Solids: 90%

| Parameter   | Result | Qualifier  | Units     | RL                  | MDL | Dilution Factor |
|---|--------|------------|-----------|---------------------|-----|-----------------|
| <b>Volatile Organics by GC/MS - Westborough Lab</b> |        |            |           |                     |     |                 |
| 1,2,4-Trimethylbenzene                              | 53000  |            | ug/kg     | 1200                | 200 | 10              |
|   |        |            |           |                     |     |                 |
| Surrogate   |        | % Recovery | Qualifier | Acceptance Criteria |     |                 |
| 1,2-Dichloroethane-d4                               |        | 117        |           | 70-130              |     |                 |
| Toluene-d8  |        | 106        |           | 70-130              |     |                 |
| 4-Bromofluorobenzene                                |        | 116        |           | 70-130              |     |                 |
| Dibromofluoromethane                                |        | 88         |           | 70-130              |     |                 |

Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-03   | Date Collected: | 03/03/23 11:45 |
| Client ID:       | GPMW-05       | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260D  
 Analytical Date: 03/10/23 22:52  
 Analyst: AJK  
 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 | 5.8  | 2.6  | 1               |
| 1,1-Dichloroethane                                  | ND     |           | ug/kg | 1.2  | 0.17 | 1               |
| Chloroform  | ND     |           | ug/kg | 1.7  | 0.16 | 1               |
| Carbon tetrachloride                                | ND     |           | ug/kg | 1.2  | 0.26 | 1               |
| 1,2-Dichloropropane                                 | ND     |           | ug/kg | 1.2  | 0.14 | 1               |
| Dibromochloromethane                                | ND     |           | ug/kg | 1.2  | 0.16 | 1               |
| 1,1,2-Trichloroethane                               | ND     |           | ug/kg | 1.2  | 0.31 | 1               |
| Tetrachloroethene                                   | ND     |           | ug/kg | 0.58 | 0.22 | 1               |
| Chlorobenzene                                       | ND     |           | ug/kg | 0.58 | 0.15 | 1               |
| Trichlorofluoromethane                              | ND     |           | ug/kg | 4.6  | 0.80 | 1               |
| 1,2-Dichloroethane                                  | ND     |           | ug/kg | 1.2  | 0.30 | 1               |
| 1,1,1-Trichloroethane                               | ND     |           | ug/kg | 0.58 | 0.19 | 1               |
| Bromodichloromethane                                | ND     |           | ug/kg | 0.58 | 0.12 | 1               |
| trans-1,3-Dichloropropene                           | ND     |           | ug/kg | 1.2  | 0.31 | 1               |
| cis-1,3-Dichloropropene                             | ND     |           | ug/kg | 0.58 | 0.18 | 1               |
| Bromoform   | ND     |           | ug/kg | 4.6  | 0.28 | 1               |
| 1,1,2,2-Tetrachloroethane                           | ND     |           | ug/kg | 0.58 | 0.19 | 1               |
| Benzene   | 0.30   | J         | ug/kg | 0.58 | 0.19 | 1               |
| Toluene   | ND     |           | ug/kg | 1.2  | 0.63 | 1               |
| Ethylbenzene  | 0.27   | J         | ug/kg | 1.2  | 0.16 | 1               |
| Chloromethane                                       | ND     |           | ug/kg | 4.6  | 1.1  | 1               |
| Bromomethane  | ND     |           | ug/kg | 2.3  | 0.67 | 1               |
| Vinyl chloride                                      | ND     |           | ug/kg | 1.2  | 0.39 | 1               |
| Chloroethane  | ND     |           | ug/kg | 2.3  | 0.52 | 1               |
| 1,1-Dichloroethene                                  | ND     |           | ug/kg | 1.2  | 0.27 | 1               |
| trans-1,2-Dichloroethene                            | ND     |           | ug/kg | 1.7  | 0.16 | 1               |
| Trichloroethene                                     | ND     |           | ug/kg | 0.58 | 0.16 | 1               |
| 1,2-Dichlorobenzene                                 | ND     |           | ug/kg | 2.3  | 0.17 | 1               |



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-03   | Date Collected: | 03/03/23 11:45 |
| Client ID:       | GPMW-05       | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

| Parameter   | Result | Qualifier | Units | RL  | MDL  | Dilution Factor |
|---|--------|-----------|-------|-----|------|-----------------|
| <b>Volatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |      |                 |
| 1,3-Dichlorobenzene                                 | ND     |           | ug/kg | 2.3 | 0.17 | 1               |
| 1,4-Dichlorobenzene                                 | ND     |           | ug/kg | 2.3 | 0.20 | 1               |
| Methyl tert butyl ether                             | ND     |           | ug/kg | 2.3 | 0.23 | 1               |
| p/m-Xylene  | 1.4    | J         | ug/kg | 2.3 | 0.64 | 1               |
| o-Xylene  | 1.6    |           | ug/kg | 1.2 | 0.34 | 1               |
| cis-1,2-Dichloroethene                              | ND     |           | ug/kg | 1.2 | 0.20 | 1               |
| Styrene   | ND     |           | ug/kg | 1.2 | 0.22 | 1               |
| Dichlorodifluoromethane                             | ND     |           | ug/kg | 12  | 1.0  | 1               |
| Acetone   | 120    |           | ug/kg | 12  | 5.5  | 1               |
| Carbon disulfide                                    | ND     |           | ug/kg | 12  | 5.2  | 1               |
| 2-Butanone  | 19     |           | ug/kg | 12  | 2.6  | 1               |
| 4-Methyl-2-pentanone                                | ND     |           | ug/kg | 12  | 1.5  | 1               |
| 2-Hexanone  | ND     |           | ug/kg | 12  | 1.4  | 1               |
| 1,2-Dibromoethane                                   | ND     |           | ug/kg | 1.2 | 0.32 | 1               |
| n-Butylbenzene                                      | ND     |           | ug/kg | 1.2 | 0.19 | 1               |
| sec-Butylbenzene                                    | ND     |           | ug/kg | 1.2 | 0.17 | 1               |
| tert-Butylbenzene                                   | ND     |           | ug/kg | 2.3 | 0.14 | 1               |
| 1,2-Dibromo-3-chloropropane                         | ND     |           | ug/kg | 3.4 | 1.2  | 1               |
| Isopropylbenzene                                    | ND     |           | ug/kg | 1.2 | 0.12 | 1               |
| p-Isopropyltoluene                                  | ND     |           | ug/kg | 1.2 | 0.12 | 1               |
| Naphthalene   | 1.0    | J         | ug/kg | 4.6 | 0.75 | 1               |
| n-Propylbenzene                                     | 0.38   | J         | ug/kg | 1.2 | 0.20 | 1               |
| 1,2,4-Trichlorobenzene                              | ND     |           | ug/kg | 2.3 | 0.31 | 1               |
| 1,3,5-Trimethylbenzene                              | 1.4    | J         | ug/kg | 2.3 | 0.22 | 1               |
| 1,2,4-Trimethylbenzene                              | 6.2    |           | ug/kg | 2.3 | 0.38 | 1               |
| Methyl Acetate                                      | ND     |           | ug/kg | 4.6 | 1.1  | 1               |
| Cyclohexane   | ND     |           | ug/kg | 12  | 0.63 | 1               |
| Freon-113   | ND     |           | ug/kg | 4.6 | 0.80 | 1               |
| Methyl cyclohexane                                  | ND     |           | ug/kg | 4.6 | 0.70 | 1               |

| Surrogate             | % Recovery | Qualifier | Acceptance Criteria |
|-----------------------|------------|-----------|---------------------|
| 1,2-Dichloroethane-d4 | 115        |           | 70-130              |
| Toluene-d8            | 108        |           | 70-130              |
| 4-Bromofluorobenzene  | 113        |           | 70-130              |
| Dibromofluoromethane  | 89         |           | 70-130              |

Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-04   | Date Collected: | 03/03/23 13:05 |
| Client ID:       | GP-08         | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260D  
 Analytical Date: 03/10/23 23:18  
 Analyst: AJK  
 Percent Solids: 89%

| Parameter   | Result | Qualifier | Units | RL   | MDL  | Dilution Factor |
|---|--------|-----------|-------|------|------|-----------------|
| <b>Volatile Organics by GC/MS - Westborough Lab</b> |        |           |       |      |      |                 |
| Methylene chloride                                  | ND     |           | ug/kg | 5.5  | 2.5  | 1               |
| 1,1-Dichloroethane                                  | ND     |           | ug/kg | 1.1  | 0.16 | 1               |
| Chloroform  | ND     |           | ug/kg | 1.6  | 0.15 | 1               |
| Carbon tetrachloride                                | ND     |           | ug/kg | 1.1  | 0.25 | 1               |
| 1,2-Dichloropropane                                 | ND     |           | ug/kg | 1.1  | 0.14 | 1               |
| Dibromochloromethane                                | ND     |           | ug/kg | 1.1  | 0.15 | 1               |
| 1,1,2-Trichloroethane                               | ND     |           | ug/kg | 1.1  | 0.30 | 1               |
| Tetrachloroethene                                   | ND     |           | ug/kg | 0.55 | 0.22 | 1               |
| Chlorobenzene                                       | ND     |           | ug/kg | 0.55 | 0.14 | 1               |
| Trichlorofluoromethane                              | ND     |           | ug/kg | 4.4  | 0.77 | 1               |
| 1,2-Dichloroethane                                  | ND     |           | ug/kg | 1.1  | 0.28 | 1               |
| 1,1,1-Trichloroethane                               | ND     |           | ug/kg | 0.55 | 0.18 | 1               |
| Bromodichloromethane                                | ND     |           | ug/kg | 0.55 | 0.12 | 1               |
| trans-1,3-Dichloropropene                           | ND     |           | ug/kg | 1.1  | 0.30 | 1               |
| cis-1,3-Dichloropropene                             | ND     |           | ug/kg | 0.55 | 0.17 | 1               |
| Bromoform   | ND     |           | ug/kg | 4.4  | 0.27 | 1               |
| 1,1,2,2-Tetrachloroethane                           | ND     |           | ug/kg | 0.55 | 0.18 | 1               |
| Benzene   | ND     |           | ug/kg | 0.55 | 0.18 | 1               |
| Toluene   | ND     |           | ug/kg | 1.1  | 0.60 | 1               |
| Ethylbenzene  | 0.47   | J         | ug/kg | 1.1  | 0.16 | 1               |
| Chloromethane                                       | ND     |           | ug/kg | 4.4  | 1.0  | 1               |
| Bromomethane  | ND     |           | ug/kg | 2.2  | 0.64 | 1               |
| Vinyl chloride                                      | ND     |           | ug/kg | 1.1  | 0.37 | 1               |
| Chloroethane  | ND     |           | ug/kg | 2.2  | 0.50 | 1               |
| 1,1-Dichloroethene                                  | ND     |           | ug/kg | 1.1  | 0.26 | 1               |
| trans-1,2-Dichloroethene                            | ND     |           | ug/kg | 1.6  | 0.15 | 1               |
| Trichloroethene                                     | 4.3    |           | ug/kg | 0.55 | 0.15 | 1               |
| 1,2-Dichlorobenzene                                 | ND     |           | ug/kg | 2.2  | 0.16 | 1               |



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-04   | Date Collected: | 03/03/23 13:05 |
| Client ID:       | GP-08         | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

| Parameter   | Result | Qualifier | Units | RL  | MDL  | Dilution Factor |
|---|--------|-----------|-------|-----|------|-----------------|
| <b>Volatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |      |                 |
| 1,3-Dichlorobenzene                                 | ND     |           | ug/kg | 2.2 | 0.16 | 1               |
| 1,4-Dichlorobenzene                                 | ND     |           | ug/kg | 2.2 | 0.19 | 1               |
| Methyl tert butyl ether                             | ND     |           | ug/kg | 2.2 | 0.22 | 1               |
| p/m-Xylene  | 1.2    | J         | ug/kg | 2.2 | 0.62 | 1               |
| o-Xylene  | 9.2    |           | ug/kg | 1.1 | 0.32 | 1               |
| cis-1,2-Dichloroethene                              | ND     |           | ug/kg | 1.1 | 0.19 | 1               |
| Styrene   | ND     |           | ug/kg | 1.1 | 0.22 | 1               |
| Dichlorodifluoromethane                             | ND     |           | ug/kg | 11  | 1.0  | 1               |
| Acetone   | 6.3    | J         | ug/kg | 11  | 5.3  | 1               |
| Carbon disulfide                                    | ND     |           | ug/kg | 11  | 5.0  | 1               |
| 2-Butanone  | ND     |           | ug/kg | 11  | 2.4  | 1               |
| 4-Methyl-2-pentanone                                | ND     |           | ug/kg | 11  | 1.4  | 1               |
| 2-Hexanone  | ND     |           | ug/kg | 11  | 1.3  | 1               |
| 1,2-Dibromoethane                                   | ND     |           | ug/kg | 1.1 | 0.31 | 1               |
| n-Butylbenzene                                      | 0.37   | J         | ug/kg | 1.1 | 0.18 | 1               |
| sec-Butylbenzene                                    | ND     |           | ug/kg | 1.1 | 0.16 | 1               |
| tert-Butylbenzene                                   | ND     |           | ug/kg | 2.2 | 0.13 | 1               |
| 1,2-Dibromo-3-chloropropane                         | ND     |           | ug/kg | 3.3 | 1.1  | 1               |
| Isopropylbenzene                                    | ND     |           | ug/kg | 1.1 | 0.12 | 1               |
| p-Isopropyltoluene                                  | 0.20   | J         | ug/kg | 1.1 | 0.12 | 1               |
| Naphthalene   | 0.78   | J         | ug/kg | 4.4 | 0.72 | 1               |
| n-Propylbenzene                                     | 0.78   | J         | ug/kg | 1.1 | 0.19 | 1               |
| 1,2,4-Trichlorobenzene                              | ND     |           | ug/kg | 2.2 | 0.30 | 1               |
| 1,3,5-Trimethylbenzene                              | 11     |           | ug/kg | 2.2 | 0.21 | 1               |
| 1,2,4-Trimethylbenzene                              | 7.2    |           | ug/kg | 2.2 | 0.37 | 1               |
| Methyl Acetate                                      | ND     |           | ug/kg | 4.4 | 1.0  | 1               |
| Cyclohexane   | ND     |           | ug/kg | 11  | 0.60 | 1               |
| Freon-113   | ND     |           | ug/kg | 4.4 | 0.76 | 1               |
| Methyl cyclohexane                                  | ND     |           | ug/kg | 4.4 | 0.67 | 1               |

| Surrogate             | % Recovery | Qualifier | Acceptance Criteria |
|-----------------------|------------|-----------|---------------------|
| 1,2-Dichloroethane-d4 | 114        |           | 70-130              |
| Toluene-d8            | 108        |           | 70-130              |
| 4-Bromofluorobenzene  | 115        |           | 70-130              |
| Dibromofluoromethane  | 87         |           | 70-130              |



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |   |                 |                |
|------------------|---------------|---|-----------------|----------------|
| Lab ID:          | L2311903-07   | D | Date Collected: | 03/06/23 16:20 |
| Client ID:       | GPMW-01       |   | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified |   | Field Prep:     | Not Specified  |

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 03/10/23 08:49  
 Analyst: MJV

| Parameter   | Result | Qualifier | Units | RL  | MDL  | Dilution Factor |
|---|--------|-----------|-------|-----|------|-----------------|
| <b>Volatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |      |                 |
| Methylene chloride                                  | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| 1,1-Dichloroethane                                  | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Chloroform  | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Carbon tetrachloride                                | ND     |           | ug/l  | 1.0 | 0.27 | 2               |
| 1,2-Dichloropropane                                 | ND     |           | ug/l  | 2.0 | 0.27 | 2               |
| Dibromochloromethane                                | ND     |           | ug/l  | 1.0 | 0.30 | 2               |
| 1,1,2-Trichloroethane                               | ND     |           | ug/l  | 3.0 | 1.0  | 2               |
| Tetrachloroethene                                   | 5.6    |           | ug/l  | 1.0 | 0.36 | 2               |
| Chlorobenzene                                       | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Trichlorofluoromethane                              | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| 1,2-Dichloroethane                                  | ND     |           | ug/l  | 1.0 | 0.26 | 2               |
| 1,1,1-Trichloroethane                               | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Bromodichloromethane                                | ND     |           | ug/l  | 1.0 | 0.38 | 2               |
| trans-1,3-Dichloropropene                           | ND     |           | ug/l  | 1.0 | 0.33 | 2               |
| cis-1,3-Dichloropropene                             | ND     |           | ug/l  | 1.0 | 0.29 | 2               |
| Bromoform   | ND     |           | ug/l  | 4.0 | 1.3  | 2               |
| 1,1,2,2-Tetrachloroethane                           | ND     |           | ug/l  | 1.0 | 0.33 | 2               |
| Benzene   | ND     |           | ug/l  | 1.0 | 0.32 | 2               |
| Toluene   | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Ethylbenzene  | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Chloromethane                                       | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Bromomethane  | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Vinyl chloride                                      | ND     |           | ug/l  | 2.0 | 0.14 | 2               |
| Chloroethane  | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| 1,1-Dichloroethene                                  | ND     |           | ug/l  | 1.0 | 0.34 | 2               |
| trans-1,2-Dichloroethene                            | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Trichloroethene                                     | 220    |           | ug/l  | 1.0 | 0.35 | 2               |
| 1,2-Dichlorobenzene                                 | ND     |           | ug/l  | 5.0 | 1.4  | 2               |



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |   |                 |                |
|------------------|---------------|---|-----------------|----------------|
| Lab ID:          | L2311903-07   | D | Date Collected: | 03/06/23 16:20 |
| Client ID:       | GPMW-01       |   | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified |   | Field Prep:     | Not Specified  |

Sample Depth:

| Parameter   | Result | Qualifier | Units | RL  | MDL  | Dilution Factor |
|---|--------|-----------|-------|-----|------|-----------------|
| <b>Volatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |      |                 |
| 1,3-Dichlorobenzene                                 | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| 1,4-Dichlorobenzene                                 | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Methyl tert butyl ether                             | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| p/m-Xylene  | 2.9    | J         | ug/l  | 5.0 | 1.4  | 2               |
| o-Xylene  | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| cis-1,2-Dichloroethene                              | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Styrene   | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Dichlorodifluoromethane                             | ND     |           | ug/l  | 10  | 2.0  | 2               |
| Acetone   | 54     |           | ug/l  | 10  | 2.9  | 2               |
| Carbon disulfide                                    | ND     |           | ug/l  | 10  | 2.0  | 2               |
| 2-Butanone  | 23     |           | ug/l  | 10  | 3.9  | 2               |
| 4-Methyl-2-pentanone                                | ND     |           | ug/l  | 10  | 2.0  | 2               |
| 2-Hexanone  | ND     |           | ug/l  | 10  | 2.0  | 2               |
| 1,2-Dibromoethane                                   | ND     |           | ug/l  | 4.0 | 1.3  | 2               |
| n-Butylbenzene                                      | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| sec-Butylbenzene                                    | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| tert-Butylbenzene                                   | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| 1,2-Dibromo-3-chloropropane                         | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Isopropylbenzene                                    | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| p-Isopropyltoluene                                  | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Naphthalene   | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| n-Propylbenzene                                     | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| 1,2,4-Trichlorobenzene                              | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| 1,3,5-Trimethylbenzene                              | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| 1,2,4-Trimethylbenzene                              | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Methyl Acetate                                      | ND     |           | ug/l  | 4.0 | 0.47 | 2               |
| Cyclohexane   | ND     |           | ug/l  | 20  | 0.54 | 2               |
| Freon-113   | ND     |           | ug/l  | 5.0 | 1.4  | 2               |
| Methyl cyclohexane                                  | ND     |           | ug/l  | 20  | 0.79 | 2               |

| Surrogate             | % Recovery | Qualifier | Acceptance Criteria |
|-----------------------|------------|-----------|---------------------|
| 1,2-Dichloroethane-d4 | 106        |           | 70-130              |
| Toluene-d8            | 100        |           | 70-130              |
| 4-Bromofluorobenzene  | 97         |           | 70-130              |
| Dibromofluoromethane  | 105        |           | 70-130              |

Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-08   | Date Collected: | 03/06/23 15:35 |
| Client ID:       | GPMW-05       | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 03/10/23 09:12  
 Analyst: MJV

| 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   | 2.7    |           | ug/l  | 0.50 | 0.16 | 1               |
| Toluene   | ND     |           | ug/l  | 2.5  | 0.70 | 1               |
| Ethylbenzene  | ND     |           | ug/l  | 2.5  | 0.70 | 1               |
| Chloromethane                                       | ND     |           | ug/l  | 2.5  | 0.70 | 1               |
| Bromomethane  | ND     |           | ug/l  | 2.5  | 0.70 | 1               |
| Vinyl chloride                                      | 0.21   | J         | ug/l  | 1.0  | 0.07 | 1               |
| Chloroethane  | ND     |           | ug/l  | 2.5  | 0.70 | 1               |
| 1,1-Dichloroethene                                  | ND     |           | ug/l  | 0.50 | 0.17 | 1               |
| trans-1,2-Dichloroethene                            | ND     |           | ug/l  | 2.5  | 0.70 | 1               |
| Trichloroethene                                     | 1.6    |           | ug/l  | 0.50 | 0.18 | 1               |
| 1,2-Dichlorobenzene                                 | ND     |           | ug/l  | 2.5  | 0.70 | 1               |



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-08   | Date Collected: | 03/06/23 15:35 |
| Client ID:       | GPMW-05       | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

| Parameter   | Result | Qualifier | Units | RL  | MDL  | Dilution Factor |
|---|--------|-----------|-------|-----|------|-----------------|
| <b>Volatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |      |                 |
| 1,3-Dichlorobenzene                                 | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| 1,4-Dichlorobenzene                                 | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| Methyl tert butyl ether                             | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| p/m-Xylene  | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| o-Xylene  | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| cis-1,2-Dichloroethene                              | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| Styrene   | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| Dichlorodifluoromethane                             | ND     |           | ug/l  | 5.0 | 1.0  | 1               |
| Acetone   | 2.1    | J         | 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 | 105        |           | 70-130              |
| Toluene-d8            | 99         |           | 70-130              |
| 4-Bromofluorobenzene  | 98         |           | 70-130              |
| Dibromofluoromethane  | 105        |           | 70-130              |

Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-09   | Date Collected: | 03/06/23 15:00 |
| Client ID:       | GPMW-10       | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260D  
 Analytical Date: 03/10/23 09:35  
 Analyst: MJV

| 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                                     | 13     | ug/l      | 0.50  | 0.18 | 1   |                 |
| 1,2-Dichlorobenzene                                 | ND     | ug/l      | 2.5   | 0.70 | 1   |                 |



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-09   | Date Collected: | 03/06/23 15:00 |
| Client ID:       | GPMW-10       | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

| Parameter   | Result | Qualifier | Units | RL  | MDL  | Dilution Factor |
|---|--------|-----------|-------|-----|------|-----------------|
| <b>Volatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |      |                 |
| 1,3-Dichlorobenzene                                 | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| 1,4-Dichlorobenzene                                 | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| Methyl tert butyl ether                             | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| p/m-Xylene  | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| o-Xylene  | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| cis-1,2-Dichloroethene                              | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| Styrene   | ND     |           | ug/l  | 2.5 | 0.70 | 1               |
| Dichlorodifluoromethane                             | ND     |           | ug/l  | 5.0 | 1.0  | 1               |
| Acetone   | 2.9    | J         | 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 | 107        |           | 70-130              |
| Toluene-d8            | 100        |           | 70-130              |
| 4-Bromofluorobenzene  | 96         |           | 70-130              |
| Dibromofluoromethane  | 107        |           | 70-130              |



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/10/23 08:25  
Analyst: PID

| Parameter   | Result | Qualifier | Units  | RL          | MDL |
|---|--------|-----------|--------|-------------|-----|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): | 07-09  |           | Batch: | WG1753983-5 |     |
| 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:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/10/23 08:25  
Analyst: PID

| Parameter   | Result | Qualifier | Units  | RL          | MDL |
|---|--------|-----------|--------|-------------|-----|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): | 07-09  |           | Batch: | WG1753983-5 |     |
| 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:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/10/23 08:25  
Analyst: PID

| Parameter   | Result | Qualifier | Units       | RL | MDL |
|---|--------|-----------|-------------|----|-----|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): | 07-09  | Batch:    | WG1753983-5 |    |     |

| Surrogate             | %Recovery | Qualifier | Acceptance Criteria |
|-----------------------|-----------|-----------|---------------------|
| 1,2-Dichloroethane-d4 | 105       |           | 70-130              |
| Toluene-d8            | 99        |           | 70-130              |
| 4-Bromofluorobenzene  | 96        |           | 70-130              |
| Dibromofluoromethane  | 104       |           | 70-130              |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/10/23 18:05  
Analyst: LAC

| Parameter   | Result | Qualifier | Units  | RL          | MDL  |
|---|--------|-----------|--------|-------------|------|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): | 03-04  |           | Batch: | WG1754376-5 |      |
| Methylene chloride  | ND     |           | ug/kg  | 5.0         | 2.3  |
| 1,1-Dichloroethane  | ND     |           | ug/kg  | 1.0         | 0.14 |
| Chloroform  | ND     |           | ug/kg  | 1.5         | 0.14 |
| Carbon tetrachloride  | ND     |           | ug/kg  | 1.0         | 0.23 |
| 1,2-Dichloropropane   | ND     |           | ug/kg  | 1.0         | 0.12 |
| Dibromochloromethane  | ND     |           | ug/kg  | 1.0         | 0.14 |
| 1,1,2-Trichloroethane                                       | ND     |           | ug/kg  | 1.0         | 0.27 |
| Tetrachloroethene   | ND     |           | ug/kg  | 0.50        | 0.20 |
| Chlorobenzene   | ND     |           | ug/kg  | 0.50        | 0.13 |
| Trichlorofluoromethane                                      | ND     |           | ug/kg  | 4.0         | 0.70 |
| 1,2-Dichloroethane  | ND     |           | ug/kg  | 1.0         | 0.26 |
| 1,1,1-Trichloroethane                                       | ND     |           | ug/kg  | 0.50        | 0.17 |
| Bromodichloromethane  | ND     |           | ug/kg  | 0.50        | 0.11 |
| trans-1,3-Dichloropropene                                   | ND     |           | ug/kg  | 1.0         | 0.27 |
| cis-1,3-Dichloropropene                                     | ND     |           | ug/kg  | 0.50        | 0.16 |
| Bromoform   | ND     |           | ug/kg  | 4.0         | 0.25 |
| 1,1,2,2-Tetrachloroethane                                   | ND     |           | ug/kg  | 0.50        | 0.17 |
| Benzene   | ND     |           | ug/kg  | 0.50        | 0.17 |
| Toluene   | ND     |           | ug/kg  | 1.0         | 0.54 |
| Ethylbenzene  | ND     |           | ug/kg  | 1.0         | 0.14 |
| Chloromethane   | ND     |           | ug/kg  | 4.0         | 0.93 |
| Bromomethane  | ND     |           | ug/kg  | 2.0         | 0.58 |
| Vinyl chloride  | ND     |           | ug/kg  | 1.0         | 0.34 |
| Chloroethane  | ND     |           | ug/kg  | 2.0         | 0.45 |
| 1,1-Dichloroethene  | ND     |           | ug/kg  | 1.0         | 0.24 |
| trans-1,2-Dichloroethene                                    | ND     |           | ug/kg  | 1.5         | 0.14 |
| Trichloroethene   | ND     |           | ug/kg  | 0.50        | 0.14 |
| 1,2-Dichlorobenzene   | ND     |           | ug/kg  | 2.0         | 0.14 |
| 1,3-Dichlorobenzene   | ND     |           | ug/kg  | 2.0         | 0.15 |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/10/23 18:05  
Analyst: LAC

| Parameter   | Result | Qualifier | Units | RL     | MDL         |
|---|--------|-----------|-------|--------|-------------|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 03-04 |        |           |       | Batch: | WG1754376-5 |
| 1,4-Dichlorobenzene   | ND     |           | ug/kg | 2.0    | 0.17        |
| Methyl tert butyl ether   | ND     |           | ug/kg | 2.0    | 0.20        |
| p/m-Xylene  | ND     |           | ug/kg | 2.0    | 0.56        |
| o-Xylene  | ND     |           | ug/kg | 1.0    | 0.29        |
| cis-1,2-Dichloroethene  | ND     |           | ug/kg | 1.0    | 0.18        |
| Styrene   | ND     |           | ug/kg | 1.0    | 0.20        |
| Dichlorodifluoromethane   | ND     |           | ug/kg | 10     | 0.92        |
| Acetone   | ND     |           | ug/kg | 10     | 4.8         |
| Carbon disulfide  | ND     |           | ug/kg | 10     | 4.6         |
| 2-Butanone  | ND     |           | ug/kg | 10     | 2.2         |
| 4-Methyl-2-pentanone  | ND     |           | ug/kg | 10     | 1.3         |
| 2-Hexanone  | ND     |           | ug/kg | 10     | 1.2         |
| 1,2-Dibromoethane   | ND     |           | ug/kg | 1.0    | 0.28        |
| n-Butylbenzene  | ND     |           | ug/kg | 1.0    | 0.17        |
| sec-Butylbenzene  | ND     |           | ug/kg | 1.0    | 0.15        |
| tert-Butylbenzene   | ND     |           | ug/kg | 2.0    | 0.12        |
| 1,2-Dibromo-3-chloropropane                                       | ND     |           | ug/kg | 3.0    | 1.0         |
| Isopropylbenzene  | ND     |           | ug/kg | 1.0    | 0.11        |
| p-Isopropyltoluene  | 0.19   | J         | ug/kg | 1.0    | 0.11        |
| Naphthalene   | ND     |           | ug/kg | 4.0    | 0.65        |
| n-Propylbenzene   | ND     |           | ug/kg | 1.0    | 0.17        |
| 1,2,4-Trichlorobenzene  | ND     |           | ug/kg | 2.0    | 0.27        |
| 1,3,5-Trimethylbenzene  | ND     |           | ug/kg | 2.0    | 0.19        |
| 1,2,4-Trimethylbenzene  | ND     |           | ug/kg | 2.0    | 0.33        |
| Methyl Acetate  | 2.0    | J         | ug/kg | 4.0    | 0.95        |
| Cyclohexane   | ND     |           | ug/kg | 10     | 0.54        |
| Freon-113   | ND     |           | ug/kg | 4.0    | 0.69        |
| Methyl cyclohexane  | ND     |           | ug/kg | 4.0    | 0.60        |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/10/23 18:05  
Analyst: LAC

| Parameter   | Result | Qualifier | Units       | RL | MDL |
|---|--------|-----------|-------------|----|-----|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): | 03-04  | Batch:    | WG1754376-5 |    |     |

| Surrogate             | %Recovery | Qualifier | Acceptance Criteria |
|-----------------------|-----------|-----------|---------------------|
| 1,2-Dichloroethane-d4 | 111       |           | 70-130              |
| Toluene-d8            | 108       |           | 70-130              |
| 4-Bromofluorobenzene  | 115       |           | 70-130              |
| Dibromofluoromethane  | 85        |           | 70-130              |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/10/23 18:05  
Analyst: LAC

| Parameter  | Result | Qualifier | Units  | RL          | MDL |
|--|--------|-----------|--------|-------------|-----|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 |        |           | Batch: | WG1754379-5 |     |
| Methylene chloride   | ND     |           | ug/kg  | 250         | 110 |
| 1,1-Dichloroethane   | ND     |           | ug/kg  | 50          | 7.2 |
| Chloroform   | ND     |           | ug/kg  | 75          | 7.0 |
| Carbon tetrachloride   | ND     |           | ug/kg  | 50          | 12. |
| 1,2-Dichloropropane  | ND     |           | ug/kg  | 50          | 6.2 |
| Dibromochloromethane   | ND     |           | ug/kg  | 50          | 7.0 |
| 1,1,2-Trichloroethane  | ND     |           | ug/kg  | 50          | 13. |
| Tetrachloroethene  | ND     |           | ug/kg  | 25          | 9.8 |
| Chlorobenzene  | ND     |           | ug/kg  | 25          | 6.4 |
| Trichlorofluoromethane   | ND     |           | ug/kg  | 200         | 35. |
| 1,2-Dichloroethane   | ND     |           | ug/kg  | 50          | 13. |
| 1,1,1-Trichloroethane  | ND     |           | ug/kg  | 25          | 8.4 |
| Bromodichloromethane   | ND     |           | ug/kg  | 25          | 5.4 |
| trans-1,3-Dichloropropene                                      | ND     |           | ug/kg  | 50          | 14. |
| cis-1,3-Dichloropropene  | ND     |           | ug/kg  | 25          | 7.9 |
| Bromoform  | ND     |           | ug/kg  | 200         | 12. |
| 1,1,2,2-Tetrachloroethane                                      | ND     |           | ug/kg  | 25          | 8.3 |
| Benzene  | ND     |           | ug/kg  | 25          | 8.3 |
| Toluene  | ND     |           | ug/kg  | 50          | 27. |
| Ethylbenzene   | ND     |           | ug/kg  | 50          | 7.0 |
| Chloromethane  | ND     |           | ug/kg  | 200         | 47. |
| Bromomethane   | ND     |           | ug/kg  | 100         | 29. |
| Vinyl chloride   | ND     |           | ug/kg  | 50          | 17. |
| Chloroethane   | ND     |           | ug/kg  | 100         | 23. |
| 1,1-Dichloroethene   | ND     |           | ug/kg  | 50          | 12. |
| trans-1,2-Dichloroethene                                       | ND     |           | ug/kg  | 75          | 6.8 |
| Trichloroethene  | ND     |           | ug/kg  | 25          | 6.8 |
| 1,2-Dichlorobenzene  | ND     |           | ug/kg  | 100         | 7.2 |
| 1,3-Dichlorobenzene  | ND     |           | ug/kg  | 100         | 7.4 |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/10/23 18:05  
Analyst: LAC

| Parameter  | Result | Qualifier | Units  | RL          | MDL |
|--|--------|-----------|--------|-------------|-----|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 |        |           | Batch: | WG1754379-5 |     |
| 1,4-Dichlorobenzene  | ND     |           | ug/kg  | 100         | 8.6 |
| Methyl tert butyl ether  | ND     |           | ug/kg  | 100         | 10. |
| p/m-Xylene   | ND     |           | ug/kg  | 100         | 28. |
| o-Xylene   | ND     |           | ug/kg  | 50          | 14. |
| cis-1,2-Dichloroethene   | ND     |           | ug/kg  | 50          | 8.8 |
| Styrene  | ND     |           | ug/kg  | 50          | 9.8 |
| Dichlorodifluoromethane  | ND     |           | ug/kg  | 500         | 46. |
| Acetone  | ND     |           | ug/kg  | 500         | 240 |
| Carbon disulfide   | ND     |           | ug/kg  | 500         | 230 |
| 2-Butanone   | ND     |           | ug/kg  | 500         | 110 |
| 4-Methyl-2-pentanone   | ND     |           | ug/kg  | 500         | 64. |
| 2-Hexanone   | ND     |           | ug/kg  | 500         | 59. |
| 1,2-Dibromoethane  | ND     |           | ug/kg  | 50          | 14. |
| n-Butylbenzene   | ND     |           | ug/kg  | 50          | 8.4 |
| sec-Butylbenzene   | ND     |           | ug/kg  | 50          | 7.3 |
| tert-Butylbenzene  | ND     |           | ug/kg  | 100         | 5.9 |
| 1,2-Dibromo-3-chloropropane                                    | ND     |           | ug/kg  | 150         | 50. |
| Isopropylbenzene   | ND     |           | ug/kg  | 50          | 5.4 |
| p-Isopropyltoluene   | 9.4    | J         | ug/kg  | 50          | 5.4 |
| Naphthalene  | ND     |           | ug/kg  | 200         | 32. |
| n-Propylbenzene  | ND     |           | ug/kg  | 50          | 8.6 |
| 1,2,4-Trichlorobenzene   | ND     |           | ug/kg  | 100         | 14. |
| 1,3,5-Trimethylbenzene   | ND     |           | ug/kg  | 100         | 9.6 |
| 1,2,4-Trimethylbenzene   | ND     |           | ug/kg  | 100         | 17. |
| Methyl Acetate   | 98     | J         | ug/kg  | 200         | 48. |
| Cyclohexane  | ND     |           | ug/kg  | 500         | 27. |
| Freon-113  | ND     |           | ug/kg  | 200         | 35. |
| Methyl cyclohexane   | ND     |           | ug/kg  | 200         | 30. |



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/10/23 18:05  
Analyst: LAC

| Parameter  | Result | Qualifier | Units       | RL | MDL |
|--|--------|-----------|-------------|----|-----|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 02 |        | Batch:    | WG1754379-5 |    |     |

| Surrogate             | %Recovery | Qualifier | Acceptance Criteria |
|-----------------------|-----------|-----------|---------------------|
| 1,2-Dichloroethane-d4 | 111       |           | 70-130              |
| Toluene-d8            | 108       |           | 70-130              |
| 4-Bromofluorobenzene  | 115       |           | 70-130              |
| Dibromofluoromethane  | 85        |           | 70-130              |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/13/23 16:12  
Analyst: AJK

| Parameter   | Result | Qualifier | Units       | RL  | MDL |
|---|--------|-----------|-------------|-----|-----|
| Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): | 02     | Batch:    | WG1754409-5 |     |     |
| Methylene chloride  | ND     | ug/kg     | 250         | 110 |     |
| 1,1-Dichloroethane  | ND     | ug/kg     | 50          | 7.2 |     |
| Chloroform  | ND     | ug/kg     | 75          | 7.0 |     |
| Carbon tetrachloride  | ND     | ug/kg     | 50          | 12. |     |
| 1,2-Dichloropropane   | ND     | ug/kg     | 50          | 6.2 |     |
| Dibromochloromethane  | ND     | ug/kg     | 50          | 7.0 |     |
| 1,1,2-Trichloroethane   | ND     | ug/kg     | 50          | 13. |     |
| Tetrachloroethene   | ND     | ug/kg     | 25          | 9.8 |     |
| Chlorobenzene   | ND     | ug/kg     | 25          | 6.4 |     |
| Trichlorofluoromethane  | ND     | ug/kg     | 200         | 35. |     |
| 1,2-Dichloroethane  | ND     | ug/kg     | 50          | 13. |     |
| 1,1,1-Trichloroethane   | ND     | ug/kg     | 25          | 8.4 |     |
| Bromodichloromethane  | ND     | ug/kg     | 25          | 5.4 |     |
| trans-1,3-Dichloropropene   | ND     | ug/kg     | 50          | 14. |     |
| cis-1,3-Dichloropropene   | ND     | ug/kg     | 25          | 7.9 |     |
| Bromoform   | ND     | ug/kg     | 200         | 12. |     |
| 1,1,2,2-Tetrachloroethane   | ND     | ug/kg     | 25          | 8.3 |     |
| Benzene   | ND     | ug/kg     | 25          | 8.3 |     |
| Toluene   | ND     | ug/kg     | 50          | 27. |     |
| Ethylbenzene  | ND     | ug/kg     | 50          | 7.0 |     |
| Chloromethane   | ND     | ug/kg     | 200         | 47. |     |
| Bromomethane  | ND     | ug/kg     | 100         | 29. |     |
| Vinyl chloride  | ND     | ug/kg     | 50          | 17. |     |
| Chloroethane  | ND     | ug/kg     | 100         | 23. |     |
| 1,1-Dichloroethene  | ND     | ug/kg     | 50          | 12. |     |
| trans-1,2-Dichloroethene  | ND     | ug/kg     | 75          | 6.8 |     |
| Trichloroethene   | ND     | ug/kg     | 25          | 6.8 |     |
| 1,2-Dichlorobenzene   | ND     | ug/kg     | 100         | 7.2 |     |
| 1,3-Dichlorobenzene   | ND     | ug/kg     | 100         | 7.4 |     |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/13/23 16:12  
Analyst: AJK

| Parameter   | Result | Qualifier | Units       | RL  | MDL |
|---|--------|-----------|-------------|-----|-----|
| Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): | 02     | Batch:    | WG1754409-5 |     |     |
| 1,4-Dichlorobenzene   | ND     | ug/kg     | 100         | 8.6 |     |
| Methyl tert butyl ether   | ND     | ug/kg     | 100         | 10. |     |
| p/m-Xylene  | ND     | ug/kg     | 100         | 28. |     |
| o-Xylene  | ND     | ug/kg     | 50          | 14. |     |
| cis-1,2-Dichloroethene  | ND     | ug/kg     | 50          | 8.8 |     |
| Styrene   | ND     | ug/kg     | 50          | 9.8 |     |
| Dichlorodifluoromethane   | ND     | ug/kg     | 500         | 46. |     |
| Acetone   | ND     | ug/kg     | 500         | 240 |     |
| Carbon disulfide  | ND     | ug/kg     | 500         | 230 |     |
| 2-Butanone  | ND     | ug/kg     | 500         | 110 |     |
| 4-Methyl-2-pentanone  | ND     | ug/kg     | 500         | 64. |     |
| 2-Hexanone  | ND     | ug/kg     | 500         | 59. |     |
| 1,2-Dibromoethane   | ND     | ug/kg     | 50          | 14. |     |
| n-Butylbenzene  | ND     | ug/kg     | 50          | 8.4 |     |
| sec-Butylbenzene  | ND     | ug/kg     | 50          | 7.3 |     |
| tert-Butylbenzene   | ND     | ug/kg     | 100         | 5.9 |     |
| 1,2-Dibromo-3-chloropropane   | ND     | ug/kg     | 150         | 50. |     |
| Isopropylbenzene  | ND     | ug/kg     | 50          | 5.4 |     |
| p-Isopropyltoluene  | ND     | ug/kg     | 50          | 5.4 |     |
| Naphthalene   | ND     | ug/kg     | 200         | 32. |     |
| n-Propylbenzene   | ND     | ug/kg     | 50          | 8.6 |     |
| 1,2,4-Trichlorobenzene  | ND     | ug/kg     | 100         | 14. |     |
| 1,3,5-Trimethylbenzene  | ND     | ug/kg     | 100         | 9.6 |     |
| 1,2,4-Trimethylbenzene  | ND     | ug/kg     | 100         | 17. |     |
| Methyl Acetate  | ND     | ug/kg     | 200         | 48. |     |
| Cyclohexane   | ND     | ug/kg     | 500         | 27. |     |
| Freon-113   | ND     | ug/kg     | 200         | 35. |     |
| Methyl cyclohexane  | ND     | ug/kg     | 200         | 30. |     |



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260D  
Analytical Date: 03/13/23 16:12  
Analyst: AJK

| Parameter   | Result | Qualifier | Units       | RL | MDL |
|---|--------|-----------|-------------|----|-----|
| Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): | 02     | Batch:    | WG1754409-5 |    |     |

| Surrogate             | %Recovery | Qualifier | Acceptance Criteria |
|-----------------------|-----------|-----------|---------------------|
| 1,2-Dichloroethane-d4 | 103       |           | 70-130              |
| Toluene-d8            | 99        |           | 70-130              |
| 4-Bromofluorobenzene  | 98        |           | 70-130              |
| Dibromofluoromethane  | 90        |           | 70-130              |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter   | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|---|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-09 Batch: WG1753983-3 WG1753983-4 |                  |      |                   |      |                     |     |      |               |
| Methylene chloride  | 100              |      | 110               |      | 70-130              | 10  |      | 20            |
| 1,1-Dichloroethane  | 110              |      | 110               |      | 70-130              | 0   |      | 20            |
| Chloroform  | 100              |      | 110               |      | 70-130              | 10  |      | 20            |
| Carbon tetrachloride  | 100              |      | 100               |      | 63-132              | 0   |      | 20            |
| 1,2-Dichloropropane   | 100              |      | 100               |      | 70-130              | 0   |      | 20            |
| Dibromochloromethane  | 85               |      | 89                |      | 63-130              | 5   |      | 20            |
| 1,1,2-Trichloroethane   | 98               |      | 100               |      | 70-130              | 2   |      | 20            |
| Tetrachloroethene   | 100              |      | 110               |      | 70-130              | 10  |      | 20            |
| Chlorobenzene   | 100              |      | 110               |      | 75-130              | 10  |      | 20            |
| Trichlorofluoromethane  | 120              |      | 120               |      | 62-150              | 0   |      | 20            |
| 1,2-Dichloroethane  | 100              |      | 100               |      | 70-130              | 0   |      | 20            |
| 1,1,1-Trichloroethane   | 110              |      | 110               |      | 67-130              | 0   |      | 20            |
| Bromodichloromethane  | 92               |      | 97                |      | 67-130              | 5   |      | 20            |
| trans-1,3-Dichloropropene   | 88               |      | 92                |      | 70-130              | 4   |      | 20            |
| cis-1,3-Dichloropropene   | 89               |      | 92                |      | 70-130              | 3   |      | 20            |
| Bromoform   | 72               |      | 76                |      | 54-136              | 5   |      | 20            |
| 1,1,2,2-Tetrachloroethane   | 89               |      | 95                |      | 67-130              | 7   |      | 20            |
| Benzene   | 100              |      | 110               |      | 70-130              | 10  |      | 20            |
| Toluene   | 100              |      | 110               |      | 70-130              | 10  |      | 20            |
| Ethylbenzene  | 110              |      | 110               |      | 70-130              | 0   |      | 20            |
| Chloromethane   | 120              |      | 120               |      | 64-130              | 0   |      | 20            |
| Bromomethane  | 91               |      | 96                |      | 39-139              | 5   |      | 20            |
| Vinyl chloride  | 120              |      | 130               |      | 55-140              | 8   |      | 20            |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter   | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|---|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-09 Batch: WG1753983-3 WG1753983-4 |                  |      |                   |      |                     |     |      |               |
| Chloroethane  | 120              |      | 130               |      | 55-138              | 8   |      | 20            |
| 1,1-Dichloroethene  | 120              |      | 120               |      | 61-145              | 0   |      | 20            |
| trans-1,2-Dichloroethene  | 110              |      | 110               |      | 70-130              | 0   |      | 20            |
| Trichloroethene   | 100              |      | 110               |      | 70-130              | 10  |      | 20            |
| 1,2-Dichlorobenzene   | 96               |      | 100               |      | 70-130              | 4   |      | 20            |
| 1,3-Dichlorobenzene   | 98               |      | 100               |      | 70-130              | 2   |      | 20            |
| 1,4-Dichlorobenzene   | 98               |      | 100               |      | 70-130              | 2   |      | 20            |
| Methyl tert butyl ether   | 89               |      | 95                |      | 63-130              | 7   |      | 20            |
| p/m-Xylene  | 110              |      | 110               |      | 70-130              | 0   |      | 20            |
| o-Xylene  | 105              |      | 110               |      | 70-130              | 5   |      | 20            |
| cis-1,2-Dichloroethene  | 100              |      | 110               |      | 70-130              | 10  |      | 20            |
| Styrene   | 105              |      | 110               |      | 70-130              | 5   |      | 20            |
| Dichlorodifluoromethane   | 120              |      | 130               |      | 36-147              | 8   |      | 20            |
| Acetone   | 81               |      | 89                |      | 58-148              | 9   |      | 20            |
| Carbon disulfide  | 110              |      | 120               |      | 51-130              | 9   |      | 20            |
| 2-Butanone  | 76               |      | 88                |      | 63-138              | 15  |      | 20            |
| 4-Methyl-2-pentanone  | 77               |      | 86                |      | 59-130              | 11  |      | 20            |
| 2-Hexanone  | 80               |      | 86                |      | 57-130              | 7   |      | 20            |
| 1,2-Dibromoethane   | 92               |      | 96                |      | 70-130              | 4   |      | 20            |
| n-Butylbenzene  | 100              |      | 110               |      | 53-136              | 10  |      | 20            |
| sec-Butylbenzene  | 110              |      | 110               |      | 70-130              | 0   |      | 20            |
| tert-Butylbenzene   | 100              |      | 110               |      | 70-130              | 10  |      | 20            |
| 1,2-Dibromo-3-chloropropane   | 67               |      | 73                |      | 41-144              | 9   |      | 20            |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| <b>Parameter</b>  | <i>LCS</i><br>%Recovery | Qual | <i>LCSD</i><br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | <i>RPD</i><br>Limits |
|---|-------------------------|------|--------------------------|------|---------------------|-----|------|----------------------|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-09 Batch: WG1753983-3 WG1753983-4 |                         |      |                          |      |                     |     |      |                      |
| Isopropylbenzene  | 100                     |      | 110                      |      | 70-130              | 10  |      | 20                   |
| p-Isopropyltoluene  | 100                     |      | 110                      |      | 70-130              | 10  |      | 20                   |
| Naphthalene   | 73                      |      | 84                       |      | 70-130              | 14  |      | 20                   |
| n-Propylbenzene   | 100                     |      | 110                      |      | 69-130              | 10  |      | 20                   |
| 1,2,4-Trichlorobenzene  | 85                      |      | 93                       |      | 70-130              | 9   |      | 20                   |
| 1,3,5-Trimethylbenzene  | 100                     |      | 110                      |      | 64-130              | 10  |      | 20                   |
| 1,2,4-Trimethylbenzene  | 98                      |      | 100                      |      | 70-130              | 2   |      | 20                   |
| Methyl Acetate  | 95                      |      | 97                       |      | 70-130              | 2   |      | 20                   |
| Cyclohexane   | 120                     |      | 120                      |      | 70-130              | 0   |      | 20                   |
| Freon-113   | 120                     |      | 130                      |      | 70-130              | 8   |      | 20                   |
| Methyl cyclohexane  | 110                     |      | 120                      |      | 70-130              | 9   |      | 20                   |

| <b>Surrogate</b>      | <i>LCS</i><br>%Recovery | Qual | <i>LCSD</i><br>%Recovery | Qual | <b>Acceptance<br/>Criteria</b> |
|-----------------------|-------------------------|------|--------------------------|------|--------------------------------|
|                       |                         |      |                          |      |                                |
| 1,2-Dichloroethane-d4 | 108                     |      | 108                      |      | 70-130                         |
| Toluene-d8            | 103                     |      | 103                      |      | 70-130                         |
| 4-Bromofluorobenzene  | 97                      |      | 99                       |      | 70-130                         |
| Dibromofluoromethane  | 103                     |      | 103                      |      | 70-130                         |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter   | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|---|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-04 Batch: WG1754376-3 WG1754376-4 |                  |      |                   |      |                     |     |      |               |
| Methylene chloride  | 80               |      | 80                |      | 70-130              | 0   |      | 30            |
| 1,1-Dichloroethane  | 99               |      | 100               |      | 70-130              | 1   |      | 30            |
| Chloroform  | 84               |      | 83                |      | 70-130              | 1   |      | 30            |
| Carbon tetrachloride  | 76               |      | 76                |      | 70-130              | 0   |      | 30            |
| 1,2-Dichloropropane   | 102              |      | 102               |      | 70-130              | 0   |      | 30            |
| Dibromochloromethane  | 80               |      | 79                |      | 70-130              | 1   |      | 30            |
| 1,1,2-Trichloroethane   | 99               |      | 99                |      | 70-130              | 0   |      | 30            |
| Tetrachloroethene   | 79               |      | 78                |      | 70-130              | 1   |      | 30            |
| Chlorobenzene   | 86               |      | 86                |      | 70-130              | 0   |      | 30            |
| Trichlorofluoromethane  | 83               |      | 82                |      | 70-139              | 1   |      | 30            |
| 1,2-Dichloroethane  | 92               |      | 92                |      | 70-130              | 0   |      | 30            |
| 1,1,1-Trichloroethane   | 82               |      | 82                |      | 70-130              | 0   |      | 30            |
| Bromodichloromethane  | 84               |      | 84                |      | 70-130              | 0   |      | 30            |
| trans-1,3-Dichloropropene   | 101              |      | 101               |      | 70-130              | 0   |      | 30            |
| cis-1,3-Dichloropropene   | 92               |      | 91                |      | 70-130              | 1   |      | 30            |
| Bromoform   | 80               |      | 78                |      | 70-130              | 3   |      | 30            |
| 1,1,2,2-Tetrachloroethane   | 106              |      | 97                |      | 70-130              | 9   |      | 30            |
| Benzene   | 92               |      | 91                |      | 70-130              | 1   |      | 30            |
| Toluene   | 91               |      | 92                |      | 70-130              | 1   |      | 30            |
| Ethylbenzene  | 94               |      | 95                |      | 70-130              | 1   |      | 30            |
| Chloromethane   | 134              | Q    | 135               | Q    | 52-130              | 1   |      | 30            |
| Bromomethane  | 95               |      | 93                |      | 57-147              | 2   |      | 30            |
| Vinyl chloride  | 109              |      | 111               |      | 67-130              | 2   |      | 30            |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter   | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|---|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-04 Batch: WG1754376-3 WG1754376-4 |                  |      |                   |      |                     |     |      |               |
| Chloroethane  | 101              |      | 101               |      | 50-151              | 0   |      | 30            |
| 1,1-Dichloroethene  | 86               |      | 85                |      | 65-135              | 1   |      | 30            |
| trans-1,2-Dichloroethene  | 82               |      | 82                |      | 70-130              | 0   |      | 30            |
| Trichloroethene   | 86               |      | 89                |      | 70-130              | 3   |      | 30            |
| 1,2-Dichlorobenzene   | 84               |      | 83                |      | 70-130              | 1   |      | 30            |
| 1,3-Dichlorobenzene   | 85               |      | 84                |      | 70-130              | 1   |      | 30            |
| 1,4-Dichlorobenzene   | 84               |      | 83                |      | 70-130              | 1   |      | 30            |
| Methyl tert butyl ether   | 96               |      | 94                |      | 66-130              | 2   |      | 30            |
| p/m-Xylene  | 91               |      | 91                |      | 70-130              | 0   |      | 30            |
| o-Xylene  | 93               |      | 94                |      | 70-130              | 1   |      | 30            |
| cis-1,2-Dichloroethene  | 81               |      | 81                |      | 70-130              | 0   |      | 30            |
| Styrene   | 94               |      | 94                |      | 70-130              | 0   |      | 30            |
| Dichlorodifluoromethane   | 105              |      | 103               |      | 30-146              | 2   |      | 30            |
| Acetone   | 130              |      | 123               |      | 54-140              | 6   |      | 30            |
| Carbon disulfide  | 140              | Q    | 140               | Q    | 59-130              | 0   |      | 30            |
| 2-Butanone  | 123              |      | 114               |      | 70-130              | 8   |      | 30            |
| 4-Methyl-2-pentanone  | 118              |      | 112               |      | 70-130              | 5   |      | 30            |
| 2-Hexanone  | 135              | Q    | 128               |      | 70-130              | 5   |      | 30            |
| 1,2-Dibromoethane   | 88               |      | 87                |      | 70-130              | 1   |      | 30            |
| n-Butylbenzene  | 108              |      | 107               |      | 70-130              | 1   |      | 30            |
| sec-Butylbenzene  | 102              |      | 100               |      | 70-130              | 2   |      | 30            |
| tert-Butylbenzene   | 93               |      | 92                |      | 70-130              | 1   |      | 30            |
| 1,2-Dibromo-3-chloropropane   | 74               |      | 72                |      | 68-130              | 3   |      | 30            |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| <b>Parameter</b>  | <i>LCS</i><br>%Recovery | <i>Qual</i> | <i>LCSD</i><br>%Recovery | <i>Qual</i> | <i>%Recovery</i><br><i>Limits</i> | <i>RPD</i> | <i>Qual</i> | <i>RPD</i><br><i>Limits</i> |
|---|-------------------------|-------------|--------------------------|-------------|-----------------------------------|------------|-------------|-----------------------------|
|   |                         |             |                          |             |                                   |            |             |                             |
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 03-04 Batch: WG1754376-3 WG1754376-4 |                         |             |                          |             |                                   |            |             |                             |
| Isopropylbenzene  | 100                     |             | 99                       |             | 70-130                            | 1          |             | 30                          |
| p-Isopropyltoluene  | 95                      |             | 94                       |             | 70-130                            | 1          |             | 30                          |
| Naphthalene   | 87                      |             | 84                       |             | 70-130                            | 4          |             | 30                          |
| n-Propylbenzene   | 108                     |             | 108                      |             | 70-130                            | 0          |             | 30                          |
| 1,2,4-Trichlorobenzene  | 80                      |             | 78                       |             | 70-130                            | 3          |             | 30                          |
| 1,3,5-Trimethylbenzene  | 97                      |             | 95                       |             | 70-130                            | 2          |             | 30                          |
| 1,2,4-Trimethylbenzene  | 96                      |             | 94                       |             | 70-130                            | 2          |             | 30                          |
| Methyl Acetate  | 118                     |             | 112                      |             | 51-146                            | 5          |             | 30                          |
| Cyclohexane   | 117                     |             | 117                      |             | 59-142                            | 0          |             | 30                          |
| Freon-113   | 87                      |             | 86                       |             | 50-139                            | 1          |             | 30                          |
| Methyl cyclohexane  | 93                      |             | 92                       |             | 70-130                            | 1          |             | 30                          |

| <b>Surrogate</b>      | <i>LCS</i><br>%Recovery | <i>Qual</i> | <i>LCSD</i><br>%Recovery | <i>Qual</i> | <b>Acceptance Criteria</b> |
|-----------------------|-------------------------|-------------|--------------------------|-------------|----------------------------|
|                       |                         |             |                          |             |                            |
| 1,2-Dichloroethane-d4 | 109                     |             | 109                      |             | 70-130                     |
| Toluene-d8            | 109                     |             | 111                      |             | 70-130                     |
| 4-Bromofluorobenzene  | 116                     |             | 115                      |             | 70-130                     |
| Dibromofluoromethane  | 88                      |             | 87                       |             | 70-130                     |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter  | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|--|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1754379-3 WG1754379-4 |                  |      |                   |      |                     |     |      |               |
| Methylene chloride   | 80               |      | 80                |      | 70-130              | 0   |      | 30            |
| 1,1-Dichloroethane   | 99               |      | 100               |      | 70-130              | 1   |      | 30            |
| Chloroform   | 84               |      | 83                |      | 70-130              | 1   |      | 30            |
| Carbon tetrachloride   | 76               |      | 76                |      | 70-130              | 0   |      | 30            |
| 1,2-Dichloropropane  | 102              |      | 102               |      | 70-130              | 0   |      | 30            |
| Dibromochloromethane   | 80               |      | 79                |      | 70-130              | 1   |      | 30            |
| 1,1,2-Trichloroethane  | 99               |      | 99                |      | 70-130              | 0   |      | 30            |
| Tetrachloroethene  | 79               |      | 78                |      | 70-130              | 1   |      | 30            |
| Chlorobenzene  | 86               |      | 86                |      | 70-130              | 0   |      | 30            |
| Trichlorofluoromethane   | 83               |      | 82                |      | 70-139              | 1   |      | 30            |
| 1,2-Dichloroethane   | 92               |      | 92                |      | 70-130              | 0   |      | 30            |
| 1,1,1-Trichloroethane  | 82               |      | 82                |      | 70-130              | 0   |      | 30            |
| Bromodichloromethane   | 84               |      | 84                |      | 70-130              | 0   |      | 30            |
| trans-1,3-Dichloropropene  | 101              |      | 101               |      | 70-130              | 0   |      | 30            |
| cis-1,3-Dichloropropene  | 92               |      | 91                |      | 70-130              | 1   |      | 30            |
| Bromoform  | 80               |      | 78                |      | 70-130              | 3   |      | 30            |
| 1,1,2,2-Tetrachloroethane  | 106              |      | 97                |      | 70-130              | 9   |      | 30            |
| Benzene  | 92               |      | 91                |      | 70-130              | 1   |      | 30            |
| Toluene  | 91               |      | 92                |      | 70-130              | 1   |      | 30            |
| Ethylbenzene   | 94               |      | 95                |      | 70-130              | 1   |      | 30            |
| Chloromethane  | 134              | Q    | 135               | Q    | 52-130              | 1   |      | 30            |
| Bromomethane   | 95               |      | 93                |      | 57-147              | 2   |      | 30            |
| Vinyl chloride   | 109              |      | 111               |      | 67-130              | 2   |      | 30            |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| <b>Parameter</b>   | <b>LCS</b>       |             | <b>LCSD</b>      |             | <b>%Recovery</b> |  | <b>RPD</b> | <b>Qual</b> | <b>RPD</b><br><b>Limits</b> |
|--|------------------|-------------|------------------|-------------|------------------|--|------------|-------------|-----------------------------|
|  | <b>%Recovery</b> | <b>Qual</b> | <b>%Recovery</b> | <b>Qual</b> | <b>Limits</b>    |  |            |             |                             |
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1754379-3 WG1754379-4 |                  |             |                  |             |                  |  |            |             |                             |
| Chloroethane   | 101              |             | 101              |             | 50-151           |  | 0          |             | 30                          |
| 1,1-Dichloroethene   | 86               |             | 85               |             | 65-135           |  | 1          |             | 30                          |
| trans-1,2-Dichloroethene   | 82               |             | 82               |             | 70-130           |  | 0          |             | 30                          |
| Trichloroethene  | 86               |             | 89               |             | 70-130           |  | 3          |             | 30                          |
| 1,2-Dichlorobenzene  | 84               |             | 83               |             | 70-130           |  | 1          |             | 30                          |
| 1,3-Dichlorobenzene  | 85               |             | 84               |             | 70-130           |  | 1          |             | 30                          |
| 1,4-Dichlorobenzene  | 84               |             | 83               |             | 70-130           |  | 1          |             | 30                          |
| Methyl tert butyl ether  | 96               |             | 94               |             | 66-130           |  | 2          |             | 30                          |
| p/m-Xylene   | 91               |             | 91               |             | 70-130           |  | 0          |             | 30                          |
| o-Xylene   | 93               |             | 94               |             | 70-130           |  | 1          |             | 30                          |
| cis-1,2-Dichloroethene   | 81               |             | 81               |             | 70-130           |  | 0          |             | 30                          |
| Styrene  | 94               |             | 94               |             | 70-130           |  | 0          |             | 30                          |
| Dichlorodifluoromethane  | 105              |             | 103              |             | 30-146           |  | 2          |             | 30                          |
| Acetone  | 130              |             | 123              |             | 54-140           |  | 6          |             | 30                          |
| Carbon disulfide   | 140              | Q           | 140              | Q           | 59-130           |  | 0          |             | 30                          |
| 2-Butanone   | 123              |             | 114              |             | 70-130           |  | 8          |             | 30                          |
| 4-Methyl-2-pentanone   | 118              |             | 112              |             | 70-130           |  | 5          |             | 30                          |
| 2-Hexanone   | 135              | Q           | 128              |             | 70-130           |  | 5          |             | 30                          |
| 1,2-Dibromoethane  | 88               |             | 87               |             | 70-130           |  | 1          |             | 30                          |
| n-Butylbenzene   | 108              |             | 107              |             | 70-130           |  | 1          |             | 30                          |
| sec-Butylbenzene   | 102              |             | 100              |             | 70-130           |  | 2          |             | 30                          |
| tert-Butylbenzene  | 93               |             | 92               |             | 70-130           |  | 1          |             | 30                          |
| 1,2-Dibromo-3-chloropropane  | 74               |             | 72               |             | 68-130           |  | 3          |             | 30                          |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter  | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|--|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1754379-3 WG1754379-4 |                  |      |                   |      |                     |     |      |               |
| Isopropylbenzene   | 100              |      | 99                |      | 70-130              | 1   |      | 30            |
| p-Isopropyltoluene   | 95               |      | 94                |      | 70-130              | 1   |      | 30            |
| Naphthalene  | 87               |      | 84                |      | 70-130              | 4   |      | 30            |
| n-Propylbenzene  | 108              |      | 108               |      | 70-130              | 0   |      | 30            |
| 1,2,4-Trichlorobenzene   | 80               |      | 78                |      | 70-130              | 3   |      | 30            |
| 1,3,5-Trimethylbenzene   | 97               |      | 95                |      | 70-130              | 2   |      | 30            |
| 1,2,4-Trimethylbenzene   | 96               |      | 94                |      | 70-130              | 2   |      | 30            |
| Methyl Acetate   | 118              |      | 112               |      | 51-146              | 5   |      | 30            |
| Cyclohexane  | 117              |      | 117               |      | 59-142              | 0   |      | 30            |
| Freon-113  | 87               |      | 86                |      | 50-139              | 1   |      | 30            |
| Methyl cyclohexane   | 93               |      | 92                |      | 70-130              | 1   |      | 30            |

| Surrogate             | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | Acceptance<br>Criteria |
|-----------------------|------------------|------|-------------------|------|------------------------|
| 1,2-Dichloroethane-d4 | 109              |      | 109               |      | 70-130                 |
| Toluene-d8            | 109              |      | 110               |      | 70-130                 |
| 4-Bromofluorobenzene  | 116              |      | 115               |      | 70-130                 |
| Dibromofluoromethane  | 88               |      | 88                |      | 70-130                 |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter  | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|--|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1754409-3 WG1754409-4 |                  |      |                   |      |                     |     |      |               |
| Methylene chloride   | 86               |      | 83                |      | 70-130              | 4   |      | 30            |
| 1,1-Dichloroethane   | 104              |      | 101               |      | 70-130              | 3   |      | 30            |
| Chloroform   | 87               |      | 85                |      | 70-130              | 2   |      | 30            |
| Carbon tetrachloride   | 93               |      | 90                |      | 70-130              | 3   |      | 30            |
| 1,2-Dichloropropane  | 101              |      | 99                |      | 70-130              | 2   |      | 30            |
| Dibromochloromethane   | 87               |      | 85                |      | 70-130              | 2   |      | 30            |
| 1,1,2-Trichloroethane  | 84               |      | 81                |      | 70-130              | 4   |      | 30            |
| Tetrachloroethene  | 99               |      | 97                |      | 70-130              | 2   |      | 30            |
| Chlorobenzene  | 90               |      | 88                |      | 70-130              | 2   |      | 30            |
| Trichlorofluoromethane   | 101              |      | 106               |      | 70-139              | 5   |      | 30            |
| 1,2-Dichloroethane   | 98               |      | 95                |      | 70-130              | 3   |      | 30            |
| 1,1,1-Trichloroethane  | 92               |      | 90                |      | 70-130              | 2   |      | 30            |
| Bromodichloromethane   | 86               |      | 84                |      | 70-130              | 2   |      | 30            |
| trans-1,3-Dichloropropene  | 89               |      | 87                |      | 70-130              | 2   |      | 30            |
| cis-1,3-Dichloropropene  | 87               |      | 84                |      | 70-130              | 4   |      | 30            |
| Bromoform  | 82               |      | 83                |      | 70-130              | 1   |      | 30            |
| 1,1,2,2-Tetrachloroethane  | 82               |      | 80                |      | 70-130              | 2   |      | 30            |
| Benzene  | 90               |      | 88                |      | 70-130              | 2   |      | 30            |
| Toluene  | 90               |      | 89                |      | 70-130              | 1   |      | 30            |
| Ethylbenzene   | 91               |      | 90                |      | 70-130              | 1   |      | 30            |
| Chloromethane  | 121              |      | 122               |      | 52-130              | 1   |      | 30            |
| Bromomethane   | 101              |      | 97                |      | 57-147              | 4   |      | 30            |
| Vinyl chloride   | 113              |      | 110               |      | 67-130              | 3   |      | 30            |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter  | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|--|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1754409-3 WG1754409-4 |                  |      |                   |      |                     |     |      |               |
| Chloroethane   | 108              |      | 105               |      | 50-151              | 3   |      | 30            |
| 1,1-Dichloroethene   | 96               |      | 95                |      | 65-135              | 1   |      | 30            |
| trans-1,2-Dichloroethene   | 91               |      | 89                |      | 70-130              | 2   |      | 30            |
| Trichloroethene  | 90               |      | 87                |      | 70-130              | 3   |      | 30            |
| 1,2-Dichlorobenzene  | 88               |      | 87                |      | 70-130              | 1   |      | 30            |
| 1,3-Dichlorobenzene  | 89               |      | 88                |      | 70-130              | 1   |      | 30            |
| 1,4-Dichlorobenzene  | 89               |      | 88                |      | 70-130              | 1   |      | 30            |
| Methyl tert butyl ether  | 90               |      | 87                |      | 66-130              | 3   |      | 30            |
| p/m-Xylene   | 93               |      | 90                |      | 70-130              | 3   |      | 30            |
| o-Xylene   | 93               |      | 92                |      | 70-130              | 1   |      | 30            |
| cis-1,2-Dichloroethene   | 88               |      | 85                |      | 70-130              | 3   |      | 30            |
| Styrene  | 92               |      | 91                |      | 70-130              | 1   |      | 30            |
| Dichlorodifluoromethane  | 104              |      | 102               |      | 30-146              | 2   |      | 30            |
| Acetone  | 129              |      | 121               |      | 54-140              | 6   |      | 30            |
| Carbon disulfide   | 157              | Q    | 152               | Q    | 59-130              | 3   |      | 30            |
| 2-Butanone   | 117              |      | 104               |      | 70-130              | 12  |      | 30            |
| 4-Methyl-2-pentanone   | 97               |      | 92                |      | 70-130              | 5   |      | 30            |
| 2-Hexanone   | 109              |      | 104               |      | 70-130              | 5   |      | 30            |
| 1,2-Dibromoethane  | 86               |      | 84                |      | 70-130              | 2   |      | 30            |
| n-Butylbenzene   | 96               |      | 95                |      | 70-130              | 1   |      | 30            |
| sec-Butylbenzene   | 92               |      | 92                |      | 70-130              | 0   |      | 30            |
| tert-Butylbenzene  | 90               |      | 89                |      | 70-130              | 1   |      | 30            |
| 1,2-Dibromo-3-chloropropane  | 80               |      | 77                |      | 68-130              | 4   |      | 30            |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter  | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|--|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 02 Batch: WG1754409-3 WG1754409-4 |                  |      |                   |      |                     |     |      |               |
| Isopropylbenzene   | 88               |      | 88                |      | 70-130              | 0   |      | 30            |
| p-Isopropyltoluene   | 92               |      | 92                |      | 70-130              | 0   |      | 30            |
| Naphthalene  | 93               |      | 91                |      | 70-130              | 2   |      | 30            |
| n-Propylbenzene  | 92               |      | 92                |      | 70-130              | 0   |      | 30            |
| 1,2,4-Trichlorobenzene   | 93               |      | 92                |      | 70-130              | 1   |      | 30            |
| 1,3,5-Trimethylbenzene   | 88               |      | 88                |      | 70-130              | 0   |      | 30            |
| 1,2,4-Trimethylbenzene   | 88               |      | 87                |      | 70-130              | 1   |      | 30            |
| Methyl Acetate   | 115              |      | 110               |      | 51-146              | 4   |      | 30            |
| Cyclohexane  | 126              |      | 122               |      | 59-142              | 3   |      | 30            |
| Freon-113  | 103              |      | 101               |      | 50-139              | 2   |      | 30            |
| Methyl cyclohexane   | 95               |      | 93                |      | 70-130              | 2   |      | 30            |

| Surrogate             | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | Acceptance<br>Criteria |
|-----------------------|------------------|------|-------------------|------|------------------------|
| 1,2-Dichloroethane-d4 | 103              |      | 101               |      | 70-130                 |
| Toluene-d8            | 100              |      | 101               |      | 70-130                 |
| 4-Bromofluorobenzene  | 96               |      | 100               |      | 70-130                 |
| Dibromofluoromethane  | 92               |      | 93                |      | 70-130                 |

# **SEMIVOLATILES**



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-05   | Date Collected: | 03/03/23 10:45 |
| Client ID:       | COMPOSITE-01  | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

|                    |                |                    |                |
|--------------------|----------------|--------------------|----------------|
| Matrix:            | Soil           | Extraction Method: | EPA 3546       |
| Analytical Method: | 1,8270E        | Extraction Date:   | 03/09/23 10:36 |
| Analytical Date:   | 03/10/23 05:43 |                    |                |
| Analyst:           | CMM            |                    |                |
| Percent Solids:    | 83%            |                    |                |

| Parameter   | Result | Qualifier | Units | RL  | MDL | Dilution Factor |
|---|--------|-----------|-------|-----|-----|-----------------|
| <b>Semivolatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |     |                 |
| Acenaphthene  | 130    | J         | ug/kg | 160 | 20. | 1               |
| 1,2,4-Trichlorobenzene                                  | ND     |           | ug/kg | 200 | 23. | 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               |
| 1,2-Dichlorobenzene                                     | ND     |           | ug/kg | 200 | 36. | 1               |
| 1,3-Dichlorobenzene                                     | ND     |           | ug/kg | 200 | 34. | 1               |
| 1,4-Dichlorobenzene                                     | ND     |           | ug/kg | 200 | 35. | 1               |
| 3,3'-Dichlorobenzidine                                  | ND     |           | ug/kg | 200 | 53. | 1               |
| 2,4-Dinitrotoluene                                      | ND     |           | ug/kg | 200 | 40. | 1               |
| 2,6-Dinitrotoluene                                      | ND     |           | ug/kg | 200 | 34. | 1               |
| Fluoranthene  | 2200   |           | 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 | 570 | 180 | 1               |
| Hexachloroethane  | ND     |           | ug/kg | 160 | 32. | 1               |
| Isophorone  | ND     |           | ug/kg | 180 | 26. | 1               |
| Naphthalene   | 140    | J         | 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 | 31. | 1               |
| Bis(2-ethylhexyl)phthalate                              | ND     |           | ug/kg | 200 | 69. | 1               |
| Butyl benzyl phthalate                                  | ND     |           | ug/kg | 200 | 50. | 1               |
| Di-n-butylphthalate                                     | ND     |           | ug/kg | 200 | 38. | 1               |
| Di-n-octylphthalate                                     | ND     |           | ug/kg | 200 | 67. | 1               |



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-05   | Date Collected: | 03/03/23 10:45 |
| Client ID:       | COMPOSITE-01  | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

| Parameter   | Result | Qualifier | Units | RL  | MDL | Dilution Factor |
|---|--------|-----------|-------|-----|-----|-----------------|
| <b>Semivolatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |     |                 |
| Diethyl phthalate                                       | ND     |           | ug/kg | 200 | 18. | 1               |
| Dimethyl phthalate                                      | ND     |           | ug/kg | 200 | 42. | 1               |
| Benzo(a)anthracene                                      | 750    |           | ug/kg | 120 | 22. | 1               |
| Benzo(a)pyrene  | 660    |           | ug/kg | 160 | 48. | 1               |
| Benzo(b)fluoranthene                                    | 910    |           | ug/kg | 120 | 33. | 1               |
| Benzo(k)fluoranthene                                    | 270    |           | ug/kg | 120 | 32. | 1               |
| Chrysene  | 780    |           | ug/kg | 120 | 21. | 1               |
| Acenaphthylene  | ND     |           | ug/kg | 160 | 31. | 1               |
| Anthracene  | 550    |           | ug/kg | 120 | 39. | 1               |
| Benzo(ghi)perylene                                      | 410    |           | ug/kg | 160 | 23. | 1               |
| Fluorene  | 200    |           | ug/kg | 200 | 19. | 1               |
| Phenanthrene  | 2300   |           | ug/kg | 120 | 24. | 1               |
| Dibenzo(a,h)anthracene                                  | 97     | J         | ug/kg | 120 | 23. | 1               |
| Indeno(1,2,3-cd)pyrene                                  | 470    |           | ug/kg | 160 | 28. | 1               |
| Pyrene  | 1600   |           | ug/kg | 120 | 20. | 1               |
| Biphenyl  | ND     |           | ug/kg | 450 | 26. | 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  | 200    |           | ug/kg | 200 | 19. | 1               |
| 2-Methylnaphthalene                                     | 70     | J         | ug/kg | 240 | 24. | 1               |
| 1,2,4,5-Tetrachlorobenzene                              | ND     |           | ug/kg | 200 | 21. | 1               |
| Acetophenone  | ND     |           | ug/kg | 200 | 24. | 1               |
| Benzyl Alcohol  | ND     |           | ug/kg | 200 | 61. | 1               |
| Carbazole   | 270    |           | ug/kg | 200 | 19. | 1               |

| Surrogate            | % Recovery | Qualifier | Acceptance Criteria |
|----------------------|------------|-----------|---------------------|
| 2-Fluorophenol       | 49         |           | 25-120              |
| Phenol-d6            | 49         |           | 10-120              |
| Nitrobenzene-d5      | 49         |           | 23-120              |
| 2-Fluorobiphenyl     | 56         |           | 30-120              |
| 2,4,6-Tribromophenol | 42         |           | 10-136              |
| 4-Terphenyl-d14      | 40         |           | 18-120              |

Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-06   | Date Collected: | 03/03/23 13:10 |
| Client ID:       | COMPOSITE-02  | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

|                    |                |                    |                |
|--------------------|----------------|--------------------|----------------|
| Matrix:            | Soil           | Extraction Method: | EPA 3546       |
| Analytical Method: | 1,8270E        | Extraction Date:   | 03/09/23 10:36 |
| Analytical Date:   | 03/10/23 07:17 |                    |                |
| Analyst:           | CMM            |                    |                |

Percent Solids: 87%

| Parameter   | Result | Qualifier | Units | RL  | MDL | Dilution Factor |
|---|--------|-----------|-------|-----|-----|-----------------|
| <b>Semivolatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |     |                 |
| Acenaphthene  | 380    | ug/kg     | 150   | 20. | 1   |                 |
| 1,2,4-Trichlorobenzene                                  | ND     | ug/kg     | 190   | 22. | 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   |                 |
| 1,2-Dichlorobenzene                                     | ND     | ug/kg     | 190   | 34. | 1   |                 |
| 1,3-Dichlorobenzene                                     | ND     | ug/kg     | 190   | 32. | 1   |                 |
| 1,4-Dichlorobenzene                                     | ND     | ug/kg     | 190   | 33. | 1   |                 |
| 3,3'-Dichlorobenzidine                                  | ND     | ug/kg     | 190   | 50. | 1   |                 |
| 2,4-Dinitrotoluene                                      | ND     | ug/kg     | 190   | 38. | 1   |                 |
| 2,6-Dinitrotoluene                                      | ND     | ug/kg     | 190   | 32. | 1   |                 |
| Fluoranthene  | 3700   | ug/kg     | 110   | 22. | 1   |                 |
| 4-Chlorophenyl phenyl ether                             | ND     | ug/kg     | 190   | 20. | 1   |                 |
| 4-Bromophenyl phenyl ether                              | ND     | ug/kg     | 190   | 29. | 1   |                 |
| Bis(2-chloroisopropyl)ether                             | ND     | ug/kg     | 230   | 32. | 1   |                 |
| Bis(2-chloroethoxy)methane                              | ND     | ug/kg     | 200   | 19. | 1   |                 |
| Hexachlorobutadiene                                     | ND     | ug/kg     | 190   | 28. | 1   |                 |
| Hexachlorocyclopentadiene                               | ND     | ug/kg     | 540   | 170 | 1   |                 |
| Hexachloroethane  | ND     | ug/kg     | 150   | 31. | 1   |                 |
| Isophorone  | ND     | ug/kg     | 170   | 24. | 1   |                 |
| Naphthalene   | 500    | 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   | 29. | 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   | 64. | 1   |                 |



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-06   | Date Collected: | 03/03/23 13:10 |
| Client ID:       | COMPOSITE-02  | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

| Parameter   | Result | Qualifier | Units | RL  | MDL | Dilution Factor |
|---|--------|-----------|-------|-----|-----|-----------------|
| <b>Semivolatile Organics by GC/MS - Westborough Lab</b> |        |           |       |     |     |                 |
| Diethyl phthalate                                       | ND     |           | ug/kg | 190 | 18. | 1               |
| Dimethyl phthalate                                      | ND     |           | ug/kg | 190 | 40. | 1               |
| Benzo(a)anthracene                                      | 1600   |           | ug/kg | 110 | 21. | 1               |
| Benzo(a)pyrene  | 1600   |           | ug/kg | 150 | 46. | 1               |
| Benzo(b)fluoranthene                                    | 1900   |           | ug/kg | 110 | 32. | 1               |
| Benzo(k)fluoranthene                                    | 710    |           | ug/kg | 110 | 30. | 1               |
| Chrysene  | 1600   |           | ug/kg | 110 | 20. | 1               |
| Acenaphthylene  | 29     | J         | ug/kg | 150 | 29. | 1               |
| Anthracene  | 970    |           | ug/kg | 110 | 37. | 1               |
| Benzo(ghi)perylene                                      | 940    |           | ug/kg | 150 | 22. | 1               |
| Fluorene  | 420    |           | ug/kg | 190 | 18. | 1               |
| Phenanthrene  | 3600   |           | ug/kg | 110 | 23. | 1               |
| Dibenzo(a,h)anthracene                                  | 220    |           | ug/kg | 110 | 22. | 1               |
| Indeno(1,2,3-cd)pyrene                                  | 1000   |           | ug/kg | 150 | 26. | 1               |
| Pyrene  | 3000   |           | ug/kg | 110 | 19. | 1               |
| Biphenyl  | 53     | J         | ug/kg | 430 | 25. | 1               |
| 4-Chloroaniline   | ND     |           | ug/kg | 190 | 34. | 1               |
| 2-Nitroaniline  | ND     |           | ug/kg | 190 | 36. | 1               |
| 3-Nitroaniline  | ND     |           | ug/kg | 190 | 36. | 1               |
| 4-Nitroaniline  | ND     |           | ug/kg | 190 | 78. | 1               |
| Dibenzofuran  | 340    |           | ug/kg | 190 | 18. | 1               |
| 2-Methylnaphthalene                                     | 260    |           | ug/kg | 230 | 23. | 1               |
| 1,2,4,5-Tetrachlorobenzene                              | ND     |           | ug/kg | 190 | 20. | 1               |
| Acetophenone  | ND     |           | ug/kg | 190 | 23. | 1               |
| Benzyl Alcohol  | ND     |           | ug/kg | 190 | 58. | 1               |
| Carbazole   | 350    |           | ug/kg | 190 | 18. | 1               |

| Surrogate            | % Recovery | Qualifier | Acceptance Criteria |
|----------------------|------------|-----------|---------------------|
| 2-Fluorophenol       | 50         |           | 25-120              |
| Phenol-d6            | 51         |           | 10-120              |
| Nitrobenzene-d5      | 51         |           | 23-120              |
| 2-Fluorobiphenyl     | 56         |           | 30-120              |
| 2,4,6-Tribromophenol | 45         |           | 10-136              |
| 4-Terphenyl-d14      | 44         |           | 18-120              |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270E  
Analytical Date: 03/09/23 01:03  
Analyst: SZ

Extraction Method: EPA 3546  
Extraction Date: 03/08/23 13:34

| Parameter   | Result | Qualifier | Units | RL                 | MDL |
|---|--------|-----------|-------|--------------------|-----|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-06 |        |           |       | Batch: WG1752440-1 |     |
| Acenaphthene  | ND     |           | ug/kg | 130                | 17. |
| 1,2,4-Trichlorobenzene  | ND     |           | ug/kg | 160                | 19. |
| Hexachlorobenzene   | ND     |           | ug/kg | 98                 | 18. |
| Bis(2-chloroethyl)ether   | ND     |           | ug/kg | 150                | 22. |
| 2-Chloronaphthalene   | ND     |           | ug/kg | 160                | 16. |
| 1,2-Dichlorobenzene   | ND     |           | ug/kg | 160                | 29. |
| 1,3-Dichlorobenzene   | ND     |           | ug/kg | 160                | 28. |
| 1,4-Dichlorobenzene   | ND     |           | ug/kg | 160                | 29. |
| 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. |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270E  
Analytical Date: 03/09/23 01:03  
Analyst: SZ

Extraction Method: EPA 3546  
Extraction Date: 03/08/23 13:34

| Parameter   | Result | Qualifier | Units  | RL          | MDL |
|---|--------|-----------|--------|-------------|-----|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): | 05-06  |           | Batch: | WG1752440-1 |     |
| 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. |
| 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         | 21. |
| 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. |
| Benzyl Alcohol  | ND     |           | ug/kg  | 160         | 50. |
| Carbazole   | ND     |           | ug/kg  | 160         | 16. |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270E  
Analytical Date: 03/09/23 01:03  
Analyst: SZ

Extraction Method: EPA 3546  
Extraction Date: 03/08/23 13:34

| Parameter  | Result | Qualifier | Units | RL | MDL |
|--|--------|-----------|-------|----|-----|
| Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-06 Batch: WG1752440-1 |        |           |       |    |     |

| Surrogate            | %Recovery | Qualifier | Acceptance Criteria |
|----------------------|-----------|-----------|---------------------|
| 2-Fluorophenol       | 48        |           | 25-120              |
| Phenol-d6            | 48        |           | 10-120              |
| Nitrobenzene-d5      | 45        |           | 23-120              |
| 2-Fluorobiphenyl     | 52        |           | 30-120              |
| 2,4,6-Tribromophenol | 50        |           | 10-136              |
| 4-Terphenyl-d14      | 53        |           | 18-120              |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter   | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|---|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-06 Batch: WG1752440-2 WG1752440-3 |                  |      |                   |      |                     |     |      |               |
| Acenaphthene  | 57               |      | 66                |      | 31-137              | 15  |      | 50            |
| 1,2,4-Trichlorobenzene  | 60               |      | 67                |      | 38-107              | 11  |      | 50            |
| Hexachlorobenzene   | 60               |      | 68                |      | 40-140              | 13  |      | 50            |
| Bis(2-chloroethyl)ether   | 58               |      | 66                |      | 40-140              | 13  |      | 50            |
| 2-Chloronaphthalene   | 61               |      | 68                |      | 40-140              | 11  |      | 50            |
| 1,2-Dichlorobenzene   | 55               |      | 64                |      | 40-140              | 15  |      | 50            |
| 1,3-Dichlorobenzene   | 57               |      | 64                |      | 40-140              | 12  |      | 50            |
| 1,4-Dichlorobenzene   | 56               |      | 64                |      | 28-104              | 13  |      | 50            |
| 3,3'-Dichlorobenzidine  | 37               | Q    | 42                |      | 40-140              | 13  |      | 50            |
| 2,4-Dinitrotoluene  | 60               |      | 68                |      | 40-132              | 13  |      | 50            |
| 2,6-Dinitrotoluene  | 60               |      | 65                |      | 40-140              | 8   |      | 50            |
| Fluoranthene  | 58               |      | 67                |      | 40-140              | 14  |      | 50            |
| 4-Chlorophenyl phenyl ether   | 59               |      | 66                |      | 40-140              | 11  |      | 50            |
| 4-Bromophenyl phenyl ether  | 58               |      | 64                |      | 40-140              | 10  |      | 50            |
| Bis(2-chloroisopropyl)ether   | 44               |      | 51                |      | 40-140              | 15  |      | 50            |
| Bis(2-chloroethoxy)methane  | 59               |      | 65                |      | 40-117              | 10  |      | 50            |
| Hexachlorobutadiene   | 56               |      | 62                |      | 40-140              | 10  |      | 50            |
| Hexachlorocyclopentadiene   | 62               |      | 68                |      | 40-140              | 9   |      | 50            |
| Hexachloroethane  | 50               |      | 57                |      | 40-140              | 13  |      | 50            |
| Isophorone  | 56               |      | 62                |      | 40-140              | 10  |      | 50            |
| Naphthalene   | 60               |      | 66                |      | 40-140              | 10  |      | 50            |
| Nitrobenzene  | 56               |      | 64                |      | 40-140              | 13  |      | 50            |
| NDPA/DPA  | 63               |      | 70                |      | 36-157              | 11  |      | 50            |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter   | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|---|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-06 Batch: WG1752440-2 WG1752440-3 |                  |      |                   |      |                     |     |      |               |
| n-Nitrosodi-n-propylamine   | 56               |      | 65                |      | 32-121              | 15  |      | 50            |
| Bis(2-ethylhexyl)phthalate  | 59               |      | 70                |      | 40-140              | 17  |      | 50            |
| Butyl benzyl phthalate  | 62               |      | 69                |      | 40-140              | 11  |      | 50            |
| Di-n-butylphthalate   | 61               |      | 70                |      | 40-140              | 14  |      | 50            |
| Di-n-octylphthalate   | 58               |      | 69                |      | 40-140              | 17  |      | 50            |
| Diethyl phthalate   | 59               |      | 68                |      | 40-140              | 14  |      | 50            |
| Dimethyl phthalate  | 60               |      | 69                |      | 40-140              | 14  |      | 50            |
| Benzo(a)anthracene  | 55               |      | 65                |      | 40-140              | 17  |      | 50            |
| Benzo(a)pyrene  | 54               |      | 65                |      | 40-140              | 18  |      | 50            |
| Benzo(b)fluoranthene  | 51               |      | 62                |      | 40-140              | 19  |      | 50            |
| Benzo(k)fluoranthene  | 56               |      | 64                |      | 40-140              | 13  |      | 50            |
| Chrysene  | 54               |      | 64                |      | 40-140              | 17  |      | 50            |
| Acenaphthylene  | 64               |      | 71                |      | 40-140              | 10  |      | 50            |
| Anthracene  | 59               |      | 68                |      | 40-140              | 14  |      | 50            |
| Benzo(ghi)perylene  | 53               |      | 64                |      | 40-140              | 19  |      | 50            |
| Fluorene  | 58               |      | 67                |      | 40-140              | 14  |      | 50            |
| Phenanthrene  | 57               |      | 66                |      | 40-140              | 15  |      | 50            |
| Dibenzo(a,h)anthracene  | 56               |      | 66                |      | 40-140              | 16  |      | 50            |
| Indeno(1,2,3-cd)pyrene  | 62               |      | 71                |      | 40-140              | 14  |      | 50            |
| Pyrene  | 59               |      | 67                |      | 35-142              | 13  |      | 50            |
| Biphenyl  | 61               |      | 69                |      | 37-127              | 12  |      | 50            |
| 4-Chloroaniline   | 50               |      | 54                |      | 40-140              | 8   |      | 50            |
| 2-Nitroaniline  | 61               |      | 70                |      | 47-134              | 14  |      | 50            |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter   | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits |
|---|------------------|------|-------------------|------|---------------------|-----|------|---------------|
| Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-06 Batch: WG1752440-2 WG1752440-3 |                  |      |                   |      |                     |     |      |               |
| 3-Nitroaniline  | 40               |      | 48                |      | 26-129              | 18  |      | 50            |
| 4-Nitroaniline  | 64               |      | 71                |      | 41-125              | 10  |      | 50            |
| Dibenzofuran  | 60               |      | 67                |      | 40-140              | 11  |      | 50            |
| 2-Methylnaphthalene   | 59               |      | 65                |      | 40-140              | 10  |      | 50            |
| 1,2,4,5-Tetrachlorobenzene  | 59               |      | 66                |      | 40-117              | 11  |      | 50            |
| Acetophenone  | 65               |      | 72                |      | 14-144              | 10  |      | 50            |
| Benzyl Alcohol  | 61               |      | 70                |      | 40-140              | 14  |      | 50            |
| Carbazole   | 60               |      | 68                |      | 54-128              | 13  |      | 50            |

| Surrogate            | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | Acceptance<br>Criteria |
|----------------------|------------------|------|-------------------|------|------------------------|
| 2-Fluorophenol       | 60               |      | 69                |      | 25-120                 |
| Phenol-d6            | 58               |      | 67                |      | 10-120                 |
| Nitrobenzene-d5      | 56               |      | 62                |      | 23-120                 |
| 2-Fluorobiphenyl     | 60               |      | 68                |      | 30-120                 |
| 2,4,6-Tribromophenol | 60               |      | 69                |      | 10-136                 |
| 4-Terphenyl-d14      | 60               |      | 67                |      | 18-120                 |

**PCBS**



Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

Lab ID: L2311903-01  
 Client ID: GP-02  
 Sample Location: Not Specified

Date Collected: 03/03/23 10:30  
 Date Received: 03/07/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8082A  
 Analytical Date: 03/10/23 09:56  
 Analyst: MEO  
 Percent Solids: 88%

Extraction Method: EPA 3546  
 Extraction Date: 03/09/23 10:31  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 03/09/23  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 03/10/23

| Parameter  | Result | Qualifier | Units | RL   | MDL  | Dilution Factor | Column |
|--|--------|-----------|-------|------|------|-----------------|--------|
| <b>Polychlorinated Biphenyls by GC - Westborough Lab</b> |        |           |       |      |      |                 |        |
| Aroclor 1016   | ND     |           | ug/kg | 37.5 | 3.33 | 1               | A      |
| Aroclor 1221   | ND     |           | ug/kg | 37.5 | 3.76 | 1               | A      |
| Aroclor 1232   | ND     |           | ug/kg | 37.5 | 7.95 | 1               | A      |
| Aroclor 1242   | ND     |           | ug/kg | 37.5 | 5.06 | 1               | A      |
| Aroclor 1248   | ND     |           | ug/kg | 37.5 | 5.62 | 1               | A      |
| Aroclor 1254   | ND     |           | ug/kg | 37.5 | 4.10 | 1               | A      |
| Aroclor 1260   | ND     |           | ug/kg | 37.5 | 6.93 | 1               | A      |
| Aroclor 1262   | ND     |           | ug/kg | 37.5 | 4.76 | 1               | A      |
| Aroclor 1268   | ND     |           | ug/kg | 37.5 | 3.88 | 1               | A      |
| PCBs, Total  | ND     |           | ug/kg | 37.5 | 3.33 | 1               | A      |

| Surrogate                    | % Recovery | Qualifier | Acceptance Criteria | Column |
|------------------------------|------------|-----------|---------------------|--------|
| 2,4,5,6-Tetrachloro-m-xylene | 61         |           | 30-150              | A      |
| Decachlorobiphenyl           | 58         |           | 30-150              | A      |
| 2,4,5,6-Tetrachloro-m-xylene | 52         |           | 30-150              | B      |
| Decachlorobiphenyl           | 59         |           | 30-150              | B      |

Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

Lab ID: L2311903-04  
 Client ID: GP-08  
 Sample Location: Not Specified

Date Collected: 03/03/23 13:05  
 Date Received: 03/07/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8082A  
 Analytical Date: 03/10/23 09:46  
 Analyst: MEO  
 Percent Solids: 89%

Extraction Method: EPA 3546  
 Extraction Date: 03/09/23 10:31  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 03/09/23  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 03/10/23

| Parameter  | Result | Qualifier | Units | RL   | MDL  | Dilution Factor | Column |
|--|--------|-----------|-------|------|------|-----------------|--------|
| <b>Polychlorinated Biphenyls by GC - Westborough Lab</b> |        |           |       |      |      |                 |        |
| Aroclor 1016   | ND     |           | ug/kg | 36.7 | 3.26 | 1               | A      |
| Aroclor 1221   | ND     |           | ug/kg | 36.7 | 3.67 | 1               | A      |
| Aroclor 1232   | ND     |           | ug/kg | 36.7 | 7.77 | 1               | A      |
| Aroclor 1242   | ND     |           | ug/kg | 36.7 | 4.94 | 1               | A      |
| Aroclor 1248   | ND     |           | ug/kg | 36.7 | 5.50 | 1               | A      |
| Aroclor 1254   | ND     |           | ug/kg | 36.7 | 4.01 | 1               | A      |
| Aroclor 1260   | ND     |           | ug/kg | 36.7 | 6.78 | 1               | A      |
| Aroclor 1262   | ND     |           | ug/kg | 36.7 | 4.66 | 1               | A      |
| Aroclor 1268   | ND     |           | ug/kg | 36.7 | 3.80 | 1               | A      |
| PCBs, Total  | ND     |           | ug/kg | 36.7 | 3.26 | 1               | A      |

| Surrogate                    | % Recovery | Qualifier | Acceptance Criteria | Column |
|------------------------------|------------|-----------|---------------------|--------|
| 2,4,5,6-Tetrachloro-m-xylene | 60         |           | 30-150              | A      |
| Decachlorobiphenyl           | 54         |           | 30-150              | A      |
| 2,4,5,6-Tetrachloro-m-xylene | 51         |           | 30-150              | B      |
| Decachlorobiphenyl           | 55         |           | 30-150              | B      |

Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

Lab ID: L2311903-08  
 Client ID: GPMW-05  
 Sample Location: Not Specified

Date Collected: 03/06/23 15:35  
 Date Received: 03/07/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 03/13/23 10:18  
 Analyst: AD

Extraction Method: EPA 3510C  
 Extraction Date: 03/13/23 00:06  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 03/13/23  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 03/13/23

| Parameter  | Result | Qualifier | Units | RL    | MDL   | Dilution Factor | Column |
|--|--------|-----------|-------|-------|-------|-----------------|--------|
| <b>Polychlorinated Biphenyls by GC - Westborough Lab</b> |        |           |       |       |       |                 |        |
| Aroclor 1016   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1221   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1232   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1242   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1248   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1254   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1260   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1262   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1268   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| PCBs, Total  | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |

| Surrogate                    | % Recovery | Qualifier | Acceptance Criteria | Column |
|------------------------------|------------|-----------|---------------------|--------|
| 2,4,5,6-Tetrachloro-m-xylene | 57         |           | 30-150              | A      |
| Decachlorobiphenyl           | 54         |           | 30-150              | A      |
| 2,4,5,6-Tetrachloro-m-xylene | 49         |           | 30-150              | B      |
| Decachlorobiphenyl           | 48         |           | 30-150              | B      |

Project Name: LEIGHTON AVENUE

Lab Number: L2311903

Project Number: 50527-01

Report Date: 03/14/23

**SAMPLE RESULTS**

Lab ID: L2311903-09  
 Client ID: GPMW-10  
 Sample Location: Not Specified

Date Collected: 03/06/23 15:00  
 Date Received: 03/07/23  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8082A  
 Analytical Date: 03/13/23 10:27  
 Analyst: AD

Extraction Method: EPA 3510C  
 Extraction Date: 03/13/23 00:06  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 03/13/23  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 03/13/23

| Parameter  | Result | Qualifier | Units | RL    | MDL   | Dilution Factor | Column |
|--|--------|-----------|-------|-------|-------|-----------------|--------|
| <b>Polychlorinated Biphenyls by GC - Westborough Lab</b> |        |           |       |       |       |                 |        |
| Aroclor 1016   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1221   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1232   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1242   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1248   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1254   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1260   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1262   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| Aroclor 1268   | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |
| PCBs, Total  | ND     |           | ug/l  | 0.036 | 0.031 | 1               | A      |

| Surrogate                    | % Recovery | Qualifier | Acceptance Criteria | Column |
|------------------------------|------------|-----------|---------------------|--------|
| 2,4,5,6-Tetrachloro-m-xylene | 60         |           | 30-150              | A      |
| Decachlorobiphenyl           | 59         |           | 30-150              | A      |
| 2,4,5,6-Tetrachloro-m-xylene | 56         |           | 30-150              | B      |
| Decachlorobiphenyl           | 60         |           | 30-150              | B      |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8082A  
Analytical Date: 03/09/23 18:15  
Analyst: JM

Extraction Method: EPA 3546  
Extraction Date: 03/09/23 05:18  
Cleanup Method: EPA 3665A  
Cleanup Date: 03/09/23  
Cleanup Method: EPA 3660B  
Cleanup Date: 03/09/23

| Parameter  | Result | Qualifier | Units | RL     | MDL         | Column |
|--|--------|-----------|-------|--------|-------------|--------|
| Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): | 01,04  |           |       | Batch: | WG1752629-1 |        |
| Aroclor 1016   | ND     |           | ug/kg | 32.2   | 2.86        | A      |
| Aroclor 1221   | ND     |           | ug/kg | 32.2   | 3.22        | A      |
| Aroclor 1232   | ND     |           | ug/kg | 32.2   | 6.82        | A      |
| Aroclor 1242   | ND     |           | ug/kg | 32.2   | 4.34        | A      |
| Aroclor 1248   | ND     |           | ug/kg | 32.2   | 4.83        | A      |
| Aroclor 1254   | ND     |           | ug/kg | 32.2   | 3.52        | A      |
| Aroclor 1260   | ND     |           | ug/kg | 32.2   | 5.94        | A      |
| Aroclor 1262   | ND     |           | ug/kg | 32.2   | 4.09        | A      |
| Aroclor 1268   | ND     |           | ug/kg | 32.2   | 3.33        | A      |
| PCBs, Total  | ND     |           | ug/kg | 32.2   | 2.86        | A      |

| Surrogate                    | %Recovery | Acceptance |          |        |
|------------------------------|-----------|------------|----------|--------|
|                              |           | Qualifier  | Criteria | Column |
| 2,4,5,6-Tetrachloro-m-xylene | 90        |            | 30-150   | A      |
| Decachlorobiphenyl           | 77        |            | 30-150   | A      |
| 2,4,5,6-Tetrachloro-m-xylene | 92        |            | 30-150   | B      |
| Decachlorobiphenyl           | 79        |            | 30-150   | B      |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8082A  
Analytical Date: 03/13/23 09:50  
Analyst: AD

Extraction Method: EPA 3510C  
Extraction Date: 03/13/23 00:06  
Cleanup Method: EPA 3665A  
Cleanup Date: 03/13/23  
Cleanup Method: EPA 3660B  
Cleanup Date: 03/13/23

| Parameter  | Result | Qualifier | Units | RL     | MDL         | Column |
|--|--------|-----------|-------|--------|-------------|--------|
| Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): | 08-09  |           |       | Batch: | WG1753868-1 |        |
| Aroclor 1016   | ND     |           | ug/l  | 0.036  | 0.031       | A      |
| Aroclor 1221   | ND     |           | ug/l  | 0.036  | 0.031       | A      |
| Aroclor 1232   | ND     |           | ug/l  | 0.036  | 0.031       | A      |
| Aroclor 1242   | ND     |           | ug/l  | 0.036  | 0.031       | A      |
| Aroclor 1248   | ND     |           | ug/l  | 0.036  | 0.031       | A      |
| Aroclor 1254   | ND     |           | ug/l  | 0.036  | 0.031       | A      |
| Aroclor 1260   | ND     |           | ug/l  | 0.036  | 0.031       | A      |
| Aroclor 1262   | ND     |           | ug/l  | 0.036  | 0.031       | A      |
| Aroclor 1268   | ND     |           | ug/l  | 0.036  | 0.031       | A      |
| PCBs, Total  | ND     |           | ug/l  | 0.036  | 0.031       | A      |

| Surrogate                    | %Recovery | Acceptance |          |        |
|------------------------------|-----------|------------|----------|--------|
|                              |           | Qualifier  | Criteria | Column |
| 2,4,5,6-Tetrachloro-m-xylene | 60        |            | 30-150   | A      |
| Decachlorobiphenyl           | 60        |            | 30-150   | A      |
| 2,4,5,6-Tetrachloro-m-xylene | 56        |            | 30-150   | B      |
| Decachlorobiphenyl           | 62        |            | 30-150   | B      |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter  | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD<br>Limits | Column |
|--|------------------|------|-------------------|------|---------------------|-----|------|---------------|--------|
| Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01,04 Batch: WG1752629-2 WG1752629-3 |                  |      |                   |      |                     |     |      |               |        |
| Aroclor 1016   | 80               |      | 80                |      | 40-140              | 0   |      | 50            | A      |
| Aroclor 1260   | 67               |      | 66                |      | 40-140              | 2   |      | 50            | A      |

| Surrogate                    | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | Acceptance<br>Criteria | Column |
|------------------------------|------------------|------|-------------------|------|------------------------|--------|
| 2,4,5,6-Tetrachloro-m-xylene | 92               |      | 89                |      | 30-150                 | A      |
| Decachlorobiphenyl           | 79               |      | 84                |      | 30-150                 | A      |
| 2,4,5,6-Tetrachloro-m-xylene | 91               |      | 86                |      | 30-150                 | B      |
| Decachlorobiphenyl           | 78               |      | 74                |      | 30-150                 | B      |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| <b>Parameter</b>   | <i>LCS</i><br>%Recovery | <i>Qual</i> | <i>LCSD</i><br>%Recovery | <i>Qual</i> | <i>%Recovery</i><br><i>Limits</i> | <i>RPD</i> | <i>Qual</i> | <i>RPD</i><br><i>Limits</i> | <i>Column</i> |
|--|-------------------------|-------------|--------------------------|-------------|-----------------------------------|------------|-------------|-----------------------------|---------------|
| Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 08-09 Batch: WG1753868-2 WG1753868-3 |                         |             |                          |             |                                   |            |             |                             |               |
| Aroclor 1016   | 53                      |             | 57                       |             | 40-140                            | 7          |             | 50                          | A             |
| Aroclor 1260   | 56                      |             | 55                       |             | 40-140                            | 2          |             | 50                          | A             |

| <b>Surrogate</b>             | <i>LCS</i><br>%Recovery | <i>Qual</i> | <i>LCSD</i><br>%Recovery | <i>Qual</i> | <i>Acceptance</i><br><i>Criteria</i> | <i>Column</i> |
|------------------------------|-------------------------|-------------|--------------------------|-------------|--------------------------------------|---------------|
| 2,4,5,6-Tetrachloro-m-xylene | 63                      | 64          | 30-150                   | A           |                                      |               |
| Decachlorobiphenyl           | 64                      |             | 65                       |             | 30-150                               | A             |
| 2,4,5,6-Tetrachloro-m-xylene | 57                      |             | 58                       |             | 30-150                               | B             |
| Decachlorobiphenyl           | 67                      |             | 68                       |             | 30-150                               | B             |

## METALS



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**SAMPLE RESULTS**

Lab ID: L2311903-05  
Client ID: COMPOSITE-01  
Sample Location: Not Specified

Date Collected: 03/03/23 10:45  
Date Received: 03/07/23  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 83%

| Parameter                           | Result | Qualifier | Units | RL    | MDL   | Dilution Factor | Date Prepared  | Date Analyzed  | Prep Method | Analytical Method | Analyst |
|-------------------------------------|--------|-----------|-------|-------|-------|-----------------|----------------|----------------|-------------|-------------------|---------|
| <b>Total Metals - Mansfield Lab</b> |        |           |       |       |       |                 |                |                |             |                   |         |
| Arsenic, Total                      | 5.38   |           | mg/kg | 0.474 | 0.099 | 1               | 03/10/23 06:30 | 03/10/23 19:33 | EPA 3050B   | 1,6010D           | MRC     |
| Barium, Total                       | 30.1   |           | mg/kg | 0.474 | 0.082 | 1               | 03/10/23 06:30 | 03/10/23 19:33 | EPA 3050B   | 1,6010D           | MRC     |
| Cadmium, Total                      | 0.079  | J         | mg/kg | 0.474 | 0.046 | 1               | 03/10/23 06:30 | 03/10/23 19:33 | EPA 3050B   | 1,6010D           | MRC     |
| Chromium, Total                     | 10.3   |           | mg/kg | 0.474 | 0.046 | 1               | 03/10/23 06:30 | 03/10/23 19:33 | EPA 3050B   | 1,6010D           | MRC     |
| Lead, Total                         | 16.0   |           | mg/kg | 2.37  | 0.127 | 1               | 03/10/23 06:30 | 03/10/23 19:33 | EPA 3050B   | 1,6010D           | MRC     |
| Mercury, Total                      | 0.133  |           | mg/kg | 0.077 | 0.050 | 1               | 03/10/23 10:10 | 03/10/23 14:25 | EPA 7471B   | 1,7471B           | DMB     |
| Selenium, Total                     | ND     |           | mg/kg | 0.947 | 0.122 | 1               | 03/10/23 06:30 | 03/10/23 19:33 | EPA 3050B   | 1,6010D           | MRC     |
| Silver, Total                       | ND     |           | mg/kg | 0.237 | 0.134 | 1               | 03/10/23 06:30 | 03/10/23 19:33 | EPA 3050B   | 1,6010D           | MRC     |



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**SAMPLE RESULTS**

Lab ID: L2311903-06  
Client ID: COMPOSITE-02  
Sample Location: Not Specified

Date Collected: 03/03/23 13:10  
Date Received: 03/07/23  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 87%

| Parameter                           | Result | Qualifier | Units | RL    | MDL   | Dilution Factor | Date Prepared  | Date Analyzed  | Prep Method | Analytical Method | Analyst |
|-------------------------------------|--------|-----------|-------|-------|-------|-----------------|----------------|----------------|-------------|-------------------|---------|
| <b>Total Metals - Mansfield Lab</b> |        |           |       |       |       |                 |                |                |             |                   |         |
| Arsenic, Total                      | 6.96   |           | mg/kg | 0.451 | 0.094 | 1               | 03/10/23 06:30 | 03/10/23 19:38 | EPA 3050B   | 1,6010D           | MRC     |
| Barium, Total                       | 88.5   |           | mg/kg | 0.451 | 0.079 | 1               | 03/10/23 06:30 | 03/10/23 19:38 | EPA 3050B   | 1,6010D           | MRC     |
| Cadmium, Total                      | 0.329  | J         | mg/kg | 0.451 | 0.044 | 1               | 03/10/23 06:30 | 03/10/23 19:38 | EPA 3050B   | 1,6010D           | MRC     |
| Chromium, Total                     | 37.1   |           | mg/kg | 0.451 | 0.043 | 1               | 03/10/23 06:30 | 03/10/23 19:38 | EPA 3050B   | 1,6010D           | MRC     |
| Lead, Total                         | 130    |           | mg/kg | 2.26  | 0.121 | 1               | 03/10/23 06:30 | 03/10/23 19:38 | EPA 3050B   | 1,6010D           | MRC     |
| Mercury, Total                      | 0.064  | J         | mg/kg | 0.073 | 0.048 | 1               | 03/10/23 10:10 | 03/10/23 14:28 | EPA 7471B   | 1,7471B           | DMB     |
| Selenium, Total                     | 0.798  | J         | mg/kg | 0.902 | 0.116 | 1               | 03/10/23 06:30 | 03/10/23 19:38 | EPA 3050B   | 1,6010D           | MRC     |
| Silver, Total                       | ND     |           | mg/kg | 0.226 | 0.128 | 1               | 03/10/23 06:30 | 03/10/23 19:38 | EPA 3050B   | 1,6010D           | MRC     |



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-08   | Date Collected: | 03/06/23 15:35 |
| Client ID:       | GPMW-05       | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

Matrix: Water

| Parameter                           | Result  | Qualifier | Units | RL      | MDL     | Dilution Factor | Date Prepared  | Date Analyzed  | Prep Method | Analytical Method | Analyst |
|-------------------------------------|---------|-----------|-------|---------|---------|-----------------|----------------|----------------|-------------|-------------------|---------|
| <b>Total Metals - Mansfield Lab</b> |         |           |       |         |         |                 |                |                |             |                   |         |
| Arsenic, Total                      | 0.00672 |           | mg/l  | 0.00050 | 0.00016 | 1               | 03/13/23 08:18 | 03/13/23 20:17 | EPA 3005A   | 1,6020B           | NTB     |
| Barium, Total                       | 0.3787  |           | mg/l  | 0.00050 | 0.00017 | 1               | 03/13/23 08:18 | 03/13/23 20:17 | EPA 3005A   | 1,6020B           | NTB     |
| Cadmium, Total                      | 0.00126 |           | mg/l  | 0.00020 | 0.00005 | 1               | 03/13/23 08:18 | 03/13/23 20:17 | EPA 3005A   | 1,6020B           | NTB     |
| Chromium, Total                     | 0.01181 |           | mg/l  | 0.00100 | 0.00017 | 1               | 03/13/23 08:18 | 03/13/23 20:17 | EPA 3005A   | 1,6020B           | NTB     |
| Lead, Total                         | 0.06603 |           | mg/l  | 0.00100 | 0.00034 | 1               | 03/13/23 08:18 | 03/13/23 20:17 | EPA 3005A   | 1,6020B           | NTB     |
| Mercury, Total                      | 0.00014 | J         | mg/l  | 0.00020 | 0.00009 | 1               | 03/13/23 08:50 | 03/13/23 15:20 | EPA 7470A   | 1,7470A           | ZNK     |
| Selenium, Total                     | 0.0147  |           | mg/l  | 0.00500 | 0.00173 | 1               | 03/13/23 08:18 | 03/13/23 20:17 | EPA 3005A   | 1,6020B           | NTB     |
| Silver, Total                       | ND      |           | mg/l  | 0.00040 | 0.00016 | 1               | 03/13/23 08:18 | 03/13/23 20:17 | EPA 3005A   | 1,6020B           | NTB     |



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

**SAMPLE RESULTS**

|                  |               |                 |                |
|------------------|---------------|-----------------|----------------|
| Lab ID:          | L2311903-09   | Date Collected: | 03/06/23 15:00 |
| Client ID:       | GPMW-10       | Date Received:  | 03/07/23       |
| Sample Location: | Not Specified | Field Prep:     | Not Specified  |

Sample Depth:

Matrix: Water

| Parameter                           | Result  | Qualifier | Units | RL      | MDL     | Dilution Factor | Date Prepared  | Date Analyzed  | Prep Method | Analytical Method | Analyst |
|-------------------------------------|---------|-----------|-------|---------|---------|-----------------|----------------|----------------|-------------|-------------------|---------|
| <b>Total Metals - Mansfield Lab</b> |         |           |       |         |         |                 |                |                |             |                   |         |
| Arsenic, Total                      | 0.00240 |           | mg/l  | 0.00050 | 0.00016 | 1               | 03/13/23 08:18 | 03/13/23 20:22 | EPA 3005A   | 1,6020B           | NTB     |
| Barium, Total                       | 0.1180  |           | mg/l  | 0.00050 | 0.00017 | 1               | 03/13/23 08:18 | 03/13/23 20:22 | EPA 3005A   | 1,6020B           | NTB     |
| Cadmium, Total                      | 0.00032 |           | mg/l  | 0.00020 | 0.00005 | 1               | 03/13/23 08:18 | 03/13/23 20:22 | EPA 3005A   | 1,6020B           | NTB     |
| Chromium, Total                     | 0.00478 |           | mg/l  | 0.00100 | 0.00017 | 1               | 03/13/23 08:18 | 03/13/23 20:22 | EPA 3005A   | 1,6020B           | NTB     |
| Lead, Total                         | 0.00421 |           | mg/l  | 0.00100 | 0.00034 | 1               | 03/13/23 08:18 | 03/13/23 20:22 | EPA 3005A   | 1,6020B           | NTB     |
| Mercury, Total                      | ND      |           | mg/l  | 0.00020 | 0.00009 | 1               | 03/13/23 08:50 | 03/13/23 15:32 | EPA 7470A   | 1,7470A           | ZNK     |
| Selenium, Total                     | 0.00496 | J         | mg/l  | 0.00500 | 0.00173 | 1               | 03/13/23 08:18 | 03/13/23 20:22 | EPA 3005A   | 1,6020B           | NTB     |
| Silver, Total                       | ND      |           | mg/l  | 0.00040 | 0.00016 | 1               | 03/13/23 08:18 | 03/13/23 20:22 | EPA 3005A   | 1,6020B           | NTB     |



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

## 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): 05-06 Batch: WG1752937-1</b> |                  |       |       |       |                 |                |                |                   |         |     |
| Arsenic, Total  | ND               | mg/kg | 0.400 | 0.083 | 1               | 03/10/23 06:30 | 03/10/23 17:05 | 1,6010D           | MRC     |     |
| Barium, Total   | ND               | mg/kg | 0.400 | 0.070 | 1               | 03/10/23 06:30 | 03/10/23 17:05 | 1,6010D           | MRC     |     |
| Cadmium, Total  | ND               | mg/kg | 0.400 | 0.039 | 1               | 03/10/23 06:30 | 03/10/23 17:05 | 1,6010D           | MRC     |     |
| Chromium, Total   | 0.148            | J     | mg/kg | 0.400 | 0.038           | 1              | 03/10/23 06:30 | 03/10/23 17:05    | 1,6010D | MRC |
| Lead, Total   | ND               | mg/kg | 2.00  | 0.107 | 1               | 03/10/23 06:30 | 03/10/23 17:05 | 1,6010D           | MRC     |     |
| Selenium, Total   | ND               | mg/kg | 0.800 | 0.103 | 1               | 03/10/23 06:30 | 03/10/23 17:05 | 1,6010D           | MRC     |     |
| Silver, Total   | ND               | mg/kg | 0.200 | 0.113 | 1               | 03/10/23 06:30 | 03/10/23 17:05 | 1,6010D           | MRC     |     |

### Prep Information

Digestion Method: EPA 3050B

| Parameter   | Result Qualifier | Units | RL    | MDL   | Dilution Factor | Date Prepared  | Date Analyzed  | Analytical Method | Analyst |
|---|------------------|-------|-------|-------|-----------------|----------------|----------------|-------------------|---------|
| <b>Total Metals - Mansfield Lab for sample(s): 05-06 Batch: WG1752938-1</b> |                  |       |       |       |                 |                |                |                   |         |
| Mercury, Total  | ND               | mg/kg | 0.083 | 0.054 | 1               | 03/10/23 10:10 | 03/10/23 13:35 | 1,7471B           | DMB     |

### Prep Information

Digestion Method: EPA 7471B

| Parameter   | Result Qualifier | Units | RL      | MDL     | Dilution Factor | Date Prepared  | Date Analyzed  | Analytical Method | Analyst |
|---|------------------|-------|---------|---------|-----------------|----------------|----------------|-------------------|---------|
| <b>Total Metals - Mansfield Lab for sample(s): 08-09 Batch: WG1753333-1</b> |                  |       |         |         |                 |                |                |                   |         |
| Arsenic, Total  | ND               | mg/l  | 0.00050 | 0.00016 | 1               | 03/13/23 08:18 | 03/13/23 18:30 | 1,6020B           | NTB     |
| Barium, Total   | ND               | mg/l  | 0.00050 | 0.00017 | 1               | 03/13/23 08:18 | 03/13/23 18:30 | 1,6020B           | NTB     |
| Cadmium, Total  | ND               | mg/l  | 0.00020 | 0.00005 | 1               | 03/13/23 08:18 | 03/13/23 18:30 | 1,6020B           | NTB     |
| Chromium, Total   | ND               | mg/l  | 0.00100 | 0.00017 | 1               | 03/13/23 08:18 | 03/13/23 18:30 | 1,6020B           | NTB     |
| Lead, Total   | ND               | mg/l  | 0.00100 | 0.00034 | 1               | 03/13/23 08:18 | 03/13/23 18:30 | 1,6020B           | NTB     |
| Selenium, Total   | ND               | mg/l  | 0.00500 | 0.00173 | 1               | 03/13/23 08:18 | 03/13/23 18:30 | 1,6020B           | NTB     |
| Silver, Total   | ND               | mg/l  | 0.00040 | 0.00016 | 1               | 03/13/23 08:18 | 03/13/23 18:30 | 1,6020B           | NTB     |



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

## Method Blank Analysis Batch Quality Control

### **Prep Information**

Digestion Method: EPA 3005A

| Parameter  | Result Qualifier | Units | RL      | MDL     | Dilution Factor | Date Prepared  | Date Analyzed  | Analytical Method | Analyst |
|--|------------------|-------|---------|---------|-----------------|----------------|----------------|-------------------|---------|
| Total Metals - Mansfield Lab for sample(s): 08-09 Batch: WG1753334-1 |                  |       |         |         |                 |                |                |                   |         |
| Mercury, Total   | ND               | mg/l  | 0.00020 | 0.00009 | 1               | 03/13/23 08:50 | 03/13/23 15:00 | 1,7470A           | ZNK     |

### **Prep Information**

Digestion Method: EPA 7470A



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter   | LCS<br>%Recovery | Qual | LCSD<br>%Recovery | Qual | %Recovery<br>Limits | RPD | Qual | RPD Limits |
|---|------------------|------|-------------------|------|---------------------|-----|------|------------|
| <b>Total Metals - Mansfield Lab</b> Associated sample(s): 05-06 Batch: WG1752937-2 SRM Lot Number: D116-540 |                  |      |                   |      |                     |     |      |            |
| Arsenic, Total  | 100              | -    | -                 | -    | 82-119              | -   | -    | -          |
| Barium, Total   | 92               | -    | -                 | -    | 82-118              | -   | -    | -          |
| Cadmium, Total  | 101              | -    | -                 | -    | 82-118              | -   | -    | -          |
| Chromium, Total   | 98               | -    | -                 | -    | 81-118              | -   | -    | -          |
| Lead, Total   | 97               | -    | -                 | -    | 83-117              | -   | -    | -          |
| Selenium, Total   | 100              | -    | -                 | -    | 78-122              | -   | -    | -          |
| Silver, Total   | 95               | -    | -                 | -    | 79-121              | -   | -    | -          |
| <b>Total Metals - Mansfield Lab</b> Associated sample(s): 05-06 Batch: WG1752938-2 SRM Lot Number: D116-540 |                  |      |                   |      |                     |     |      |            |
| Mercury, Total  | 98               | -    | -                 | -    | 58-142              | -   | -    | -          |
| <b>Total Metals - Mansfield Lab</b> Associated sample(s): 08-09 Batch: WG1753333-2                          |                  |      |                   |      |                     |     |      |            |
| Arsenic, Total  | 104              | -    | -                 | -    | 80-120              | -   | -    | -          |
| Barium, Total   | 102              | -    | -                 | -    | 80-120              | -   | -    | -          |
| Cadmium, Total  | 106              | -    | -                 | -    | 80-120              | -   | -    | -          |
| Chromium, Total   | 100              | -    | -                 | -    | 80-120              | -   | -    | -          |
| Lead, Total   | 102              | -    | -                 | -    | 80-120              | -   | -    | -          |
| Selenium, Total   | 106              | -    | -                 | -    | 80-120              | -   | -    | -          |
| Silver, Total   | 105              | -    | -                 | -    | 80-120              | -   | -    | -          |

**Lab Control Sample Analysis**  
**Batch Quality Control**

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter   | LCS<br>%Recovery | LCSD<br>%Recovery | %Recovery<br>Limits | RPD | RPD Limits |
|---|------------------|-------------------|---------------------|-----|------------|
| Total Metals - Mansfield Lab Associated sample(s): 08-09 Batch: WG1753334-2 |                  |                   |                     |     |            |
| Mercury, Total  | 99               | -                 | 80-120              | -   | -          |

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter  | Native Sample | MS Added | MS Found | MS %Recovery | Qual    | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|--|---------------|----------|----------|--------------|---------|-----------|---------------|------|-----------------|-----|------|------------|
| <b>Total Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1752937-3 QC Sample: L2312292-01 Client ID: MS Sample</b>             |               |          |          |              |         |           |               |      |                 |     |      |            |
| Arsenic, Total   | 2.46          | 9.83     | 12.9     | 106          | -       | -         | -             | -    | 75-125          | -   | -    | 20         |
| Barium, Total  | 33.0          | 164      | 195      | 99           | -       | -         | -             | -    | 75-125          | -   | -    | 20         |
| Cadmium, Total   | 0.062J        | 4.34     | 4.55     | 105          | -       | -         | -             | -    | 75-125          | -   | -    | 20         |
| Chromium, Total  | 4.96          | 16.4     | 22.0     | 104          | -       | -         | -             | -    | 75-125          | -   | -    | 20         |
| Lead, Total  | 5.85          | 43.4     | 49.2     | 100          | -       | -         | -             | -    | 75-125          | -   | -    | 20         |
| Selenium, Total  | ND            | 9.83     | 9.94     | 101          | -       | -         | -             | -    | 75-125          | -   | -    | 20         |
| Silver, Total  | ND            | 4.1      | 4.18     | 102          | -       | -         | -             | -    | 75-125          | -   | -    | 20         |
| <b>Total Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1752938-3 QC Sample: L2312292-01 Client ID: MS Sample</b>             |               |          |          |              |         |           |               |      |                 |     |      |            |
| Mercury, Total   | ND            | 1.31     | 1.35     | 103          | -       | -         | -             | -    | 80-120          | -   | -    | 20         |
| <b>Total Metals - Mansfield Lab Associated sample(s): 08-09 QC Batch ID: WG1753333-3 WG1753333-4 QC Sample: L2312222-02 Client ID: MS Sample</b> |               |          |          |              |         |           |               |      |                 |     |      |            |
| Arsenic, Total   | 0.00040J      | 0.12     | 0.1267   | 106          | 0.1269  | 106       | -             | -    | 75-125          | 0   | -    | 20         |
| Barium, Total  | 0.6765        | 2        | 2.675    | 100          | 2.752   | 104       | -             | -    | 75-125          | 3   | -    | 20         |
| Cadmium, Total   | ND            | 0.053    | 0.05577  | 105          | 0.05764 | 109       | -             | -    | 75-125          | 3   | -    | 20         |
| Chromium, Total  | 0.00116       | 0.2      | 0.2020   | 100          | 0.2029  | 101       | -             | -    | 75-125          | 0   | -    | 20         |
| Lead, Total  | 0.00128       | 0.53     | 0.5407   | 102          | 0.5528  | 104       | -             | -    | 75-125          | 2   | -    | 20         |
| Selenium, Total  | ND            | 0.12     | 0.126    | 105          | 0.130   | 108       | -             | -    | 75-125          | 3   | -    | 20         |
| Silver, Total  | ND            | 0.05     | 0.05166  | 103          | 0.05224 | 104       | -             | -    | 75-125          | 1   | -    | 20         |

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter  | Native Sample | MS Added | MS Found | MS %Recovery | MSD Found | MSD %Recovery | Recovery Limits | RPD | RPD Limits |
|--|---------------|----------|----------|--------------|-----------|---------------|-----------------|-----|------------|
| <b>Total Metals - Mansfield Lab Associated sample(s): 08-09 QC Batch ID: WG1753333-7 WG1753333-8 QC Sample: L2312213-04 Client ID: MS Sample</b> |               |          |          |              |           |               |                 |     |            |
| Arsenic, Total   | 0.0002J       | 0.12     | 0.1331   | 111          | 0.1287    | 107           | 75-125          | 3   | 20         |
| Barium, Total  | 0.0125        | 2        | 2.149    | 107          | 2.081     | 103           | 75-125          | 3   | 20         |
| Cadmium, Total   | ND            | 0.053    | 0.05985  | 113          | 0.05827   | 110           | 75-125          | 3   | 20         |
| Chromium, Total  | 0.0041        | 0.2      | 0.2140   | 105          | 0.2108    | 103           | 75-125          | 2   | 20         |
| Lead, Total  | ND            | 0.53     | 0.5689   | 107          | 0.5490    | 104           | 75-125          | 4   | 20         |
| Selenium, Total  | ND            | 0.12     | 0.134    | 112          | 0.129     | 108           | 75-125          | 4   | 20         |
| Silver, Total  | ND            | 0.05     | 0.05434  | 109          | 0.05348   | 107           | 75-125          | 2   | 20         |
| <b>Total Metals - Mansfield Lab Associated sample(s): 08-09 QC Batch ID: WG1753334-3 WG1753334-4 QC Sample: L2312222-02 Client ID: MS Sample</b> |               |          |          |              |           |               |                 |     |            |
| Mercury, Total   | ND            | 0.005    | 0.00500  | 100          | 0.00510   | 102           | 75-125          | 2   | 20         |

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter   | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---------------|------------------|-------|-----|------|------------|
| <b>Total Metals - Mansfield Lab</b> Associated sample(s): 05-06 QC Batch ID: WG1752937-4 QC Sample: L2312292-01 Client ID: DUP Sample |               |                  |       |     |      |            |
| Arsenic, Total  | 2.46          | 2.59             | mg/kg | 5   |      | 20         |
| Barium, Total   | 33.0          | 28.7             | mg/kg | 14  |      | 20         |
| Cadmium, Total  | 0.062J        | 0.075J           | mg/kg | NC  |      | 20         |
| Chromium, Total   | 4.96          | 4.77             | mg/kg | 4   |      | 20         |
| Lead, Total   | 5.85          | 6.53             | mg/kg | 11  |      | 20         |
| Selenium, Total   | ND            | ND               | mg/kg | NC  |      | 20         |
| Silver, Total   | ND            | ND               | mg/kg | NC  |      | 20         |
| <b>Total Metals - Mansfield Lab</b> Associated sample(s): 05-06 QC Batch ID: WG1752938-4 QC Sample: L2312292-01 Client ID: DUP Sample |               |                  |       |     |      |            |
| Mercury, Total  | ND            | ND               | mg/kg | NC  |      | 20         |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Serial Dilution  
Analysis  
Batch Quality Control**

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter  | Native Sample | Serial Dilution | Units | % D | Qual | RPD Limits |
|--|---------------|-----------------|-------|-----|------|------------|
| Total Metals - Mansfield Lab Associated sample(s): 08-09 QC Batch ID: WG1753333-6 QC Sample: L2312222-02 Client ID: DUP Sample |               |                 |       |     |      |            |
| Barium, Total  | 0.6765        | 0.6641          | mg/l  | 2   |      | 20         |

# **INORGANICS & MISCELLANEOUS**



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

### SAMPLE RESULTS

Lab ID: L2311903-01  
Client ID: GP-02  
Sample Location: Not Specified

Date Collected: 03/03/23 10:30  
Date Received: 03/07/23  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

| Parameter                                  | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared  | Date Analyzed | Analytical Method | Analyst |
|--|--------|-----------|-------|----|-----|-----------------|----------------|---------------|-------------------|---------|
| <b>General Chemistry - Westborough Lab</b> |        |           |       |    |     |                 |                |               |                   |         |
| Solids, Total                              | 88.0   | %         | 0.100 | NA | 1   | -               | 03/09/23 08:43 | 121,2540G     | ROI               |         |



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

### SAMPLE RESULTS

Lab ID: L2311903-02  
Client ID: GP-04  
Sample Location: Not Specified

Date Collected: 03/03/23 11:15  
Date Received: 03/07/23  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

| Parameter                                  | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared  | Date Analyzed | Analytical Method | Analyst |
|--|--------|-----------|-------|----|-----|-----------------|----------------|---------------|-------------------|---------|
| <b>General Chemistry - Westborough Lab</b> |        |           |       |    |     |                 |                |               |                   |         |
| Solids, Total                              | 89.6   | %         | 0.100 | NA | 1   | -               | 03/09/23 08:43 | 121,2540G     | ROI               |         |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

### SAMPLE RESULTS

Lab ID: L2311903-03  
Client ID: GPMW-05  
Sample Location: Not Specified

Date Collected: 03/03/23 11:45  
Date Received: 03/07/23  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

| Parameter                                  | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared  | Date Analyzed | Analytical Method | Analyst |
|--|--------|-----------|-------|----|-----|-----------------|----------------|---------------|-------------------|---------|
| <b>General Chemistry - Westborough Lab</b> |        |           |       |    |     |                 |                |               |                   |         |
| Solids, Total                              | 84.2   | %         | 0.100 | NA | 1   | -               | 03/09/23 08:43 | 121,2540G     | ROI               |         |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

## SAMPLE RESULTS

Lab ID: L2311903-04  
Client ID: GP-08  
Sample Location: Not Specified

Date Collected: 03/03/23 13:05  
Date Received: 03/07/23  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

| Parameter                                  | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared  | Date Analyzed | Analytical Method | Analyst |
|--|--------|-----------|-------|----|-----|-----------------|----------------|---------------|-------------------|---------|
| <b>General Chemistry - Westborough Lab</b> |        |           |       |    |     |                 |                |               |                   |         |
| Solids, Total                              | 88.9   | %         | 0.100 | NA | 1   | -               | 03/09/23 08:43 | 121,2540G     | ROI               |         |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

### SAMPLE RESULTS

Lab ID: L2311903-05  
Client ID: COMPOSITE-01  
Sample Location: Not Specified

Date Collected: 03/03/23 10:45  
Date Received: 03/07/23  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

| Parameter                                  | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared  | Date Analyzed | Analytical Method | Analyst |
|--|--------|-----------|-------|----|-----|-----------------|----------------|---------------|-------------------|---------|
| <b>General Chemistry - Westborough Lab</b> |        |           |       |    |     |                 |                |               |                   |         |
| Solids, Total                              | 82.6   | %         | 0.100 | NA | 1   | -               | 03/09/23 08:43 | 121,2540G     | ROI               |         |

**Project Name:** LEIGHTON AVENUE  
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**Lab Number:** L2311903  
**Report Date:** 03/14/23

### SAMPLE RESULTS

Lab ID: L2311903-06  
Client ID: COMPOSITE-02  
Sample Location: Not Specified

Date Collected: 03/03/23 13:10  
Date Received: 03/07/23  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

| Parameter                                  | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared  | Date Analyzed | Analytical Method | Analyst |
|--|--------|-----------|-------|----|-----|-----------------|----------------|---------------|-------------------|---------|
| <b>General Chemistry - Westborough Lab</b> |        |           |       |    |     |                 |                |               |                   |         |
| Solids, Total                              | 86.9   | %         | 0.100 | NA | 1   | -               | 03/09/23 08:43 | 121,2540G     | ROI               |         |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Lab Number:** L2311903  
**Report Date:** 03/14/23

| Parameter  | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|--|---------------|------------------|-------|-----|------|------------|
| General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1752671-1 QC Sample: L2311903-01 Client ID: GP-02 |               |                  |       |     |      |            |
| Solids, Total  | 88.0          | 88.1             | %     | 0   |      | 20         |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

Serial\_No:03142314:35  
**Lab Number:** L2311903  
**Report Date:** 03/14/23

### 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>  |
|---------------------|------------------------------------|---------------|-------------------|-----------------|-------------------|-------------|-------------|-------------------------|---|
| L2311903-01A        | Glass 120ml/4oz unpreserved        | A             | NA                |                 | 3.8               | Y           | Absent      |                         | TS(7),NYTCL-8082(365)   |
| L2311903-02A        | Glass 60mL/2oz unpreserved         | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14),TS(7)   |
| L2311903-02X        | Vial MeOH preserved split          | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)   |
| L2311903-02Y        | Vial Water preserved split         | A             | NA                |                 | 3.8               | Y           | Absent      | 10-MAR-23 11:45         | NYTCL-8260-R2(14)   |
| L2311903-02Z        | Vial Water preserved split         | A             | NA                |                 | 3.8               | Y           | Absent      | 10-MAR-23 11:45         | NYTCL-8260-R2(14)   |
| L2311903-03A        | Glass 60mL/2oz unpreserved         | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14),TS(7)   |
| L2311903-03X        | Vial MeOH preserved split          | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)   |
| L2311903-03Y        | Vial Water preserved split         | A             | NA                |                 | 3.8               | Y           | Absent      | 10-MAR-23 11:45         | NYTCL-8260-R2(14)   |
| L2311903-03Z        | Vial Water preserved split         | A             | NA                |                 | 3.8               | Y           | Absent      | 10-MAR-23 11:45         | NYTCL-8260-R2(14)   |
| L2311903-04A        | Glass 60mL/2oz unpreserved         | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)   |
| L2311903-04B        | Glass 120ml/4oz unpreserved        | A             | NA                |                 | 3.8               | Y           | Absent      |                         | TS(7),NYTCL-8082(365)   |
| L2311903-04X        | Vial MeOH preserved split          | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)   |
| L2311903-04Y        | Vial Water preserved split         | A             | NA                |                 | 3.8               | Y           | Absent      | 10-MAR-23 11:45         | NYTCL-8260-R2(14)   |
| L2311903-04Z        | Vial Water preserved split         | A             | NA                |                 | 3.8               | Y           | Absent      | 10-MAR-23 11:45         | NYTCL-8260-R2(14)   |
| L2311903-05A        | Glass 250ml/8oz unpreserved        | A             | NA                |                 | 3.8               | Y           | Absent      |                         | AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180) |
| L2311903-05B        | Glass 250ml/8oz unpreserved        | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8270(14),TS(7)  |
| L2311903-06A        | Glass 250ml/8oz unpreserved        | A             | NA                |                 | 3.8               | Y           | Absent      |                         | AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180) |
| L2311903-06B        | Vial Large Septa unpreserved (4oz) | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8270(14),TS(7)  |
| L2311903-07A        | Vial HCl preserved                 | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)   |
| L2311903-07B        | Vial HCl preserved                 | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)   |
| L2311903-07C        | Vial HCl preserved                 | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)   |

\*Values in parentheses indicate holding time in days

**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>   |
|---------------------|------------------------------|---------------|-------------------|-----------------|-------------------|-------------|-------------|-------------------------|--|
| L2311903-08A        | Vial HCl preserved           | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)  |
| L2311903-08B        | Vial HCl preserved           | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)  |
| L2311903-08C        | Vial HCl preserved           | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)  |
| L2311903-08D        | Plastic 250ml HNO3 preserved | A             | <2                | <2              | 3.8               | Y           | Absent      |                         | SE-6020T(180),BA-6020T(180),CR-6020T(180),PB-6020T(180),AS-6020T(180),HG-T(28),AG-6020T(180),CD-6020T(180) |
| L2311903-08E        | Amber 120ml unpreserved      | A             | 7                 | 7               | 3.8               | Y           | Absent      |                         | NYTCL-8082-LVI(365)  |
| L2311903-08F        | Amber 120ml unpreserved      | A             | 7                 | 7               | 3.8               | Y           | Absent      |                         | NYTCL-8082-LVI(365)  |
| L2311903-09A        | Vial HCl preserved           | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)  |
| L2311903-09B        | Vial HCl preserved           | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)  |
| L2311903-09C        | Vial HCl preserved           | A             | NA                |                 | 3.8               | Y           | Absent      |                         | NYTCL-8260-R2(14)  |
| L2311903-09D        | Plastic 250ml HNO3 preserved | A             | <2                | <2              | 3.8               | Y           | Absent      |                         | BA-6020T(180),SE-6020T(180),CR-6020T(180),PB-6020T(180),AS-6020T(180),CD-6020T(180),HG-T(28),AG-6020T(180) |
| L2311903-09E        | Amber 120ml unpreserved      | A             | 7                 | 7               | 3.8               | Y           | Absent      |                         | NYTCL-8082-LVI(365)  |
| L2311903-09F        | Amber 120ml unpreserved      | A             | 7                 | 7               | 3.8               | Y           | Absent      |                         | NYTCL-8082-LVI(365)  |
| L2311903-10A        | Vial HCl preserved           | A             | NA                |                 | 3.8               | Y           | Absent      |                         | ARCHIVE()  |
| L2311903-10B        | Vial HCl preserved           | A             | NA                |                 | 3.8               | Y           | Absent      |                         | ARCHIVE()  |

\*Values in parentheses indicate holding time in days

**Project Name:** LEIGHTON AVENUE  
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## GLOSSARY

### **Acronyms**

|          |   |
|----------|---|
| DL       | - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)   |
| EDL      | - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).                        |
| EMPC     | - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.  |
| EPA      | - Environmental Protection Agency.  |
| LCS      | - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.   |
| LCSD     | - Laboratory Control Sample Duplicate: Refer to LCS.  |
| LFB      | - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  |
| LOD      | - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  |
| LOQ      | - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  |
|          | Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  |
| MDL      | - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.   |
| MS       | - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.   |
| MSD      | - Matrix Spike Sample Duplicate: Refer to MS.   |
| NA       | - Not Applicable.   |
| NC       | - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.  |
| NDPA/DPA | - N-Nitrosodiphenylamine/Diphenylamine.   |
| NI       | - Not Ignitable.  |
| NP       | - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.   |
| NR       | - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.   |
| RL       | - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.  |
| RPD      | - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report. |
| SRM      | - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.  |
| STLP     | - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.   |
| TEF      | - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.  |
| TEQ      | - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.   |
| TIC      | - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.   |

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#### 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.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**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.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

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**Data Qualifiers**

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

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**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2311903  
**Report Date:** 03/14/23

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 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 its 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

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**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.  
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

**SM 2540D**: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix**: EPA 3050B

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**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

**Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2**: THMs and VOCs; **EPA 504.1**: EDB, DBCP.

**Microbiology**: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **SM9222D**.

**Non-Potable Water**

**SM4500H,B**, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM4500NH3-BH**: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, **EPA 351.1**, **SM4500NO3-F**, **EPA 353.2**: Nitrate-N, **SM4500P-E**, **SM4500P-B**, **E**, **SM4500SO4-E**, **SM5220D**, **EPA 410.4**, **SM5210B**, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**, **EPA 300**: Chloride, Sulfate, Nitrate.

**EPA 624.1**: Volatile Halocarbons & Aromatics,

**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

**Microbiology**: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9221E**, **EPA 1600**, **EPA 1603**, **SM9222D**.

**Mansfield Facility:**

**Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8**: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522**, **EPA 537.1**.

**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, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.

| <b>NEW YORK<br/>CHAIN OF<br/>CUSTODY</b>   |   | Service Centers   |              | Page<br>1 of 1  | Date Rec'd<br>in Lab<br><i>3/8/13</i> | ALPHA Job #<br>L2311903   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
|--|---|---|--------------|---|---------------------------------------|---|-------------|---|------------|--------------------------|-----------------|--------------|--|-------------------|----------------|---------------------------|--------------|---------------------------|--------------|------------------------|--------------|------------------------|--------------|------------|--------------|--|--|
|  |   | Mahwah, NJ 07430: 35 Whitney Rd, Suite 5<br>Albany, NY 12205: 14 Walker Way<br>Tonawanda, NY 14150: 275 Cooper Ave, Suite 105 |              |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| Westborough, MA 01581<br>8 Walkup Dr.<br>TEL: 508-898-9220<br>FAX: 508-898-9193  |   | Mansfield, MA 02048<br>320 Forbes Blvd<br>TEL: 508-822-9300<br>FAX: 508-822-3288  |              | Project Information   |                                       | Deliverables  |             | Billing Information   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
|  |   |   |              | Project Name: <i>Leighton Avenue</i>                            |                                       | <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B<br><input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File)<br><input checked="" type="checkbox"/> Other Base report only  |             | <input checked="" type="checkbox"/> Same as Client Info<br>PO# <i>50527-01</i><br><i>gregandrus@luengineers.com</i> |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| Client Information   |   | Project Location:   |              | Project # <i>50527-01</i>                                       |                                       | Regulatory Requirement  |             | Disposal Site Information   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| Client: Lu Engineers   |   | (Use Project name as Project #) <input type="checkbox"/>  |              | Project Manager: Ben Seifert                                    |                                       | <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375<br><input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51<br><input type="checkbox"/> NY Restricted Use <input checked="" type="checkbox"/> Other<br><input type="checkbox"/> NY Unrestricted Use<br><input type="checkbox"/> NYC Sewer Discharge |             | Please identify below location of applicable disposal facilities.   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| Address: 280 E. Broad St.<br>Site 170 Rochester NY   |   | Phone: 585 - 385 - 7417   |              | Fax: <i>bseifert@luengineers.com</i>                            |                                       |   |             | Disposal Facility:  |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
|  |   |   |              | Turn-Around Time  |                                       |   |             | <input type="checkbox"/> NJ <input type="checkbox"/> NY<br><input type="checkbox"/> Other                           |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
|  |   |   |              | Standard <input checked="" type="checkbox"/> Due Date:          |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
|  |   |   |              | Rush (only if pre approved) <input type="checkbox"/> # of Days: |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| These samples have been previously analyzed by Alpha <input type="checkbox"/>  |   |   |              |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| Other project specific requirements/comments:<br><i>Please homogenize composite samples to the extent possible</i>   |   |   |              |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| Please specify Metals or TAL.  |   |   |              |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| ALPHA Lab ID<br>(Lab Use Only)   | Sample ID   | Collection  |              | Sample Matrix   | Sampler's Initials                    | ANALYSIS  |             | Sample Filtration   |            | Total<br>Bottle<br>Count |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
|  |   | Date  | Time         |   |                                       | VOCs  | TCL + CP-51 | SVOCs: B/N only   | PCBs: 8082 |                          | VOCs: TCL+CP-51 | PCBs: 8082   | Done<br><input type="checkbox"/><br>Lab to do<br><input type="checkbox"/><br>Preservation<br><input type="checkbox"/><br>Lab to do |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| 11903 - 01   | GP-02   | 03/03/23  | 10:30        | S:1   | B6S                                   |   | ✓           |   |            | 1                        |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| 07   | GP-04   |   | 11:15        |   | B6S                                   | ✓   |             |   |            | 1                        |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| 03   | GPMW-05   |   | 11:45        |   | B6S                                   | ✓   |             |   |            | 1                        |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| 04   | GP-08   |   | 13:05        |   | B6S                                   | ✓   |             | ✓   |            | 2                        |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| 05   | Composite - 01                                    |   | 10:45        |   | B6S                                   |   | ✓           | ✓   |            | 2                        |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| 06   | Composite - 02                                    |   | 13:10        | ↓   | B6S                                   |   | ✓           | ✓   |            | 2                        |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| 07   | GPMW-01   | 03/06/23  | 16:20        | Groundwater   | B6S                                   |   |             |   | ✓          | 3                        |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| 08   | GPMW-05   |   | 15:35        | ↓   | B6S                                   |   |             |   | ✓          | 6                        |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| 09   | GPMW-10   |   | 15:00        | ↓   | B6S                                   |   |             |   | ✓          | 6                        |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| Preservative Code:   |   | Container Code  |              | Westboro: Certification No: MA935                               |                                       | Container Type  |             | A A A A ✓ P A   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| A = None   | P = Plastic                                       | A = Amber Glass   | V = Vial     | Mansfield: Certification No: MA015                              |                                       | Preservative  |             | A A A A B C A   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| B = HCl  | A = Plastic                                       | B = Bacteria Cup  | C = Cube     |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| C = HNO <sub>3</sub>   | V = Glass   | C = Glass   | O = Other    |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| D = H <sub>2</sub> SO <sub>4</sub>   | G = Vial  | B = Cube  | E = Encore   |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| E = NaOH   | H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> | D = BOD Bottle  | I = Other    |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| F = MeOH   | J = Other   |   |              |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| G = NaHSO <sub>4</sub>   | K = Other   |   |              |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>  | L = Other   |   |              |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| K/E = Zn Ac/NaOH   | M = Other   |   |              |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| O = Other  | N = Other   |   |              |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| <table border="1"> <thead> <tr> <th>Relinquished By:</th> <th>Date/Time</th> <th>Received By:</th> <th>Date/Time</th> </tr> </thead> <tbody> <tr> <td><i>B. Seifert</i></td> <td>03/07/23 13:45</td> <td><i>SECURE STORAGE AAC</i></td> <td>3/7/23 13:45</td> </tr> <tr> <td><i>SECURE STORAGE AAC</i></td> <td>3/7/23 16:57</td> <td><i>RCunningham AAC</i></td> <td>3/7/23 16:57</td> </tr> <tr> <td><i>RCunningham AAC</i></td> <td>3/7/23 16:57</td> <td><i>MWH</i></td> <td>3/8/23 00:40</td> </tr> </tbody> </table> |   |   |              |   |                                       |   |             |   |            | Relinquished By:         | Date/Time       | Received By: | Date/Time  | <i>B. Seifert</i> | 03/07/23 13:45 | <i>SECURE STORAGE AAC</i> | 3/7/23 13:45 | <i>SECURE STORAGE AAC</i> | 3/7/23 16:57 | <i>RCunningham AAC</i> | 3/7/23 16:57 | <i>RCunningham AAC</i> | 3/7/23 16:57 | <i>MWH</i> | 3/8/23 00:40 | 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    |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| <i>B. Seifert</i>  | 03/07/23 13:45                                    | <i>SECURE STORAGE AAC</i>   | 3/7/23 13:45 |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| <i>SECURE STORAGE AAC</i>  | 3/7/23 16:57                                      | <i>RCunningham AAC</i>  | 3/7/23 16:57 |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| <i>RCunningham AAC</i>   | 3/7/23 16:57                                      | <i>MWH</i>  | 3/8/23 00:40 |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |
| Form No: 01-25 HC (rev. 30-Sept-2013)  |   |   |              |   |                                       |   |             |   |            |                          |                 |              |  |                   |                |                           |              |                           |              |                        |              |                        |              |            |              |  |  |



## ANALYTICAL REPORT

|                 |   |
|-----------------|---|
| Lab Number:     | L2313576  |
| Client:         | Lu Engineers<br>280 E Broad St.<br>Suite 170<br>Rochester, NY 14604 |
| ATTN:           | Ben Seifert   |
| Phone:          | (585) 385-7417  |
| Project Name:   | LEIGHTON AVENUE   |
| Project Number: | 50527-01  |
| Report Date:    | 03/21/23  |

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), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

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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:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2313576  
**Report Date:** 03/21/23

| Alpha<br>Sample ID | Client ID    | Matrix | Sample<br>Location | Collection<br>Date/Time | Receive Date |
|--------------------|--------------|--------|--------------------|-------------------------|--------------|
| L2313576-01        | COMPOSITE-02 | SOIL   | Not Specified      | 03/03/23 13:10          | 03/07/23     |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2313576  
**Report Date:** 03/21/23

### Case Narrative

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

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

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

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

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

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

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**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2313576  
**Report Date:** 03/21/23

**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:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 03/21/23

## METALS



**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2313576  
**Report Date:** 03/21/23

**SAMPLE RESULTS**

Lab ID: L2313576-01  
Client ID: COMPOSITE-02  
Sample Location: Not Specified

Date Collected: 03/03/23 13:10  
Date Received: 03/07/23  
Field Prep: Not Specified

Sample Depth: TCLP/SPLP Ext. Date: 03/17/23 09:04  
Matrix: Soil

| Parameter                               | Result | Qualifier | Units | RL    | MDL    | Dilution Factor | Date Prepared  | Date Analyzed  | Prep Method | Analytical Method | Analyst |
|---|--------|-----------|-------|-------|--------|-----------------|----------------|----------------|-------------|-------------------|---------|
| TCLP Metals by EPA 1311 - Mansfield Lab |        |           |       |       |        |                 |                |                |             |                   |         |
| Lead, TCLP                              | ND     |           | mg/l  | 0.500 | 0.0270 | 1               | 03/21/23 10:31 | 03/21/23 15:30 | EPA 3015    | 1,6010D           | DMB     |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2313576  
**Report Date:** 03/21/23

## Method Blank Analysis Batch Quality Control

| Parameter  | Result Qualifier | Units | RL    | MDL    | Dilution Factor | Date Prepared  | Date Analyzed  | Analytical Method | Analyst |
|--|------------------|-------|-------|--------|-----------------|----------------|----------------|-------------------|---------|
| TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1756856-1 |                  |       |       |        |                 |                |                |                   |         |
| Lead, TCLP   | ND               | mg/l  | 0.500 | 0.0270 | 1               | 03/21/23 10:31 | 03/21/23 13:42 | 1,6010D           | DMB     |

### Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 03/16/23 03:10



**Lab Control Sample Analysis**  
**Batch Quality Control**

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2313576  
**Report Date:** 03/21/23

| <b>Parameter</b>  | <b>LCS</b>       | <b>LCSD</b> | <b>%Recovery</b> |             | <b>RPD</b> | <b>Qual</b> | <b>RPD Limits</b> |
|---|------------------|-------------|------------------|-------------|------------|-------------|-------------------|
|   | <b>%Recovery</b> | <b>Qual</b> | <b>%Recovery</b> | <b>Qual</b> |            |             |                   |
| TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1756856-2 |                  |             |                  |             |            |             |                   |
| Lead, TCLP  | 101              | -           | -                | 75-125      | -          | -           | 20                |

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Number:** L2313576  
**Report Date:** 03/21/23

| Parameter   | Native Sample | MS Added | MS Found | MS %Recovery | MSD Qual | MSD Found | MSD %Recovery | MSD Qual | Recovery Limits | RPD | Qual | RPD Qual Limits |
|---|---------------|----------|----------|--------------|----------|-----------|---------------|----------|-----------------|-----|------|-----------------|
| TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1756856-3 QC Sample: L2313773-07 Client ID: MS Sample |               |          |          |              |          |           |               |          |                 |     |      |                 |
| Lead, TCLP  | ND            | 5.3      | 5.39     | 102          | -        | -         | -             | -        | 75-125          | -   | -    | 20              |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Lab Number:** L2313576  
**Report Date:** 03/21/23

| Parameter  | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|--|---------------|------------------|-------|-----|------|------------|
| TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1756856-4 QC Sample: L2313773-07 Client ID: DUP Sample |               |                  |       |     |      |            |
| Lead, TCLP   | ND            | ND               | mg/l  | NC  |      | 20         |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

Serial\_No:03212319:28  
**Lab Number:** L2313576  
**Report Date:** 03/21/23

**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> |
|---------------------|---------------------------------------|---------------|-------------------|-----------------|-------------------|-------------|-------------|-------------------------|--------------------|
| L2313576-01A        | Vial Large Septa unpreserved (4oz)    | A             | NA                |                 | 3.8               | Y           | Absent      | -                       |                    |
| L2313576-01X        | Plastic 120ml HNO3 preserved Extracts | A             | NA                |                 | 3.8               | Y           | Absent      | -                       | PB-Cl(180)         |
| L2313576-01X9       | Tumble Vessel                         | A             | NA                |                 | 3.8               | Y           | Absent      | -                       |                    |

**Project Name:** LEIGHTON AVENUE  
**Project Number:** 50527-01

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## GLOSSARY

### **Acronyms**

|          |   |
|----------|---|
| DL       | - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)   |
| EDL      | - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).                        |
| EMPC     | - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.  |
| EPA      | - Environmental Protection Agency.  |
| LCS      | - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.   |
| LCSD     | - Laboratory Control Sample Duplicate: Refer to LCS.  |
| LFB      | - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.  |
| LOD      | - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  |
| LOQ      | - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  |
|          | Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  |
| MDL      | - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.   |
| MS       | - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.   |
| MSD      | - Matrix Spike Sample Duplicate: Refer to MS.   |
| NA       | - Not Applicable.   |
| NC       | - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.  |
| NDPA/DPA | - N-Nitrosodiphenylamine/Diphenylamine.   |
| NI       | - Not Ignitable.  |
| NP       | - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.   |
| NR       | - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.   |
| RL       | - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.  |
| RPD      | - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report. |
| SRM      | - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.  |
| STLP     | - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.   |
| TEF      | - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.  |
| TEQ      | - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.   |
| TIC      | - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.   |

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#### 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.

**Chlordane:** The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

**Difference:** With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

**Final pH:** As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

**Frozen Date/Time:** With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

**Gasoline Range Organics (GRO):** Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

**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.

**PAH Total:** With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

**Total:** With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively

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**Data Qualifiers**

Identified Compounds (TICs).

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

*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 - VI, 2018.

## 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 its 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

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**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine. SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

**SM 2540D**: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix**: EPA 3050B

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**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

**Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2**: THMs and VOCs; **EPA 504.1**: EDB, DBCP.

**Microbiology**: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **SM9222D**.

**Non-Potable Water**

**SM4500H,B**, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM4500NH3-BH**: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1**, **SM4500NO3-F**, **EPA 353.2**: Nitrate-N, **SM4500P-E**, **SM4500P-B**, **E**, **SM4500SO4-E**, **SM5220D**, **EPA 410.4**, **SM5210B**, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**, **EPA 300**: Chloride, Sulfate, Nitrate.

**EPA 624.1**: Volatile Halocarbons & Aromatics,

**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

**Microbiology**: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9221E**, **EPA 1600**, **EPA 1603**, **SM9222D**.

**Mansfield Facility:**

**Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8**: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522**, **EPA 537.1**.

**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, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

**EPA 245.1** Hg.

**SM2340B**

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For a complete listing of analytes and methods, please contact your Alpha Project Manager.

3/16/23

L2313576

| NEW YORK<br>CHAIN OF<br>CUSTODY   |  | Service Centers<br>Mahwah, NJ 07430: 35 Whitney Rd, Suite 5<br>Albany, NY 12205: 14 Walker Way<br>Tonawanda, NY 14210: 275 Cooper Ave, Suite 105 | Page<br>1 of 1   |  | Date Rec'd<br>in Lab<br><i>3/8/23</i>        | ALPHA Job #<br><i>LC51103-66</i>    |                                |                                     |   |   |   |
|---|--|--|--|--|--|-------------------------------------|--------------------------------|-------------------------------------|---|---|---|
| Westborough, MA 01581<br>8 Walkup Dr.<br>TEL: 508-898-9220<br>FAX: 508-898-9193   | Mansfield, MA 02048:<br>320 Forbes Blvd<br>TEL: 508-822-9300<br>FAX: 508-822-3288  |  | Project Information  |  |  |                                     | Deliverables                   |                                     |   |   |   |
| Client Information  |  |  | Project Name: <i>Leighton Avenue</i><br>Project Location:<br>Project # <i>SDS27-01</i> |  |  |                                     | <input type="checkbox"/> ASP-A | <input type="checkbox"/> ASP-B      |   |   |   |
| Client: <i>Lu Engineers</i><br>Address: <i>280 E. Broad St.</i><br><i>Site 170 Rochester NY</i><br>Phone: <i>585 - 385 - 7417</i><br>Fax:<br>Email: <i>bseifert@luengineers.com</i>   |  | (Use Project name as Project #) <input type="checkbox"/>   |  | <input type="checkbox"/> EQuIS (1 File)                    | <input type="checkbox"/> EQuIS (4 File)      |                                     |                                |                                     |   |   |   |
|   |  | Project Manager: <i>Ben Seifert</i><br>ALPHAQuote #:   |  | <input checked="" type="checkbox"/> Other Base report only |  |                                     |                                |                                     |   |   |   |
|   |  | Turn-Around Time   |  | Regulatory Requirement                                     |  |                                     |                                |                                     |   |   |   |
|   |  | Standard <input checked="" type="checkbox"/>   | Due Date:  | <input type="checkbox"/> NY TOGS                           | <input type="checkbox"/> NY Part 375         |                                     |                                |                                     |   |   |   |
|   |  | Rush (only if pre approved) <input type="checkbox"/>   | # of Days:   | <input type="checkbox"/> AWQ Standards                     | <input type="checkbox"/> NY CP-51            |                                     |                                |                                     |   |   |   |
|   |  | These samples have been previously analyzed by Alpha <input type="checkbox"/>  |  | <input type="checkbox"/> NY Restricted Use                 | <input checked="" type="checkbox"/> Other    |                                     |                                |                                     |   |   |   |
|   |  | Other project specific requirements/comments:<br><i>Please homogenize composite samples to the extent possible</i>                               |  | <input type="checkbox"/> NY Unrestricted Use               | <input type="checkbox"/> NYC Sewer Discharge |                                     |                                |                                     |   |   |   |
|   |  | Please specify Metals or TAL.  |  | ANALYSIS   |  |                                     |                                |                                     |   |   |   |
| ALPHA Lab ID<br>(Lab Use Only)<br><i>11A03-01</i>   | Sample ID<br><i>GP-02</i>  | Collection   |  | Sample Matrix  | Sampler's Initials                           |                                     |                                |                                     |   |   |   |
|   |  | Date<br><i>03/03/23</i>  | Time<br><i>10:30</i>   |  |  |                                     |                                |                                     |   |   |   |
| <i>3576-01</i>  | <i>02</i>  | <i>11:15</i>   | <i>B6S</i>   | <input checked="" type="checkbox"/>                        |  |                                     |                                |                                     |   |   |   |
|   | <i>03</i>  | <i>11:45</i>   | <i>B6S</i>   | <input checked="" type="checkbox"/>                        |  |                                     |                                |                                     |   |   |   |
|   | <i>04</i>  | <i>13:05</i>   | <i>B6S</i>   | <input checked="" type="checkbox"/>                        |  |                                     |                                |                                     |   |   |   |
|   | <i>05</i>  | <i>10:45</i>   | <i>B6S</i>   | <input checked="" type="checkbox"/>                        |  |                                     |                                |                                     |   |   |   |
|   | <i>06</i>  | <i>13:10</i>   | <i>B6S</i>   | <input checked="" type="checkbox"/>                        | <input checked="" type="checkbox"/>          |                                     |                                |                                     |   |   |   |
|   | <i>07</i>  | <i>16:20</i>   | <i>Groundwater</i>   | <i>B6S</i>   | <input checked="" type="checkbox"/>          | <input checked="" type="checkbox"/> |                                |                                     |   |   |   |
|   | <i>08</i>  | <i>15:35</i>   | <i>B6S</i>   |  | <input checked="" type="checkbox"/>          | <input checked="" type="checkbox"/> |                                |                                     |   |   |   |
|   | <i>09</i>  | <i>15:00</i>   | <i>B6S</i>   |  | <input checked="" type="checkbox"/>          | <input checked="" type="checkbox"/> |                                |                                     |   |   |   |
|   |  |  |  |  |  |                                     |                                |                                     |   |   |   |
| Preservative Code:<br>A = None<br>B = HCl<br>C = HNO <sub>3</sub><br>D = H <sub>2</sub> SO <sub>4</sub><br>E = NaOH<br>F = MeOH<br>G = NaHSO <sub>4</sub><br>H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub><br>K/E = Zn Ac/NaOH<br>O = Other | Container Code<br>P = Plastic<br>A = Amber Glass<br>V = Vial<br>G = Glass<br>B = Bacteria Cup<br>C = Cube<br>O = Other<br>E = Encore<br>D = BOD Bottle | Westboro: Certification No: MA935<br>Mansfield: Certification No: MA015  |  | Container Type   |  |                                     |                                |                                     |   |   |   |
|   |  |  |  | A  | A  | A                                   | A                              | <input checked="" type="checkbox"/> | P | A |   |
|   |  |  |  | Preservative   |  | A                                   | A                              | A                                   | B | C | A |
| Relinquished By:  |  | Date/Time  |  | Received By:   |  |                                     |                                | Date/Time                           |   |   |   |
| <i>B. Seifert</i>   |  | <i>03/07/23 13:45</i>  |  | <i>SECURE STORAGE AAL</i>                                  |  |                                     |                                | <i>3/7/23 13:45</i>                 |   |   |   |
| <i>SECURE STORAGE AAL</i>   |  | <i>3/7/23 14:57</i>  |  | <i>PCunningham AAL</i>                                     |  |                                     |                                | <i>3/7/23 14:57</i>                 |   |   |   |
| <i>PCunningham AAL</i>  |  | <i>3/7/23 16:57</i>  |  | <i>MWJ AAL</i>   |  |                                     |                                | <i>3/8/23 00:40</i>                 |   |   |   |